



REQUEST FOR PROPOSALS
For
Roadway Work Zone Data Reporting Services
RFP # 2022-035

Sealed proposals will be accepted until **2:00 PM CT, Friday, August , 2022** and then publicly opened and read aloud thereafter.

iCone Products, LLC

Legal Name of Proposing Firm

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Acknowledgment of Addenda: #1 X #2 N/A #3 N/A #4 N/A #5 N/A

By signing below, you hereby certify that the information contained in this proposal and any attachments is true and correct and may be viewed as an accurate representation of proposed services to be provided by this organization. You agree that failure to submit all requested information may result in rejection of your company's proposal as non-responsive. You certify that no employee, board member, or agent of the North Central Texas Council of Governments has assisted in the preparation of this proposal. You acknowledge that you have read and understand the requirements and provisions of this solicitation and that the organization will comply with the regulations and other applicable local, state, and federal regulations and directives in the implementation of this contract. And furthermore, that I certify that I am legally authorized to sign this offer and to submit it to the North Central Texas Council of Governments, on behalf of said offeror by authority of its governing body.

Authorized Signature

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**ADDENDUM TO THE
REQUEST FOR PROPOSALS
North Central Texas Council of Governments
Roadway Workzone Data Reporting Services**

ADDENDUM NO. 1

DATE ISSUED: July 27, 2022

**REQUEST FOR PROPOSALS NUMBER: NCT-2022-035
ORIGINAL RFP SUBMISSION DATE: August 5, 2022
REVISED RFP SUBMISSION DATE: August 19, 2022 (Revised)**

RFP NCT-2022-035, dated June 29, 2022, is hereby amended to incorporate in full text the following provisions:

The following questions were submitted by potential proposers and are answered below. Questions are indicated by standard type and answers indicated by **bold-face type**.

Question #1

How do the legal terms work for this bid? Is NCTCOG going to release its legal terms at a later date, or do we include our own legal terms?

Answer 1: This question is not fully understood.

The NCTCOG terms and conditions are incorporated into the RFP document, and Respondents are able to make the NCTCOG aware of any exceptions that they have in their responses.

Should a vendor have specific end-user license agreement requirements, they are asked to submit those for review in their response, as well.

Upon selection of an awardee, final contractual terms and conditions will be determined during negotiations.

Question #2

Of this Bid Document, on pg 17 under the Tab D - Technical Proposal - could you please explain the difference between point #2 'description of proposer's process for responding to an order for a product and point #3 - Description of Proposer's process for delivering orders to respective clients? These feel very similar - so it would be great to understand in more detail what you are expecting from these questions and how they are different.

Answer 2: Item 2 – Description of Proposer’s Process for Responding to an Order for Product refers to a description of how the Respondent will process an order for services, from their being made aware of what is desired to the point of preparing for delivery. Item 3 refers to the description of the process from that point forward, to delivery and implementation of the service to the end-user.

Question #3

What are the total number of center lane miles (both state & federal) for the 16 counties within the NCTCOG association?

Answer 3: Total roadway centerline miles open to the public in the 16-county region: 41,300

Total roadway centerline miles maintained by TxDOT in the 16-county region: 5,900

Total roadway centerline miles on the National Highway System in the 16-county region: 2,600

Question #4

Is there existing demand for the program?

Answer 4: Yes. There is demand from multiple sources for improved reporting of work zone data.

Question #5

How many requests are you currently getting for this solution?

Answer 5: NCTCOG's regional partners are generally interested in improving the reporting of work zones. One of the important tasks the selected vendor(s) will perform is outreach to NCTCOG's partners to inform them of their solution. Such outreach will be coordinated with and supported by NCTCOG.

Question #6

Were these requirements based on an existing solution in other states? If so, which state?

Answer 6: No. N/A. NCTCOG is pursuing this solution to help support the efforts of USDOT, state DOTs (including TxDOT), and others to standardize work zone reporting in the Work Zone Data Exchange format.

Question #7

Is there a particular cloud platform that you're anticipating on leveraging?

Answer 7: NCTCOG anticipates that the vendor will supply the cloud platform. Such a platform should have appropriate security protections and be adequate to ensure the timely and accurate reporting of work zone data in WZDx format. NCTCOG expects vendors that propose to take raw work zone data, convert it to WZDx format, and publish that data via API to provide a comprehensive solution. NCTCOG is not using this project to establish a data repository or "lake." It wants a real-time feed of work zone data from its partners in WZDx format that is accessible to AV developers, OEMs, travel navigation services, and other public agencies.

Question #8

Are you open to extending this RFP due date?

Answer 8: Yes. A two-week extension has been granted to August 19, 2022.

Question #9

Is NCTCOG anticipating maintaining/upgrading this solution directly? Or is this the vendors responsibility?

Answer 9: Awarded Vendor is responsible for implementing, maintaining, and upgrading the solution in order to meet the project objective, namely, the timely and accurate reporting of work zone information in WZDx format.

Question #10

What is the primary driver for this RFP? Is the project funded? If yes, how much? Is their a projected budget allocation?

Answer 10: See RFP for description of purpose of this project. The procurement will establish what cost, if any, NCTCOG's partners must bear to implement the WZDx solution(s). Based on that information, NCTCOG may establish a budget through which it can provide financial assistance to facilitate adoption of the WZDx solution(s). NCTCOG believes that there may be low- or no-cost proposals to provide WZDx reporting, eliminating or obviating the need for NCTCOG to budget for this project.

Question #11

Is there an hourly rate budgeted? NTE amount?

Answer 11: Neither.

Question #12

What is the common file format used by the work zone engineers?

Answer 12: There likely is no common file format in which NCTCOG's many partners keep their work zone data currently; hence, the need for a service that takes work zone data in multiple formats and converts that data into the WZDx format, which is a key purpose of this procurement.

Question #13

Will you consider a centralized cloud-based solution where all participating entities can enter their data for management and reporting?

Answer 13: Another program area in NCTCOG is studying whether and how to establish a centralized data exchange. If that effort goes forward and is successful the resulting data exchange might be an effective host of work zone data. That solution is not available at this time, however, and NCTCOG does not want to wait in order to improve the reporting of work zone data in the DFW region.

Question #14

Has the potential user community expressed a need for this type of project?

Answer 14: Yes. NCTCOG has done multiple briefings for its regional stakeholders on the procurement and the rationale for such. It is including polling exercises in these briefings. Through such polling the regional stakeholders have nearly unanimously expressed support for this initiative.

Question #15

Will you conder a 10–14-day extension?

Answer 15: Yes. A two-week extension has been granted to August 19, 2022.

Question #16

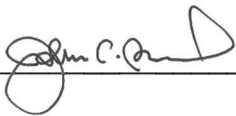
Do subcontractors have to submit appendix documents as well?

Answer 16: The Principle is responsible for documents associated with the RFP.

Craig Johnson
Purchasing Manager

Proposers: Please acknowledge and return a copy of this Addendum with your proposal.

COMPANY NAME: iCone Products, LLC

SIGNATURE: 

NOTE: Company name and signature must be the same as on the RFP documents.

REQUIRED ATTACHMENT CHECKLIST

Please utilize this checklist to ensure that all required attachments are included with your proposal. IF AN ATTACHMENT DOES NOT APPLY, PLEASE MARK AS “**NOT APPLICABLE**” AND SUBMIT WITH THE PROPOSAL. FAILURE TO SUBMIT **ALL REQUIRED DOCUMENTS** MAY NEGATIVELY IMPACT YOUR EVALUATION SCORE.

- ☒ Page 1 - Cover Sheet
- ☒ Page 20 - Attachment I: Instructions for Proposals Compliance and Submittal
- ☒ Page 21 - Attachment II: Certification of Offeror
- ☒ Page 22 - Attachment III: Certification Regarding Debarment
- ☒ Page 23 - Attachment IV: Restrictions on Lobbying
- ☒ Page 25 - Attachment V: Drug-Free Workplace Certification
- ☒ Page 26 - Attachment VI: Certification [✓]Regarding Disclosure of Conflict of Interest
- ☒ Page 28 - Attachment VII: Certification of Fair Business Practices
- ☒ Page 29 - Attachment VIII: Certification of Good Standing Texas Corporate Franchise Tax Certification
- ☒ Page 30 - Attachment IX: Historically Underutilized Businesses, Minority Or Women-Owned Or Disadvantaged Business Enterprises **NOT APPLICABLE**
- ☒ Page 31 - Attachment X: Federal and State of Texas Contractual Required Provisions
- ☒ Page 35 - Exhibit A: Service Area Designation Forms
- ☒ Page 38 - Exhibit B: Description of Desired Services for Proposed Pricing
- ☒ Page 40 – Exhibit C: Service Questionnaire
- ☒ Page 41 - Exhibit D: Sample Market Basket Form
- ☒ Page 42 – Exhibit E: Pricing Form
- ☒ Respondent recognizes that all proposals must be submitted electronically through Public Purchase by the RFP due date and time. All other forms of submissions will be deemed nonresponsive and will not be opened or considered.

Project Understanding

The North Central Texas Council of Governments (NCTCOG) has been providing valuable services and programs to its 230+ members in the 16-county region for over a half-century. The initiative taken by NCTCOG with this procurement will result in greater access to life-saving technology and information for its members and other public entities around the US via state-of-the-art software, systems, reporting services and data that will be used to alert the driving public to potential work zone hazards and protect the workers who are present on our highways and other infrastructure projects.

Incidents between the traveling public and workers and work zones have become a critical issue over the years as evidenced by the increase in crashes, injuries and fatalities as our nation's roadways and infrastructure are being built and maintained. NCTCOG seeks to establish systems and resources to support its member agencies and others around the US in managing and maintaining work zones to mitigate the hazardous conditions that exist on the roadways. The objective of the NCTCOG is to create an intelligent work zone management service using an automated information system which provides traffic management, communications, and analysis of real-time data.

As autonomous vehicle technology is rapidly taking hold through significant advances in the auto industry and third-party logistics, tapping into and implementing more effective Intelligent Transportation Systems (ITS) is becoming more important than ever. While vehicle manufacturers have an advanced understanding of vehicles and vehicle technology, they have limited understanding of how roads and infrastructure are built and maintained. Advances in autonomous vehicle technology will be severely limited without the introduction of better technology to the process of building and maintaining the roads and infrastructure. Whether caused by human error or autonomous vehicle technology failure, the tragic injuries and deaths related to work zone incidents, in addition to the economic costs and travel inefficiencies are increasingly affected by work zone accidents.

Driven largely by the vehicle manufacturing industry, the need for a comprehensive resource using a common format for data and data reporting has surfaced. The initiative taken by the USDOT in the development of the Work Zone Data Exchange (WZDx) and the associated specifications and technology has established the basis for the collaboration needed to produce more data about the status of work zones and the roadways and deliver that data to software and systems that can be used to alert human drivers and automated vehicles about the presence of workers and work zones in real-time. More needs to be done to better identify unknown work zones and report them in a common format (i.e., WZDx) to roadway operators and the driving public.

We understand that Phase Two of this initiative is intended to address the need to improve the identification of work zones to be communicated to the software and systems expected in response to Phase One of this RFP; however, we believe that the Work Zone Data industry (WZDi™) is prepared to respond more quickly to the data needs to support Phase One of this initiative, as indicated by our proposal presented in the following sections. The WZDi™ is comprised of several private entities that have developed currently deployed smart work zone technology as part of the traffic control industry that can be used to better identify and report the presence and status of workers and work zones. A significant amount of progress has already been made to consolidate and curate the data generated from existing smart work zone devices consistent with the WZDx format. Without access to accurate, real-time data about work zones, the value of the software and services delivered as Phase One of this initiative will be limited primarily to academic and analytical

value. Introducing the data component to this initiative sooner will result in real, intrinsic value and immediate impact to the overall objective of reducing accidents in work zones and improving real-time management of infrastructure projects.

iCone Qualifications and Background

iCone Products, LLC (iCone) has been paving the way in ITS and Work Zone Safety since 2008! iCone's parent company was executing a truck probe study in 2008 with the New York State Department of Transportation (NYSDOT) when the NYSDOT engineers extended the contract so that iCone could apply its truck monitoring expertise to develop a more manageable approach to work zone monitoring. This diverse background in technology and logistics is the foundation behind iCone's drive to get the IT of the work zone into the dashboard of every vehicle on the road.

Since 2014 iCone has been working with groups like FMCSA, Texas A&M Transportation Institute (TTI), SAE, 5GAA and others looking for the business model that would motivate both the roadway construction industry and the automotive industry to rapidly change to a connectivity model. iCone was the first organization to present the work zone problem to the Automotive Vehicle Symposium in 2016. The 2016 symposium and the sessions that followed in 2017 and 2018 marked the inception of the concept of "smart work zone technology". iCone lead those sessions and the iCone team sat with Ariel Gold of the Federal Highway Administration (FHWA) at a Waze global conference in 2018 and discussed the establishment of the Work Zone Data Exchange.

iCone ConnectedTech™

Working with our partners in road construction, state Departments of Transportation (DoTs) and construction equipment manufacturers, we are actively deploying smart work zone technology in hundreds of work zones around North America today. iCone's family of ConnectedTech™ products includes kits that can be built into new equipment at the manufacturing site as well as devices that can retrofit any item that could be used in a work zone, from traffic cones, channelizing barrels and barricades to arrow boards, message boards, vehicles, signs, and flagging batons. We can let you know of anything in the work zone right down to the human beings flagging traffic around the work zone. Our technology is successfully working today to allow the travelling public to know what lies ahead and give them time to react. As an integrated technology platform, iCone's devices can mark virtually anything that may intrude upon a public right-of-way that would cause a vehicle to change either its speed or direction of travel.

Because of the already proven success of this technology, State DOTs across the United States are adopting specifications requiring road construction projects to incorporate Smart Work Zone technology. iCone devices are being incorporated as a requirement in road construction bid documents on many state funded highway projects. Contractors are recognizing the importance of including this technology in their work zones on a voluntary basis due to the significantly improved worker safety it offers.

R.O.A.D.™ Database

In response to the increasing demand for a consolidated, curated source of data, iCone created a cloud-based data service for digitally marked work zone events called the **Real Ontime Accurate Data (R.O.A.D.)™** database. Smart and connected work zones are becoming commonplace in North America, supported by integrated Internet of Things (IoT) technology. Consolidating this set of traffic control and roadway infrastructure devices – otherwise known as an "Internet of Road Work (IoR™)" – allows drivers, contractors, traffic managers, and others to receive real-time status

information about key traffic control devices being used in roadway construction operations and any disruptive anomalies they may cause to surface transportation.

The R.O.A.D.™ database for work zones is a cloud-based database of road event data supplied by preeminent equipment and infrastructure developers, IoT equipment retrofit companies, construction operators, maintenance, and traffic control companies. These organizations all work together to provide data for safer roads. This database represents an industry-first in that it is populated by the actual producers and generators of the work-zone data, collectively known as the Work-Zone Data Industry (WZDi™).

The R.O.A.D.™ database is the clearinghouse for work zone-generated attributes that may require corrective or attentive action or alertness from roadway users. The launch of the R.O.A.D.™ database involves a significant portion of the WZDi™, made possible through relationships with major traffic control equipment manufacturers, pavement marking companies and other significant producers of smart work zone technology and data that perform tasks on a daily basis such as temporary work zones, lane closures, protecting lives and equipment, painting lanes, closing roads, and performing maintenance, through automatic communications from devices integrated inside roadway assets.

Auto Industry Collaboration

We are actively collaborating with the major automobile manufacturers to bring work zone data directly into the dashboard of modern connected vehicles via the R.O.A.D.™ database. As autonomous vehicle technology becomes a reality, automakers are aggressively pursuing advanced technology to alert drivers to hazards, eventually incorporating this technology into the vehicle operating systems themselves. iCone has been a major contributor in the preliminary stages of development with the automakers, and the R.O.A.D.™ data is essential to provide accurate, real-time information for vehicle systems to react to work zones in a timely manner.

iCone's Vision for Tomorrow

Our vision leads to a world where every road anomaly will show up on the dashboard of every vehicle and navigation system. The data stream from the R.O.A.D.™ database will be used by travelers to prevent car accidents, better manage navigation routes to avoid travel delays by re-routing around construction zones and increasing the overall safety and efficiency of travel not only on major highways, but all public roadways. There will be a time when every work zone will be a "Smart Work Zone" marked by smart work zone technology, every maintenance vehicle and work truck will be identified on the map, and every flag person will be protected.

Tab B: EXECUTIVE SUMMARY

iCone is uniquely positioned to assist the North Central Texas Council of Governments (NCTCOG) achieve the objectives of this RFP, including the intended objectives of Phase Two of this initiative. Our response to Bid Item #3 as well as the Additional Items/Bid Item #4 demonstrates that iCone can provide the data needed, as well as the technical expertise and consulting services to support the efforts required by Bid Items #1 and #2 of this RFP. The extensive footprint of data that currently exists within the NCTCOG region as well as throughout the US in the R.O.A.D.™ database combined with our experience working with public and private entities throughout the US will support any other public entity in the US that elects to access the software, services and data that will be made available under this contract via the SHARE Cooperative Purchasing Program.

While there are many qualified respondents proposing to provide the software and services required as part of this RFP, iCone is the one resource that enables the true value of those services to be realized in a meaningful way, regardless of the award recipients for Bid Items #1 and #2. Not only has iCone orchestrated the collaboration of the Work Zone Data Industry (WZDi™) and created the R.O.A.D.™ database, but we are also actively working with most of the technology and software firms responding to this RFP to integrate the R.O.A.D. Device Feed™ into their software platforms. Most of the heavy lifting has been done.

iCone has a long history of working in the ITS industry bringing work zone safety to the forefront. We were one of the original companies that helped create the Work Zone Data Exchange (WZDx), and we remain active in many government and organizational groups and committees to advance work zone safety through the use of technology.

A key element of the WZDx is creating a secure, trusted environment. iCone executives have served on the Technical Assistance Subgroup of the WZDx which offers guidance to agencies that are preparing to stand up WZDx feeds. The Technical Assistance Subgroup has spent a significant amount of time on cyber security and securing a trusted Source of Truth. iCone and the members of the R.O.A.D.™ community have built this offering specifically to provide WZDx publishers with an automated, reliable Source of Truth from the project site. We are offering this proposal to NCTCOG to make the actual traffic control equipment in the work zone into your trusted Source of Truth and provide the data and services needed to support the efforts of the scope of services contemplated in Bid Items #1 and #2 of this RFP.

We are offering a latency tiered data pricing structure for data to serve the needs of the NCTCOG in an economical manner while building an environment where the work zone data industry has a robust presence with low latency capability on many of the work zones in the region. Through the R.O.A.D.™ database, the NCTCOG will have a data resource that supports the traffic operations of the members at a latency and price that fits the budgets and processing schedule. It will also create a work zone data environment where automated vehicle companies will be able to subscribe to instantaneous data if their development requires it.

Our Technical Proposal demonstrates that there is significant work zone data already available within the 16-county region of the NCTCOG as well as around the US. More importantly, there is an incentivized business model in place to aggressively grow the amount of smart work zone devices generating data within the NCTCOG and other areas around the US without relying on public agencies, regulation, and specifications to drive the deployment of smart work zone technology. We have also demonstrated that while the WZDx has created an effective format to establish a standard for the collection, curation, and distribution of data, as a government-based initiative, its scope is

limited and will continue to be for the foreseeable future to generate the volume of data necessary to support the objectives of this RFP and the future expectations of the NCTCOG and other entities that may access this contract. Notably, iCone has received significant support from the USDOT and the Work Zone Data Working Group to advance the concept of consolidating work zone data using the WZDx Device Feed format into the private sector.

Lastly, given the complex nature of this RFP and the potentially wide variety of responses that are likely to be submitted in response to this RFP, we encourage the NCTCOG to set up interviews with selected respondents to better understand the responses and establish an effective long-term and integrated solution. iCone is happy to review our thoughts not only on our proposal but the overall objectives of this initiative to assist NCTCOG develop a comprehensive solution that works not only for its member agencies but is an effective solution for other public entities around the country.

Tab C: KEY PERSONNEL

iCone Products is a technology company with roots in the aerospace and commercial vehicle sectors. Combined, our key personnel have over 150 years' experience in the ITS, engineering, business, and technology space. The seasoned professionals and technical experts are not new to this industry, and they bring immense insight and innovation to a rapidly developing industry.

John Brod, CEO

Mr. Brod is an executive leader with 30 years' experience and an established track record of results in growth and turnaround situations across multiple industries, including technology, real estate development, storage, engineering, and construction.

He is a process-oriented executive with strong financial and operational acumen, who consistently develops strong teams and instills a culture of ownership-thinking to execute on a common vision and objectives. As Chief Executive Officer of iCone, Mr. Brod is responsible for leading the organization including business development, operations oversight, and strategic partnerships.

Ross Sheckler, CTO & Founder

Mr. Sheckler is an engineering professional with over 30 years of technical experience in the Intelligent Transportation Systems (ITS), aerospace, heavy vehicle design, highway information systems, and data management industries. As a co-Founder and Chief Technology Officer of iCone Products, LLC, Mr. Sheckler has been at the forefront of smart work zone technologies and is widely respected throughout the industry as the premier subject matter expert.

For more than two decades, Mr. Sheckler has been focused on the development of robust traffic monitoring systems, applying experience from the aerospace and heavy trucking and logistics industries in the creation of a wide variety of smart work zone technologies, leading to the launch of iCone's ConnectedTech suite of products and the development of the R.O.A.D. database and R.O.A.D. Device Feed.

Mr. Sheckler chairs or sits on multiple boards and trade associations focused on improving ITS and Work Zone Safety. Specifically, Mr. Sheckler was one of the founding members of the WZDx Working Group and has served as a technical advisor to WZDx for more than 5 years. As a regular speaker at symposiums related to automated vehicles and work zone data sharing Mr. Sheckler advises both national and regional agencies on policy and specifications.

Mr. Sheckler has advised NASA, the US DOE, the US DOT, the US EPA, the US Army, and the US Air Force. Mr. Sheckler has been a guest lecturer in the Aerospace Department of Syracuse University and served as the President of Iowa State University's Industry Advisor Council.

Garvin Forrester, COO & Founder

Mr. Forrester is a founder of iCone Products from its infancy when it was transferring aerospace technology into the truck industry. As Chief Operating Officer, Mr. Forrester has focused his tenure at iCone on business development and financial strategies. Mr. Forrester also provides operational oversight for iCone's manufacturing and vendor relationships.

Mr. Forrester is currently leading the development of a data clearinghouse for work zone-generated attributes that may require corrective or attentive action or alertness from roadway users, known as Realtime Ontime Accurate Database (R.O.A.D.TM). Mr. Forrester is establishing relationships with several major traffic control equipment manufacturers, pavement marking companies and other significant producers of smart work zone technology.

Mr. Forrester's background is Aerospace Engineering and was involved in the fuel efficiency re-design effort for leading truck manufacturers in the U.S. This effort led to involvement in a NASA/DoE study on the aerodynamic effects of a tractor-trailer combination at highway speeds. He has worked on contracts for Boeing in which he developed methodology for the application of Boeing's AGPS design package to special problems in near-sonic flight.

George Smith, CSO

Mr. Smith brings thirty years of sales, marketing and business development in the data collection markets for logistics, transportation, and retail industries. As Chief Strategy Officer at iCone, Mr. Smith has been focusing on sales and investor activities for iCone.

Mr. Smith's background is sales, marketing, and legal having been a general counsel for a Honeywell business unit for twenty years managing the function which included intellectual property as well as responsible for OEM sales. Mr. Smith led the intellectual property strategy that disrupted the Automatic Identification Data Collection industry. Mr. Smith teamed with sales and marketing to win a \$150MM order from UPS for mobile computing.

Daren Lynch, Vice President of Business Development

Mr. Lynch brings extensive experience (thirty-five years) of sales, marketing, and business development from diverse industries (medical device, agricultural and government road maintenance) which created a strategic intellectual property disruption for the snow and ice maintenance industry. Mr. Lynch's past seven years working with national cooperative purchasing groups (NASPO and Sourcewell) which includes state DOT procurement practices, has created significant growth for iCone Products, LLC. Beyond the national procurement process, Mr. Lynch has relationships with major pavement marking, traffic control and work zone safety equipment manufacturers that allow for a strategic foundation from the producers of data in the smart work zone data arena.

Adam Kovar, Chief Engineer

Mr. Kovar has over 15 years' experience in the technology industry, with specific expertise in traffic data, work zone management and construction. As chief engineer for iCone, Mr. Kovar is responsible for product system integration as well as software and database architecture.

Mr. Kovar designed iCone's queue warning system logic as well as the dynamic late merge logic, both of which have become a recognized industry standard. Mr. Kovar has implemented hundreds of queue warning systems and has implemented and maintained many different data transfer for mats and methods to both provide and ingest data, including Waze's CIFSv2, Iowa's SABP, several versions of WZDx, and countless custom formats.

Mr. Kovar leads the software development for the ConnectedTech™ suite of products and has been instrumental in the development of the back-office management systems for the R.O.A.D. data base and R.O.A.D. Device Feed™ .

Victor Pedraza, Computer Engineer

Mr. Pedraza is a Computer Engineer at iCone Products LLC. Mr. Pedraza has over 30 years of IT experience in the ITS, pharmaceutical, manufacturing and distribution industry. Mr. Pedraza has been working at iCone since 2012 and is responsible for the computer infrastructure of the company, and contributes significantly to product design, manufacturing and technical support by providing feedback on product design, assembling product and helping customers with training or troubleshooting their devices.

Tab D: TECHNICAL PROPOSAL

Introduction

iCone Products is responding to the NCTCOG solicitation for Roadway Work Zone Data Reporting Services Bid Item #3 to provide consulting services to support the requirements associated with Bid Items #1 and #2. In addition, iCone is providing a proposal under Additional Items/Bid Item #4 to provide a single, curated feed of data from a rapidly growing inventory of work zone traffic control devices known as the R.O.A.D. Device Feed™. iCone will not be directly processing the WZDx feed, however, the data from iCone's R.O.A.D. Device Feed™ will be a significant asset for the companies that are responding to this solicitation under Bid Items #1 and #2.

While Bid Items #1 and #2 of this solicitation request responses that assist the members of the NCTCOG in processing construction scheduling and 511 data into the WZDx format, the addition of real-time device data from the construction site is a significant enhancement to the overall WZDx product. In fact, a stream of data from the equipment of the contractors in the NCTCOG will directly address three of the major concerns expressed in this solicitation.

- 1) Capturing field data to update known work zones with up to the minute data on activities and location.
- 2) Identifying the otherwise unknown work zones on all types of roadways.
- 3) Establishing a means to encourage the increase in the availability of data over time.

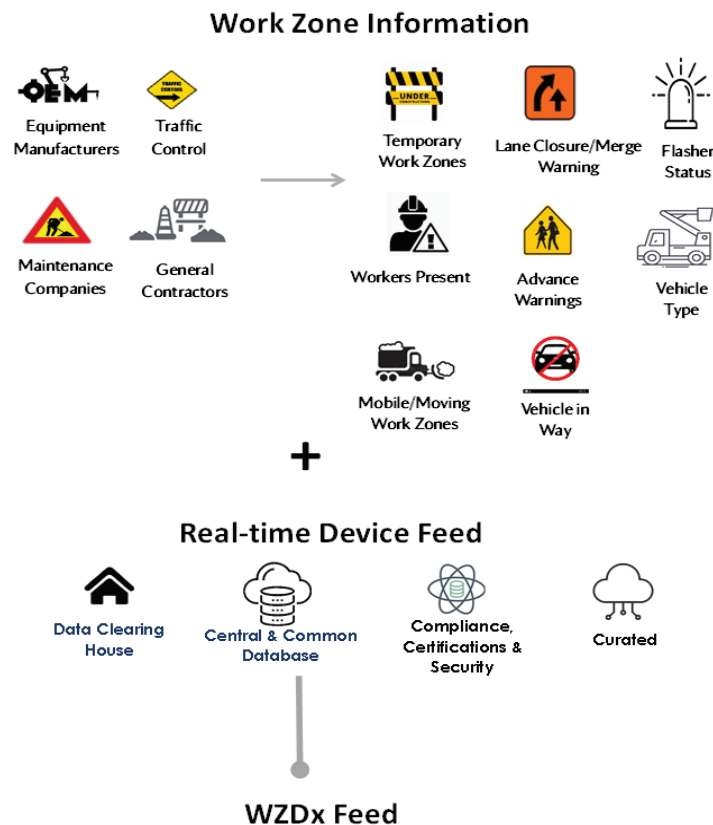


Figure 1. Data Flow from Work Zone to R.O.A.D. Device Feed™

D.1 Consulting Services (Bid Item #3)

D.1.1 Description of Services

Consulting Services to implement real-time data into the systems and services developed by the award recipients of Bid Items #1 and #2. allowing those providers to use the data provided by R.O.A.D.™ data services in Bid Item #4 (Section D.2).

D.1.2 Process for Responding to an Order

Upon notification from NCTCOG of Award Recipient(s) we would work with the selected entities to determine the following:

- Scope and Objectives for tools / services being developed specifically for the NCTCOG.
- Understand the data attribute needs of the Award Recipient(s).
- Create a roadmap for integrating the R.O.A.D. Device Feed™ (D.2) into the systems/software of Award Recipient(s).

Once a final scope of services is developed and agreed upon, iCone will prepare a proposal for the required services based on the discounted consulting pricing included in Tab F and Exhibit E for review and approval by the NCTCOG and/or the Award Recipient(s) prior to initiating work.

D.1.3 Delivery

Upon receipt of approval of the proposal as defined in D.1.2, iCone will begin work on the approved services.

- iCone will provide a proprietary R.O.A.D. Device Feed™ to the Award Recipients of Bid Items #1 and #2.
- iCone will help integrate the R.O.A.D. Device Feed™ into the systems and/or software of those award recipients.
 - Help them digest the R.O.A.D. Device Feed™ terminologies and documentation.
 - Manipulate or change the R.O.A.D. Device Feed™ as needed.
- Award Recipients will transform the R.O.A.D. Device Feed™ into a WZDx compliant feed.

DI.1.4 Customer Service

iCone maintains a 24/7 Customer / Tech Support service line. Every email and call will be managed by people who are extremely knowledgeable that consist of a cohesive support team to be in contact each time you call or email.

R.O.A.D.™ Technical or Customer Support can be reached by phone or email if you have any questions or problems setting up, sending, or receiving the R.O.A.D. Data Feed™. iCone is a US-based company, and offers bi-lingual (English, Spanish) customer support for the convenience of our customers.

R.O.A.D.™ Customer Support can be reached by telephone at (315)579-3515, and email-based support is available, at support@iconeproducts.com and our support representatives will respond as necessary.

D.1.5 Invoicing Process

Consulting services are billed on a time and materials basis. Upon completion of pre-approved work efforts, invoices are generated with NET 30 terms. Direct expenses will be billed at cost. Efforts will be made to minimize any travel expenses via the use of technology and on-line meeting systems.

D.1.6 Assumptions

iCone assumes that the NCTCOG requires and/or the Award Recipient(s) for Bid Items #1 and #2 will be open to working with R.O.A.D.™ to ingest the data required to accomplish the objectives of their efforts.

D.1.7 Exceptions to Requirements in RFP

iCone has no exceptions to the requirements of the RFP or the stated terms and conditions. Because data rights are not addressed as part of the terms and conditions included in the RFP, iCone would expect our standard End User License Agreement (EULA – Appendix 3) to apply to any transfer of data either to the NCTCOG, its member agencies, or any award recipient(s) for Bid Items #1 and #2.

D.1.8 Special Features/Additional Considerations

Fortunately, many of the companies that are responding to Bid Items #1 and #2 (see Figure below) already have a history of working with iCone to incorporate R.O.A.D.™ into the agencies 511 and scheduling data. A short amount of time will be needed to incorporate the R.O.A.D. Device Feed™ into the processes of the respondents to Bid Items #1 and #2. The level of consulting services required to complete the integration process will be based on the ultimate award of Bid Items #1 and #2 and the efforts already completed with one or more of these companies.



Figure 2. Technology Service Providers currently ingesting R.O.A.D. Device Feed™

D.2 R.O.A.D.™ Data Services (Bid Item #4)

The effectiveness of any efforts expended as part of Bid Items #1 and #2 is highly dependent on the availability of a reliable, trusted source of data that provides an accurate depiction of the condition and status of work zones. There are potentially dozens of companies that produce traffic control equipment that is connected for a variety of reasons, many not for the purpose of safety alone. Although there are a substantial number of connected devices currently on the roadways today, until recently, there has been no consolidation of that equipment or data to produce an effective stream of data that can be used for traffic management and safety.

As part of the Additional Item/s requested in the RFP, iCone is pleased to offer the R.O.A.D. Device Feed™ required to support Bid Items #1 and #2 as Bid Item #4 in our proposal.

D.2.1 Description of Services

Types of Data

The transportation industry has decided that it is important to make data on work zones available to the industry, but first there must be a definition of the meaning and purpose of the traffic control devices that we are going to collect data on. For several years now, the iCone team has been working with other members of the work zone data industry to identify which devices are the most important to be monitored and what characteristics to measure.

The team of traffic control equipment providers that contribute to R.O.A.D.™ offer connected devices that combine to make all the tools of traffic control available as IoT connected. Some of these include:

DEVICE	MEANING
Traffic cones/delineators	Boundary of work zone
Arrow boards	Lane closure, merger advice
Work truck hazard lights	Work activity ahead
STOP/SLOW paddles	Flagging activity, reversing single lane
Automated Flagging Device	Flagging activity, reversing single lane
Pavement marking truck	Slow moving work, wet paint
Portable changeable message boards	Traveler information
Portable rumble strips	Caution, slow down
Portable Traffic Signals	Alternating single lane of traffic

Table I. Types of work zone data

Types of Projects and Roadways

The advantage of making the traffic control devices the core of the monitoring system is that these tools are used as standard practice across all the professions that work on the roadway. Within R.O.A.D.™ there are companies that use connected equipment for construction, maintenance, utilities, street sweeping and first responders. When an agency uses and promotes the R.O.A.D. Device Feed™ they open an avenue for these professionals to share their activities in the right-of-way without any additional tasks for the crews in the field.

The following is a depiction of the diverse types of traffic control equipment and scenarios that can be utilized as part of the R.O.A.D. Device Feed™.



Figure 3. "Wheel of Safety" - Internet of Road Work™ Applications

Availability of Data – WZDx vs R.O.A.D.™

The intent of the WZDx is not necessarily to be a comprehensive source of data that would reflect the entirety of work zones. Instead, WZDx has carried out the goal of setting up a standard for indexing and reporting the presence of work zones via connected equipment. That standard can be adopted in the private sector to produce a comprehensive resource of data that more completely communicates the status of work zones associated with the highway and infrastructure projects in real-time.

For any government-based entity to develop a comprehensive source of data, universal mandates across the country to institute connected technologies would be required. While this may be the ultimate path, it would potentially take decades to implement at a scale that would be effective in carrying out the goals of this RFP in the near term. To truly create a comprehensive, real-time record of all scheduled roadway anomalies involving road construction, road maintenance, utility work and other right of way activities, the Infrastructure Owner/Operator's (IOO's) must implement comprehensive smart work zone technology which exists primarily in the private sector traffic control equipment OEMs and contractors.

Currently, less than half of the States have adopted the WZDx specification and are reporting active work zone data through the WZDx device feed. In those states, it is estimated that only about 15% of the active work zones are being reported via the WZDx device feed. With the development of the R.O.A.D. Device Feed™, iCone is prepared to deliver a high volume of work zone data immediately, not only within the NCTCOG 16-county region, but throughout the entire US. Via the incentives built into the business model, R.O.A.D.™ is set up for virtually unlimited scalability that will allow for the expansion of this service to any public entity.

The following image illustrates the complexity involved in the collection of data daily from 10,000+ work zone projects, executed by 1,000+ contractors using connected equipment manufactured by 30+ companies and organizing the various sources of data feeds (public, private, planned and/or emergent work zone) to the public agency. iCone's development of R.O.A.D.™ overcomes this significant challenge through the extensive collaboration established within many private companies in the Work Zone Data Industry.

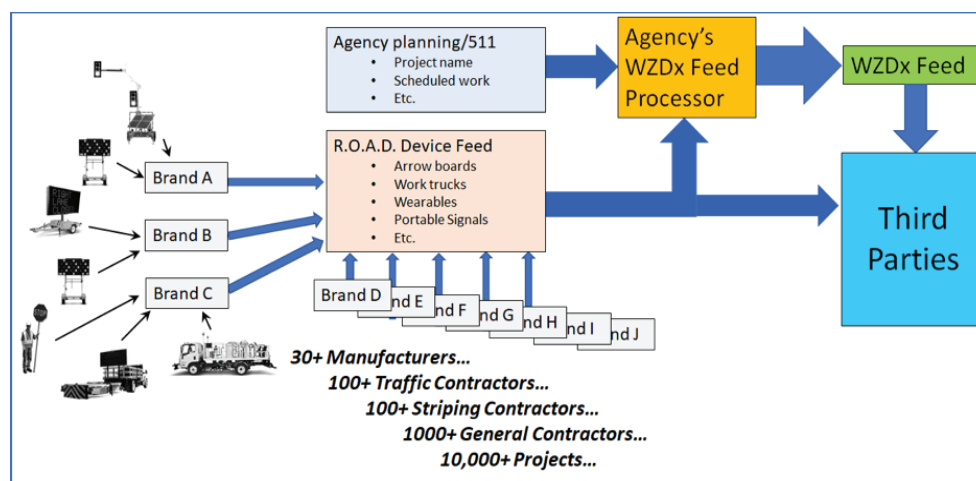


Figure 4. Complexity of collecting event data.

Tracking the known work zones

One of the modern breakthroughs in the management of large road networks has been the introduction of the Internet of Things (IoT). Connected work zone equipment makes key traffic control tools like arrow boards and traffic cones into an IoT. The connected traffic control devices built by iCone and its equipment building partners stream details of location and status from the work site in real time. As a result, the connected traffic control equipment makes the unknown work zone instantly discoverable on all roadways regardless of project size or location.

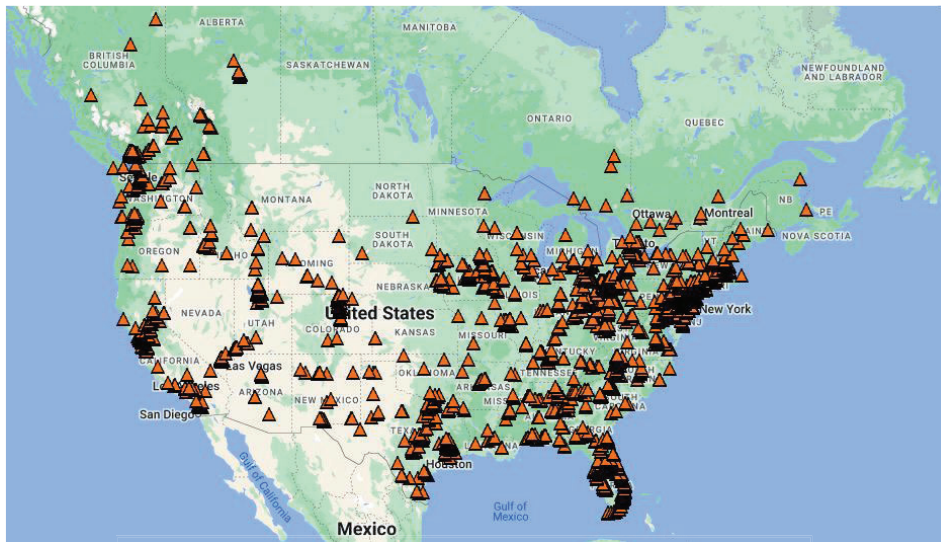


Figure 5. Sample of North American connected devices in R.O.A.D.™

A connected arrow board that is set up and positioned for direction about a left merger in a right-lane closure transmits its location and left-arrow message to the R.O.A.D.™ Database. This data is formatted into a Device Feed format where the agency can pick it up. Within minutes of the arrow board being activated the agency has the data. Once the location and status of the arrow board is known, the device can be paired with a planned project by the WZDx processing software, and the known project can be updated with the exact location and time of the lane closure.

While the entire WZDx process is new to the industry, the companies that have been supporting the development process have been working together for quite some time. Because of the safety benefit of having work zones appear on navigation apps such as Waze and Google Maps, many of the contractors that are active in the NCTCOG region have been acquiring connected work zone traffic control equipment. As a result, the R.O.A.D. Device Feed™ already has hundreds of work zones reported each day in the NCTCOG region, and thousands in the state of Texas. iCone expects that by the end of 2022 as many as 400 unique work zone events will be reported in the NCTCOG region in real-time via the R.O.A.D. Device Feed™ every day.

Work Zones Reporting per Day in the NCTCOG Region and the State of Texas



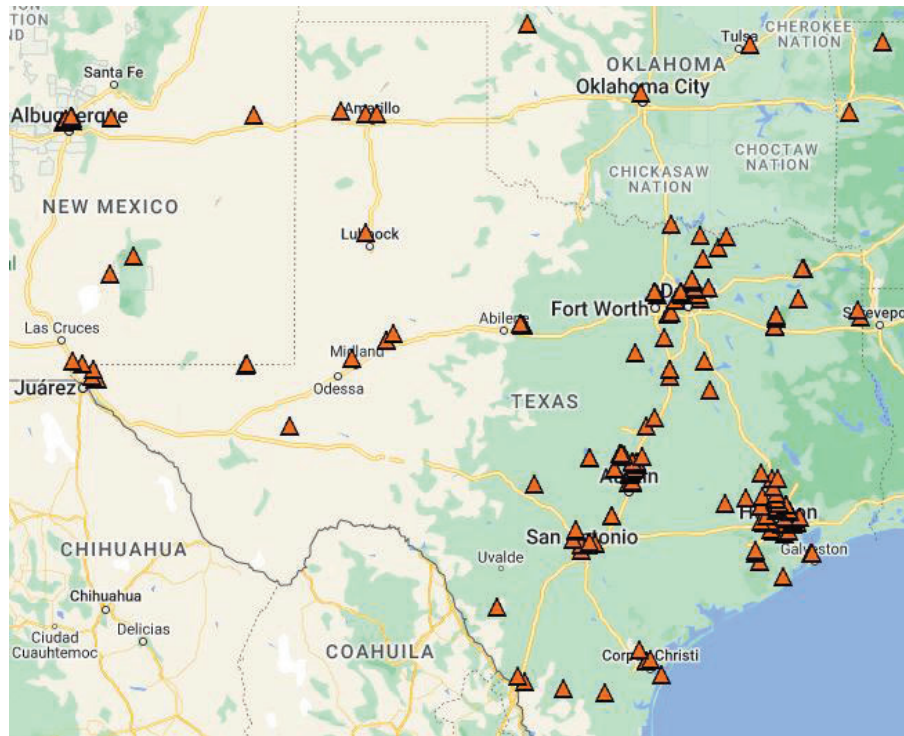


Figure 6. Snapshot of connected devices in Texas.

Finding Unknown Work Zones

After years of aggregating work zone data around North America, iCone has learned that a significant majority of the work events that happen on America's roadways are not known by the traffic centers in advance. The state of Iowa was the first state to require all state funded highway projects to include a connected arrow board. As of 2021, approximately 95% of those projects have met that requirement, and most arrow boards owned by contractors in the state are now connected. Iowa State University estimates that 85% of the data reported by those connected arrow boards was associated with projects that were not previously in the traffic management system.

When the traffic control and utility maintenance companies adopt connected technologies for their own economic and safety reasons, the data is automatically reported on all their projects regardless of the type of road that they are working on. The major traffic control contracting and rental companies in the NCTCOG region such as Lite & Barricade, Buyers Barricade, and StreetSmart have started to convert their rental fleets to connected equipment. Integrating the R.O.A.D. Device Feed™ as a source of work zone data as part of the NCTCOG Roadway Work Zone Data Reporting Services initiative, the rate of adoption will be significantly increased through revenue-sharing incentives.

The growth of a healthy market for renting connected traffic control equipment will also allow the NCTCOG's member agencies to adopt a policy of requiring connected equipment to be registered with each work permit. iCone and several of the other contributors to R.O.A.D.™ allow for the connected equipment to be assigned to specific work permits and the permit number is included in the R.O.A.D. Device Feed™. Policies such as these encourage the availability of work zone data on all types of roadways.

Growing The Data Volume

iCone and its partners that contribute to the R.O.A.D. Device Feed™ have established a business model with the express intent of increasing the volume of work zone data, delivering data from the work zone to the dashboard of every vehicle in the country. To achieve this, economic incentives need to be in place to incentivize equipment builders and contractors to produce and use connected traffic control equipment.

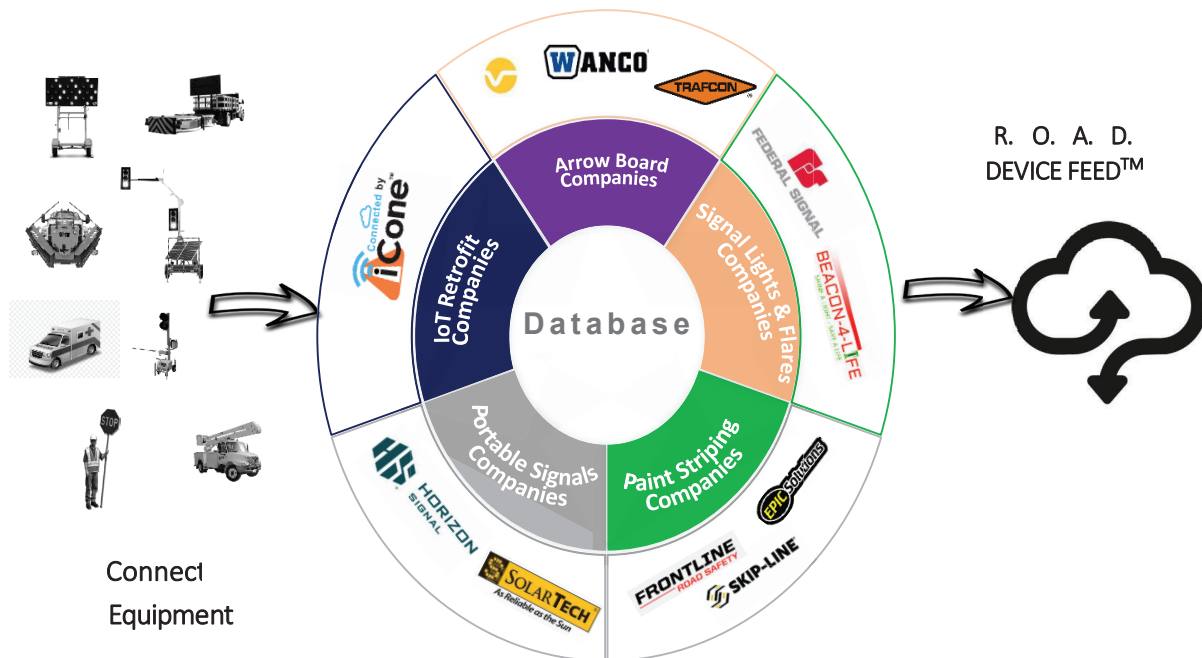


Figure 7. Work Zone Data Industry (WZDi™) Business Model

The R.O.A.D.™ business model incentivizes the equipment builder partners with a share of the net revenue collected from data sales in a region based upon the proportion of data that is collected in the region. The share of data revenue that an equipment-builder receives is based upon the amount of connected equipment in the region so the manufacturer gets a larger share if they can get more equipment into the region. The equipment builders that are contributing to R.O.A.D.™ understand the revenue sharing model and have committed to using a variety of distribution incentives to get more connected equipment into the NCTCOG region.

By integrating the R.O.A.D. Device Feed™, the NCTCOG region will immediately experience between one and two hundred known and unknown connected work zone events each day. Because of the business incentives built into the R.O.A.D.™ business model, iCone expects that the data volume in the NCTCOG region will grow significantly in the first year.

D.2.2 Process for Responding to an Order

An Order” under this Bid Item would consist of a request from one of the Award Recipients of Bid Items #1 and/or #2 or any public entity that is a provider of data to support the software and services being developed as part of their efforts under this contract. Upon receipt of an “Order” for data, iCone will respond as follows:

- Determine the actual entity getting the data (NCTCOG or other public entity).
- Identify the level of data latency (data feed types) needed as defined in Section D.2.3.
- Hold a “discovery” session with the Award Recipient of Bid Items #1 and/or #2 to decide the technical requirements for ingestion of the data as well as any added consulting services that may be needed as defined in Section D.1.
- Set up data account, log-in credentials and establish terms of use for the end user as defined in Section 2.7.

As described in Section D.1 above, there may be additional consulting services necessary to fully integrate the R.O.A.D. Device Feed™ into the software platform developed as part of Bid Item #1.

D.2.3 Delivery of Data

Data Supply

As an established member of the work zone data industry (WZDi™), iCone and its partners in the R.O.A.D.™ system are currently operating real-time streaming services to several state and local agencies across the country. As a result, the R.O.A.D. Device Feed™ will be fully functional upon execution of a contract.

Additionally, iCone is also currently providing streaming services to many of the software companies that are submitting proposals under Bid Items #1 and #2. While each of these technology providers offer unique features and services that satisfy the needs of NCTCOG, all the respondents that we are aware of have a working relationship with iCone and the ability to work with the R.O.A.D Device Feed™.

While the R.O.A.D.™ database already monitors much of the work zone traffic control equipment in the NCTCOG region, a sizable portion of the equipment is already in the fleets of contractors and maintenance departments. The equipment builders, see Figure below, that are contributors to R.O.A.D.™ are also ready to assist these groups in upgrading their traffic control equipment to connected status. The revenue sharing through the R.O.A.D.™ business model will aid in reducing the cost of these upgrades.



Figure 8. Work Zone Data Industry equipment builders

Latency

Among the techniques that have been proposed for gathering data on the presence of work zones, there are three that dominate the conversation; worker check-in, probe reporting, and device connectivity.

Reports that are phoned in or checked-off on a phone app require additional time from the jobsite workers back at the traffic center. Either way the delivery speed is limited by the workers' personal time restraints. Reports that rely on probe vehicles passing near the work zone necessarily wait for a verifying probe to occur. On busy roads this approach frequently takes fifteen to thirty minutes. On local streets it may be hours or days before a probe reports a work zone.

iCone has long been teaching the transportation industry that simply upgrading key traffic control equipment to connected status is the most efficient way to get work zone data into traffic centers in seconds. The team of companies that contribute to R.O.A.D.™ has made significant progress converting key traffic control devices so that they automatically communicate when they are setting up the work zone. In regions of the country where entire commercial fleets have been fully converted to connected equipment, every work zone is reported within minutes, regardless of what road it is on. When a connected arrow board is rented for a job, it reports the start of that lane closure in minutes, every road, every time.

The images below are illustrations of iCone's ConnectedTech™ retrofit technology once activated in the field.

- Image #1: Represents the device feed information as it appears on the national iCone internal mapping system as well as on the customer's direct log in and data feed.
- Image #2: Represents the device feed information as it appears in the on-line version of WAZE Live Maps on a laptop or desktop computer.
- Image #3: Represents the device feed information as it appears on a smart phone WAZE app that would be on the phone or the dashboard of the driving public.

Image #1

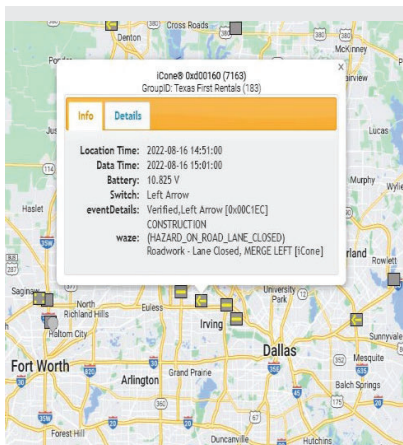


Image #2

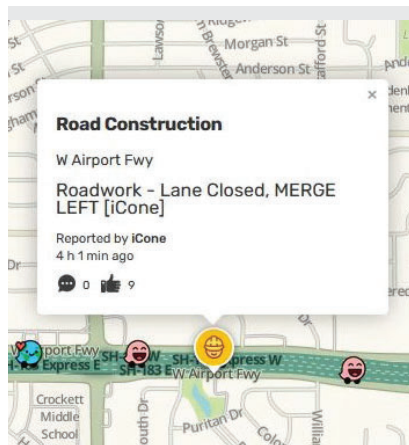
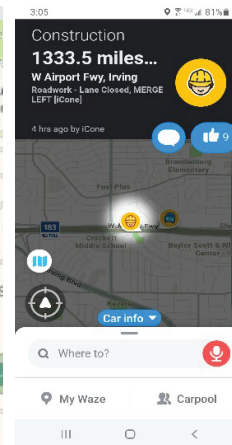


Image #3



While the equipment builders that contribute data to the R.O.A.D.™ system have implemented a variety of IoT technologies, in general the connected traffic control equipment uses cellular technology and is programmed to send updates within seconds of a change in status of the equipment. These updates from the field devices are compiled at iCone into the R.O.A.D. Device Feed™ and pushed out through the API in approximately two minutes of the updates or two minutes after the work zone is set-up or torn down.

Data retrieval latency levels have direct advantages and uses for infrastructure operators.

1-minute Latency	10-minute Latency	60-minute Latency
Facilitates capturing field data to update known work zones with up to the minute data on activities and location.	Locating Traditional Work Zones Longer Term planned construction activities	Analysis and Research activities.
Presence of Temporary or Short-Term events (Workers maybe present).	Managing Permitting Activities	Archival data collection.
Locate Unknown Work Zones on all types of Roadways.	Verifying existence of scheduled work (active vs. non-active work zones)	Limited value for real-time information Analysis.
Contractor Time Management & Inspection	Traffic Operation alerts (e.g. snowplow)	
Verification of Deployment and Status of Traffic Control Devices		
Providing driving public routing updates.		

Table II. Data retrieval features

Data Security

Security of data systems is an extremely broad topic where detailed answers change daily with the shifting landscape of an increasingly international computational society. Practitioners need to adjust their systems to keep up with the times, but some basic best practices continue to apply.

The Technical Assistance Subgroup of the WZDx has published a list for data security which includes:

- REST Endpoint Security
- SSL (TLS)
- Cloud-hosted
- Securing the Source of Truth (Chain of Custody management)

* Refer to the WZDx protocol for a more definitive description of these security measures.

Not only is iCone's R.O.A.D.™ system built to adhere to the data security best practices outlined by the WZDx, but using the automated reporting of the traffic control equipment as a Source of Truth and a source of discovery will give the NCTCOG WZDx feed the highest degree of reliability.

Data Licensing & Pricing Models

The R.O.A.D. Device Feed™ will function with (3) three primary licensing and (2) pricing models that are procured on a per-seat (granted access) basis.

① Navigation Feed Real-time Streaming Plans 1 Minute Latency ● Presence of Temporary or Short-Term Events (Workers maybe involved) • Removal of traffic control devices • Picking up road debris • Accurate location of Mobile Work Zones ● Locate Unknown Work Zones ● Contractor Time Management & Inspection ● Verification of Deployment and Status of Traffic Control Devices ● Providing driving Public routing updates.	② Traffic Operations Feed Live-Data Plans 10 Minute Latency ● Locating traditional Work Zones ● Managing Permitting Activities ● Verify Active vs. Non-Active work zones	③ Analysis Feed Snapshot Plans 60 Minute Latency ● Analysis and Research activities. ● Archival Data Collection ● Limited value for real-time information Analysis.
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Table III. R.O.A.D. Device Feed™ Licensing Models

The licensing models for data service are defined below. Pricing (see Tab F - Cost Proposal) for this model assumes a flat fee will be charged for every consumer that requires connectivity to the The R.O.A.D. Device Feed:

1. Navigation Feed:

The Navigation Feed licenses are intended for customers and consumers that require a real-time feed of work zone warnings at a streaming service level of delivery (latency 1 minute). This type of model is ideal for agencies needing to capture field data to update known work zones with up to the minute data on activities and location.

2. Traffic Operations Feed:

The Traffic Operations Feed licenses are intended for customers and consumers that require live data of work zone warnings at a subscription level of delivery (latency 10 minutes).

3. Analysis Feed:

The Analysis Feed licenses are intended for customers and consumers that require a snapshot of work zone warnings at a subscription level of delivery (latency 60 minutes).

The pricing model for each level of data subscription is based on (2) purchasing plans.

1. **Master Agency Plan** – serves as the primary subscription holder on behalf of other entities within a certain jurisdiction. In the case of this RFP, the NCTCOG would serve as the Master Agency on behalf of its Associate Member Agencies.
2. **Associate Agency Plan** – serves as a supplemental subscription to the Master Agency plan. This supplemental plan is offered because of additional benefits and features that a separate “seat” can offer an Associate Member Agency. For example,
 - Enhanced data Analysis & Reports.
 - Member agency prefers to segregate its dataset for dashboard viewing.
 - Member agency requires an enhanced or upgraded Feed.
 - Member agency requires faster data-delivery speed.

The pricing model is further described in Tab F - Cost Proposal.

D.2.4 Customer Support

Please refer to section D1.4 above.

D.2.5 Invoicing Process

Data licensing is invoiced based on contractual terms to be determined on a case-by-case basis as required by the contracting entity in accordance with the Proposal Pricing included in Tab F. If NCTCOG establishes a data licensing subscription under this contract, it is anticipated that the term of such contract would be in accordance with the terms defined in Section 5.2 of the RFP. Typical data subscription license contracts are billed monthly under a 1-to-3-year term contract; however, alternate billing terms may be available. Invoices are generated and submitted upon NET 30 terms.

D.2.6 Assumptions

None

D.2.7 Exceptions to Requirements in RFP

iCone has no exceptions to the requirements of the RFP or the stated terms and conditions. Because data rights are not addressed as part of the terms and conditions included in the RFP, iCone would expect our standard End User License Agreement (Appendix 3 - Data Rights, Ownership, And Redistribution) to apply to any transfer of data either to the NCTCOG, its member agencies, or any award recipient(s) for Bid Items #1 and #2.

D.2.8 Special Features/Additional Considerations

Much of the data that is available in any given region is associated with utility and maintenance operations that are unknown within the agency's traffic operation systems. As a representative of these contractors iCone is seeking to supply as much of this data to the traffic operations organization while accurately representing the contractor/partner's interests. However, if the agency intends to republish this data on previously unknown events without enhancing the

R.O.A.D.™ data with details previously known to the agency it erodes the opportunity for iCone to return value to our data partners. iCone will be able to maximize the total amount of deliverable data in the region if the NCTCOG will only republish data that has been enhanced by agency data. The R.O.A.D.™ business model is most effective if the NCTCOG will commit to reserve R.O.A.D.™ data that does not match previously known agency events or the agency has not added additional value to allow the data supply partners to realize the economic benefits of the model.

Contact Persons:

Bid Process: Daren Lynch | D.Lynch@iConeProducts.com | 315-663-6529

Contracting Process: Garvin Forrester | G.Forrester@iConeProducts.com | 315-491-2620 Contract

Administration: Ross Sheckler | R.Sheckler@iConeProducts.com | 315-626-6800

Tab E: REFERENCES

North Carolina DOT -	Kelly Wells, State Traveler Information Engineer, kwells@ncdot.gov , (919) 825-2615
Southern Nevada RTC –	John Penuelas, Director of Engineering, penuelasj@rtcshv.com , (702) 676-1611
Iowa DOT –	Skylar Knickerbocker, Research Engineer – InTrans, sknick@iastate.edu , (515) 294-2238
Texas Transportation Institute –	Dr. Gerald Ullman, Sr. Research Engineer and Program Manager, g-ullman@tti.tamu.edu , (979) 317-2142

Tab F: COST PROPOSAL

Definitions:

Master Agency – Entity that serves as the primary procurement agency on behalf of other entities within its jurisdiction. In the case of this RFP, the NCTCOG would serve as the Master Agency on behalf of its Associate Member Agencies, including any of the 230 member governments within the 16-county region of the NCTCOG.

Associate Agency – Entity within the jurisdiction of the Master Agency. The 230 member governments within the NCTCOG qualify as Associate Agencies. If a state level DOT were to serve as a Master Agency, any public entity within that state (County DOT, Municipality, etc) would qualify as an Associate Agency. Similarly, if a County were to serve as a Master Agency, any public entity within that County (such as Towns, Cities, etc) would qualify as an Associate Agency.

Cost Proposal for NCTCOG:

Document Management Solution Services Rate Chart - SHARE Cooperative Purchasing Program						
Level of Data Service	Description	List Price per CLM ¹	Discount Price per CLM	Master Agency Monthly Fee (NCTCOG) ^{2,3}	Associate Agency Monthly Fee	Discount off List Price
1	Navigation Feed	\$ 1.20	\$ 0.90	\$ 37,170.00	\$ 1,500.00	30%
2	Traffic Operations Feed	\$ 0.55	\$ 0.40	\$ 16,520.00	\$ 1,000.00	30%
3	Analysis Feed	\$ 0.35	\$ 0.25	\$ 10,325.00	\$ 500.00	30%

Notes:

1. CLM = Center Line Miles (CLM measures the length of a road or highway, as defined by the governing State Department of Transportation.)
2. The Pricing Model described below was used to develop the specific pricing included above for the NCTCOG 16-county region based on the amount of center line miles totaling 41,300 CLM in the COG as referenced in the answer to Question #3 in Addendum #1 to the RFP.
3. Pricing includes Login Credentials for a single “seat” in the R.O.A.D.™ database, which includes access to the data feed as well as a live dashboard. The same Pricing Model will be applied to any other entity that accesses this contract via the SHARE Cooperative Purchasing Program.

Pricing Model:

1. The Master Agency, serving as the primary procurement agency on behalf of itself as well as all Associate Agencies in its jurisdiction, will select the base level of data service desired (Level 1 – Navigation Feed; Level 2 – Traffic Operations Feed; Level 3 – Analysis Feed) based on the criteria and benefits of each level as defined in Tables II and III in Section D.2.3 of the Technical Proposal.
2. The Master Agency and its designated technology providers will be provided Login Credentials for a single “seat” in the R.O.A.D.™ database, providing access to the selected level of data service and a live dashboard.

3. Once the Master Agency has selected and contracted for the specified level of data service, all employees of the Master Agency, its designated technology partners, as well as any Associate Agencies will have access to the data selected as the base level for the Master Agency.
 - a. Associate Agencies will have access to the Master Agency data at no additional cost through the Master Agency.
 - b. Associate Agencies have the option to set up a separate “seat” or individual Login Credentials, for their own independent use of the R.O.A.D.™ database, including the data stream and live dashboard, up to, but not greater than the level of data service selected by the Master Agency. There are additional benefits for an Associate Agency to set up a separate “seat” in the R.O.A.D. Device Feed™, as defined in Section D.2.3 - Data Licensing Models of the Technical Proposal.
 - c. If an Associate Agency desires access to a higher level of data than was contracted for by their Master Agency, then the Associate Agency has the option to purchase a “seat” at any data service level at the discounted per mile price based on the number of CLM in their region, subject to the 10,000-mile minimums as defined in the chart below.

Minimums based on 10,000 CLM for individual seats outside of Master Agency Procurement

Level of Data Service	Description	List Minimum/Month	Discounted Minimum/Month	Discount Off List
1	Navigation Feed	\$12,000	\$9,000	30%
2	Traffic Operations Feed	\$5,500	\$4,000	30%
3	Analysis Feed	\$3,500	\$2,500	30%

Use case scenarios:

1. NCTCOG as the Master Agency selects Level 2 – Traffic Operations Feed as the base level of data service
 - a. NCTCOG pays the discounted monthly fee of \$16,520 and receives a single set of Login Credentials.
 - b. Employees of NCTCOG as well as their designated technology partners can access the data feed and live dashboard at Level 2 using the NCTCOG Login Credentials. All 230 Associate Member Agencies will be able to receive the data directly through the NCTCOG at no additional cost.
 - c. All Associate Member Agencies within the NCTCOG have the option to set up a separate “seat” with individual Login Credentials to access the data feed and live dashboard directly for either Level 2 data at \$1,000 per month, or Level 3 data for \$500 per month.
 - d. If an Associate Member Agency needs a higher level of data feed (i.e., Level 1 – Navigation Feed) then that Associate Member Agency can create a separate feed under this contract at the discounted pricing above for the CLM in their specific region, subject to the 10,000-mile minimums specified above.

2. The State of X Department of Transportation (DOT) as the Master Agency selects Level 1 – Navigation Feed as the base Level of data service (assume State of X has a total of 100,000 CLM in the state)
 - a. State of X DOT pays the discounted monthly fee of \$90,000 (\$0.90/CLM x 100,000 miles).
 - b. Employees of the State of X DOT, as well as their designated technology partners can access the data feed and live dashboard at Level 1 using the State of X DOT Login Credentials. All public entities within the State of X will be able to receive the data directly through the State of X DOT at no additional cost.
 - c. All public entities within the State of X jurisdiction have the option to set up a separate “seat” with individual Login Credentials to access the data feed and live dashboard directly for any level of data at their discretion at the monthly pricing provided above (i.e., Level 1 Data - \$1,500/mo.; Level 2 Data - \$1,000/mo.; Level 3 Data - \$500/mo.).

Considerations By the Master Agency:

The pricing included in the Pricing Model is based on a minimum of a 30% discount off the list price for the data services. Depending on the base level of data services selected by the Master Agency, as well as the level of data service selected by the Associate Agencies, the discount may be significantly more than 30% off the list price. For example, if NCTCOG selects Level 2 data service at the discounted rate of \$16,520/mo, not only do all 230 Associate Agencies within the NCTCOG have access to the same level of data at no additional cost, but each Associate Agency can also choose to obtain individual data license “seats” at \$1,000/mo, which is a substantially greater discount than 30% compared to that Associate Agency procuring the R.O.A.D.™ data feed directly.

It is recommended that the Master Agencies review the various options for base levels of data service with its Associate Agencies to determine demand within that specific jurisdiction and select the best combination of data service levels for the Master Agency as well as the various Associate Agencies. iCone can work directly with the Master Agency to assist in building the most cost-effective pricing model to best serve all agencies involved.

Further, a Master Agency has the option to procure the base level of data service as well as all additional Associate Agency “seats” directly and pass the costs on to the Associate Agencies via internal billing. The pricing to the Master Agency will be as provided in the Pricing Model above, and the Master Agency has the option to offer the additional “seats” at either a discount or a premium based on its discretion. The Master Agency may choose to apply a premium to help cover administrative costs for acting as the primary procurement agency on behalf of its Associate Agencies, limiting the costs to the Master Agency for the base level of data service by passing a small part of that cost along to its Associate Agencies.

Lastly, it is our understanding that as other public entities access this contract via the SHARE Cooperative Purchasing Program, a portion of the contract value is directed back to NCTCOG as the entity that established the original contract. Based on our initial assessment of demand for the R.O.A.D.™ data, there could be significant cost savings and potentially revenue above the actual costs of procurement for NCTCOG as this contract is accessed by dozens of other public entities around the United States.

Tab G: REQUIRED ATTACHMENTS

**ATTACHMENT I:
INSTRUCTIONS FOR PROPOSALS COMPLIANCE AND SUBMITTAL**

Compliance with the Solicitation

Submissions must be in strict compliance with this solicitation. Failure to comply with all provisions of the solicitation may result in disqualification.

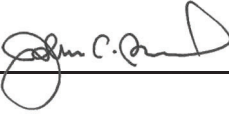
Acknowledgment of Insurance Requirements

By signing its submission, Offeror acknowledges that it has read and understands the insurance requirements for the submission. Offeror also understands that the evidence of required insurance may be requested to be submitted within ten (10) working days following notification of its offer being accepted; otherwise, NCTCOG may rescind its acceptance of the Offeror's proposals. The insurance requirements are outlined in Section 6.04.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/2022

**ATTACHMENT II:
CERTIFICATIONS OF OFFEROR**

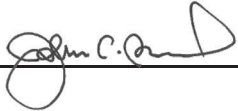
I hereby certify that the information contained in this proposal and any attachments is true and correct and may be viewed as an accurate representation of proposed services to be provided by this organization. I certify that no employee, board member, or agent of the North Central Texas Council of Governments has assisted in the preparation of this proposal. I acknowledge that I have read and understand the requirements and provisions of the solicitation and that the organization will comply with the regulations and other applicable local, state, and federal regulations and directives in the implementation of this contract.

I also certify that I have read and understood all sections of this solicitation and will comply with all the terms and conditions as stated; and furthermore that I, John Brod (typed or printed name) certify that I am the CEO (title) of the corporation, partnership, or sole proprietorship, or other eligible entity named as offeror and respondent herein and that I am legally authorized to sign this offer and to submit it to the North Central Texas Council of Governments, on behalf of said offeror by authority of its governing body.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/22

**ATTACHMENT III:
CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS**

This certification is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 93, Government-wide Debarment and Suspension, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668, 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned certifies, to the best of his or her knowledge and belief, that both it and its principals:

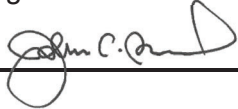
1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;
2. Have not within a three-year period preceding this contract been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction, violation of federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false Proposals, or receiving stolen property;
3. Are not presently indicated for or otherwise criminally or civilly charged by a government entity with commission of any of the offense enumerated in Paragraph (2) of this certification; and,
4. Have not within a three-year period preceding this contract had one or more public transactions terminated for cause or default.

Where the prospective recipient of federal assistance funds is unable to certify to any of the qualifications in this certification, such prospective recipient shall attach an explanation to this certification form.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/22

ATTACHMENT IV: RESTRICTIONS ON LOBBYING

Section 319 of Public Law 101-121 prohibits recipients of federal contracts, grants, and loans exceeding \$100,000 at any tier under a federal contract from using appropriated funds for lobbying the Executive or Legislative Branches of the federal government in connection with a specific contract, grant, or loan. Section 319 also requires each person who requests or receives a federal contract or grant in excess of \$100,000 to disclose lobbying.

No appropriated funds may be expended by the recipient of a federal contract, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any federal executive department or agency as well as any independent regulatory commission or government corporation, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered federal actions: the awarding of any federal contract, the making of any federal grant, the making of any federal loan the entering into of any cooperative agreement and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

As a recipient of a federal grant exceeding \$100,000, NCTCOG requires its subcontractors of that grant to file a certification, set forth in Appendix B.1, that neither the agency nor its employees have made, or will make, any payment prohibited by the preceding paragraph.

Subcontractors are also required to file with NCTCOG a disclosure form, set forth in Appendix B.2, if the subcontractor or its employees have made or have agreed to make any payment using nonappropriated funds (to include profits from any federal action), which would be prohibited if paid for with appropriated funds.

**LOBBYING CERTIFICATION
FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS**

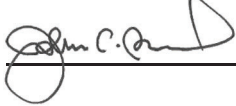
The undersigned certifies, to the best of his or her knowledge or belief, that:

1. No federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an officer or employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal loan, the entering into of any cooperative Contract, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative contract; and
2. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, and or cooperative contract, the undersigned shall complete and submit Standard Form – LLL, “Disclosure Form to Report Lobbying”, in accordance with the instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers and that all sub-recipients shall certify accordingly.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/22

**ATTACHMENT V:
DRUG-FREE WORKPLACE CERTIFICATION**

The iCone Products, LLC (company name) will provide a Drug Free Work Place in compliance with the Drug Free Work Place Act of 1988. The unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited on the premises of the iCone Products, LLC (company name) or any of its facilities. Any employee who violates this prohibition will be subject to disciplinary action up to and including termination. All employees, as a condition of employment, will comply with this policy.

CERTIFICATION REGARDING DRUG-FREE WORKPLACE

This certification is required by the Federal Regulations Implementing Sections 5151-5160 of the Drug-Free Workplace Act, 41 U.S.C. 701, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668 and 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned subcontractor certifies it will provide a drug-free workplace by:

Publishing a policy Proposal notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace and specifying the consequences of any such action by an employee;

Establishing an ongoing drug-free awareness program to inform employees of the dangers of drug abuse in the workplace, the subcontractor's policy of maintaining a drug-free workplace, the availability of counseling, rehabilitation and employee assistance programs, and the penalties that may be imposed on employees for drug violations in the workplace;

Providing each employee with a copy of the subcontractor's policy Proposal;

Notifying the employees in the subcontractor's policy Proposal that as a condition of employment under this subcontract, employees shall abide by the terms of the policy Proposal and notifying the subcontractor in writing within five days after any conviction for a violation by the employee of a criminal drug abuse statute in the workplace;

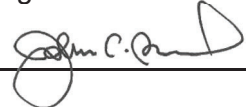
Notifying the Board within ten (10) days of the subcontractor's receipt of a notice of a conviction of any employee; and,

Taking appropriate personnel action against an employee convicted of violating a criminal drug statute or requires such employee to participate in a drug abuse assistance or rehabilitation program.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/22

**ATTACHMENT VI:
CERTIFICATION REGARDING DISCLOSURE OF CONFLICT OF INTEREST**

The undersigned certifies that, to the best of his or her knowledge or belief, that:

"No employee of the contractor, no member of the contractor's governing board or body, and no person who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of this contract shall participate in any decision relating to this contract which affects his/her personal pecuniary interest.

Executives and employees of contractor shall be particularly aware of the varying degrees of influence that can be exerted by personal friends and associates and, in administering the contract, shall exercise due diligence to avoid situations which give rise to an assertion that favorable treatment is being granted to friends and associates. When it is in the public interest for the contractor to conduct business with a friend or associate of an executive or employee of the contractor, an elected official in the area or a member of the North Central Texas Council of Governments, a permanent record of the transaction shall be retained.

Any executive or employee of the contractor, an elected official in the area or a member of NCTCOG, shall not solicit or accept money or any other consideration from a third person, for the performance of an act reimbursed in whole or part by contractor or Department. Supplies, tools, materials, equipment or services purchased with contract funds shall be used solely for purposes allowed under this contract. No member of NCTCOG shall cast a vote on the provision of services by that member (or any organization which that member represents) or vote on any matter which would provide a direct or indirect financial benefit to the member or any business or organization which the member directly represents".

No officer, employee or paid consultant of the contractor is a member of NCTCOG.

No officer, manager or paid consultant of the contractor is married to a member of NCTCOG.

No member of NCTCOG directly owns, controls or has interest in the contractor.

The contractor has disclosed any interest, fact, or circumstance that does or may present a potential conflict of interest.

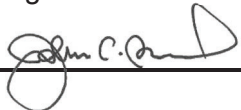
No member of NCTCOG receives compensation from the contractor for lobbying activities as defined in Chapter 305 of the Texas Government Code.

Should the contractor fail to abide by the foregoing covenants and affirmations regarding conflict of interest, the contractor shall not be entitled to the recovery of any costs or expenses incurred in relation to the contract and shall immediately refund to the North Central Texas Council of Governments any fees or expenses that may have been paid under this contract and shall further be liable for any other costs incurred or damages sustained by NCTCOG as it relates to this contract.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/22

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

N/A

2 ☐ Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

N/A

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

N/A

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐

Yes

☐

No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐

Yes

☐

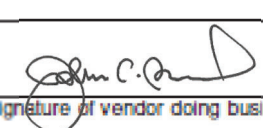
No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

N/A

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7



Signature of vendor doing business with the governmental entity

8/15/2022

Date

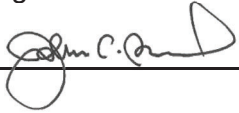
**ATTACHMENT VII:
CERTIFICATION OF FAIR BUSINESS PRACTICES**

That the submitter has not been found guilty of unfair business practices in a judicial or state agency administrative proceeding during the preceding year. The submitter further affirms that no officer of the submitter has served as an officer of any company found guilty of unfair business practices in a judicial or state agency administrative during the preceding year.

Name of Organization/Contractor(s):

iCone Products, LLC

Signature of Authorized Representative:



Date: 8/17/22

**ATTACHMENT VIII:
CERTIFICATION OF GOOD STANDING
TEXAS CORPORATE FRANCHISE TAX CERTIFICATION**

Pursuant to Article 2.45, Texas Business Corporation Act, state agencies may not contract with for profit corporations that are delinquent in making state franchise tax payments. The following certification that the corporation entering into this offer is current in its franchise taxes must be signed by the individual authorized on Form 2031, Corporate Board of Directors Resolution, to sign the contract for the corporation.

The undersigned authorized representative of the corporation making the offer herein certified that the following indicated Proposal is true and correct and that the undersigned understands that making a false Proposal is a material breach of contract and is grounds for contract cancellation.

Indicate the certification that applies to your corporation:

X	The Corporation is a for-profit corporation and certifies that it is not delinquent in its franchise tax payments to the State of Texas.
---	--

_____ The Corporation is a non-profit corporation or is otherwise not subject to payment of franchise taxes to the State of Texas.

Type of Business (if not corporation): ☐ Sole Proprietor

- Partnership

☐ Other

Pursuant to Article 2.45, Texas Business Corporation Act, the North Central Texas Council of Governments reserves the right to request information regarding state franchise tax payments.

John Brod
(Printed/Typed Name and Title of Authorized Representative)

Signature

Date: 8/17/22

**ATTACHMENT IX:
HISTORICALLY UNDERUTILIZED BUSINESSES, MINORITY OR WOMEN-OWNED OR DISADVANTAGED
BUSINESS ENTERPRISES**

Historically Underutilized Businesses (HUBs), minority or women-owned or disadvantaged businesses enterprises (M/W/DBE) are encouraged to participate in the solicitation process. Representatives from HUB companies should identify themselves and submit a copy of their certification.

NCTCOG recognizes the certifications of both the State of Texas Program and the North Central Texas Regional Certification Agency. Companies seeking information concerning HUB certification are urged to contact:

State of Texas HUB Program
Texas Comptroller of Public Accounts
Lyndon B. Johnson State Office Building
111 East 17th Street
Austin, Texas 78774
(512) 463-6958
<http://www.window.state.tx.us/procurement/prog/hub/>

Local businesses seeking M/W/DBE certification should contact:

North Central Texas Regional Certification Agency
624 Six Flags Drive, Suite 100
Arlington, TX 76011
(817) 640-0606
<http://www.nctrca.org/certification.html>

Submitter must include a copy of its minority certification documentation as part of this solicitation.

If your company is already certified, attach a copy of your certification to this form and return with your proposal.

Indicate all that apply:

_____ Minority-Owned Business Enterprise

_____ Women-Owned Business Enterprise

_____ Disadvantaged Business Enterprise

ATTEST TO Attachments of Certification:

NOT APPLICABLE

Authorized Signature

Typed Name

Date

Subscribed and sworn to before me this _____ day of _____ (month), 20__ in

_____ (city), _____ (county), _____ (state).

SEAL

Notary Public in and for _____ (County),
State of _____ Commission expires: _____

ATTACHMENT X:
NCTCOG FEDERAL AND STATE OF TEXAS REQUIRED PROCUREMENT PROVISIONS

The following provisions are mandated by Federal and/or State of Texas law. Failure to certify to the following will result in disqualification of consideration for contract. Entities or agencies that are not able to comply with the following will be ineligible for consideration of contract award.

**PROHIBITED TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
CERTIFICATION**

This Contract is subject to the Public Law 115-232, Section 889, and 2 Code of Federal Regulations (CFR) Part 200, including §200.216 and §200.471, for prohibition on certain telecommunications and video surveillance or equipment.

Public Law 115-232, Section 889, identifies that restricted telecommunications and video surveillance equipment or services (e.g. phones, internet, video surveillance, cloud servers) include the following:

- A) Telecommunications equipment that is produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliates of such entities).
- B) Video surveillance and telecommunications equipment produced by Hytera Communications Corporations, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliates of such entities).
- C) Telecommunications or video surveillance services used by such entities or using such equipment.
- D) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, Director of the National Intelligence, or the Director of the Federal Bureau of Investigation reasonably believes to be an entity owned or controlled by the government of a covered foreign country.

The entity identified below, through its authorized representative, hereby certifies that no funds under this Contract will be obligated or expended to procure or obtain telecommunication or video surveillance services or equipment or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as a critical technology as part of any system prohibited by 2 CFR §200.216 and §200.471, or applicable provisions in Public Law 115-232 Section 889.

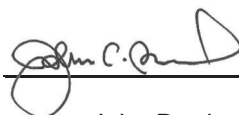
☒ The Contractor or Subrecipient hereby certifies that it does comply with the requirements of 2 CFR §200.216 and §200.471, or applicable regulations in Public Law 115-232 Section 889.

SIGNATURE OF AUTHORIZED
PERSON:

NAME OF AUTHORIZED PERSON:

NAME OF COMPANY:

DATE:



John Brod

iCone Products, LLC

8/17/22

DISCRIMINATION AGAINST FIREARMS ENTITIES OR FIREARMS TRADE ASSOCIATIONS

This contract is subject to the Texas Local Government Code chapter 2274, Subtitle F, Title 10, prohibiting contracts with companies who discriminate against firearm and ammunition industries.

TLGC chapter 2274, Subtitle F, Title 10, identifies that "discrimination against a firearm entity or firearm trade association" includes the following:

- A) means, with respect to the entity or association, to:
- I. refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; and
 - II. refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or
 - III. terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association.
- B) An exception to this provision excludes the following:
- I. contracts with a sole-source provider; or
 - II. the government entity does not receive bids from companies who can provide written verification.

The entity identified below, through its authorized representative, hereby certifies that they have no practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and that they will not discriminate during the term of the contract against a firearm entity or firearm trade association as prohibited by Chapter 2274, Subtitle F, Title 10 of the Texas Local Government Code.

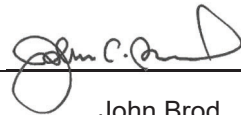
☒ The Contractor or Subrecipient hereby certifies that it does comply with the requirements of Chapter 2274, Subtitle F, Title 10.

SIGNATURE OF AUTHORIZED PERSON:

NAME OF AUTHORIZED PERSON:

NAME OF COMPANY:

DATE:



John Brod

iCone Products, LLC

8/17/22

-OR-

☐ The Contractor or Subrecipient hereby certifies that it cannot comply with the requirements of Chapter 2274, Subtitle F, Title 10.

SIGNATURE OF AUTHORIZED PERSON:

NAME OF AUTHORIZED PERSON:

NAME OF COMPANY:

DATE:

BOYCOTTING OF CERTAIN ENERGY COMPANIES

This contract is subject to the Texas Local Government Code chapter 809, Subtitle A, Title 8, prohibiting contracts with companies who boycott certain energy companies.

TLGC chapter Code chapter 809, Subtitle A, Title 8, identifies that "boycott energy company" means, without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company:

- I. engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; and
- II. does business with a company described by paragraph (I).

The entity identified below, through its authorized representative, hereby certifies that they do not boycott energy companies, and that they will not boycott energy companies during the term of the contract as prohibited by Chapter 809, Subtitle A, Title 8 of the Texas Local Government Code.

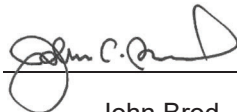
☒ The Contractor or Subrecipient hereby certifies that it does comply with the requirements of Chapter 809, Subtitle A, Title 8.

SIGNATURE OF AUTHORIZED
PERSON:

NAME OF AUTHORIZED PERSON:

NAME OF COMPANY:

DATE:



John Brod

iCone Products, LLC

8/17/22

-OR-

☐ The Contractor or Subrecipient hereby certifies that it cannot comply with the requirements of Chapter 809, Subtitle A, Title 8.

SIGNATURE OF AUTHORIZED PERSON:

NAME OF AUTHORIZED PERSON:

NAME OF COMPANY:

DATE:

EXHIBIT A

RFP 2022-035	Texas Service Area Designation or Identification		
Proposer Name:	iCone Products, LLC		
Notes:	Indicate in the appropriate box whether you are proposing to service the entire State of Texas		
	Will service the entire State of Texas	Will not service the entire State of Texas	
	YES		
	If you are not proposing to service the entire State of Texas, designate on the form below the regions that you are proposing to provide goods and/or services to. By designating a region or regions, you are certifying that you are willing and able to provide the proposed goods and services.		
Item	Region	Metropolitan Statistical Areas	Designated Service Area
1.	North Central Texas	16 counties in the Dallas-Fort Worth Metropolitan area	
2.	High Plains	Amarillo Lubbock	
3.	Northwest	Abilene Wichita Falls	
4.	Upper East	Longview Texarkana, TX-AR Metro Area Tyler	
5.	Southeast	Beaumont-Port Arthur	
6.	Gulf Coast	Houston-The Woodlands-Sugar Land	
7.	Central Texas	College Station-Bryan Killeen-Temple Waco	
8.	Capital Texas	Austin-Round Rock	
9.	Alamo	San Antonio-New Braunfels Victoria	
10.	South Texas	Brownsville-Harlingen Corpus Christi Laredo McAllen-Edinburg-Mission	
11.	West Texas	Midland Odessa San Angelo	
12.	Upper Rio Grande	El Paso	

RFP 2022-035	Nationwide Service Area Designation or Identification Form		
Proposer Name:	iCone Products, LLC		
Notes:	Indicate in the appropriate box whether you are proposing to provide service to all Fifty (50) States.		
	Will service all Fifty (50) States	Will not service Fifty (50) States	
	YES		
	If you are not proposing to service to all Fifty (50) States, then designate on the form below the States that you will provide service to. By designating a State or States, you are certifying that you are willing and able to provide the proposed goods and services in those States. If you are only proposing to service a specific region, metropolitan statistical area (MSA), or city in a State, then indicate as such in the appropriate column box.		
Item	State	Region/MSA/City	Designated as a Service Area
1.	Alabama		
2.	Alaska		
3.	Arizona		
4.	Arkansas		
5.	California		
6.	Colorado		
7.	Connecticut		
8.	Delaware		
9.	Florida		
10.	Georgia		
11.	Hawaii		
12.	Idaho		
13.	Illinois		
14.	Indiana		
15.	Iowa		
16.	Kansas		
17.	Kentucky		
18.	Louisiana		
19.	Maine		

20.	Maryland		
21.	Massachusetts		
22.	Michigan		
23.	Minnesota		
24.	Mississippi		
25.	Missouri		
26.	Montana		
27.	Nebraska		
28.	Nevada		
29.	New Hampshire		
30.	New Jersey		
31.	New Mexico		
32.	New York		
33.	North Carolina		
34.	North Dakota		
35.	Ohio		
36.	Oregon		
37.	Oklahoma		
38.	Pennsylvania		
39.	Rhode Island		
40.	South Carolina		
41.	South Dakota		
42.	Tennessee		
43.	Texas		
44.	Utah		
45.	Vermont		
46.	Virginia		
47.	Washington		
48.	West Virginia		
49.	Wisconsin		
50.	Wyoming		

Exhibit B: Description of Desired Services for Proposed Pricing

Proposed services are described in Tab D (Technical Proposal), and proposed pricing is included in Tab F (Cost Proposal).

Exhibit C Service Questionnaire

SERVICE	YES	NO
Bid Item #1		X
Bid Item #2		X
Bid Item #3	X	
Additional Item/s (Bid Item #4) *	X	

* Bid Item #4 is further described in the Technical Proposal included in Tab D.

Exhibit D Sample Market Basket Pricing Form (Bid Item #3)

Consulting Services to integrate the real-time data from the R.O.A.D.™ database into the systems and service of the award recipients of Bid Items #1 and #2 are described in the Technical Proposal included in Tab D. Additional consulting services that may be required will be provided based on the discounted pricing included below.

BID ITEM #3: Provide/implement WZDx-related consulting services. Such services would consist of providing advice and other services to help roadway operators improve their reporting of work zones.				
Bid Item #	Description	Percent (%) of Discount off Catalog or Pricelist	Vendor Price (List Price)	TxSHARE Price (Vendor Price less discount)
3	On Site WZDx-related Consulting Services: An example is real-time work zone reporting, capturing location, lane shifts, and other changes as they occur in the field and reporting them promptly so that information is shared with road users in a timely fashion. Another example of such services is working with a reporting agency on increasing the accuracy of work zone information and capturing a higher percentage of work zones in their work zone reporting system.	30%	\$215 Hourly Rate	\$150 Hourly Rate
3	Remote WZDx-related Consulting Services: An example is real-time work zone reporting, capturing location, lane shifts, and other changes as they occur in the field and reporting them promptly so that information is shared with road users in a timely fashion. Another example of such services is working with a reporting agency on increasing the accuracy of work zone information and capturing a higher percentage of work zones in their work zone reporting system.	30%	\$215 Hourly Rate	\$150 Hourly Rate

Exhibit E Pricing Proposal

Proposed services are described in Tab D (Technical Proposal), and proposed pricing is included in Tab F (Cost Proposal).

APPENDIX 1 WORK ZONE DATA INDUSTRY (WZDi) COLLABORATORS

As the creator of R.O.A.D.™, iCone has been responsible for unprecedented collaboration in the Work Zone Data Industry (WZDi™). Most of the private companies that produce connected work zone equipment consider themselves competitors; however, through iCone's efforts, virtually the entire industry has agreed to come together for the benefit collaborating to build a robust, comprehensive source of work zone data using a common format compatible with the WZDx Device Feed.



The auto industry and others are anxious to access work zone data for a variety of purposes, but most agree that to make that data useable, it needs to be collected into a single, consolidated resource using an industry standard so that any prospective data consumer can ingest the data regardless of its source or ultimate use. Thanks to the cooperative spirit of the majority of the WZDi™, combined with a recognition that collaboration between the private sector competitors is the only realistic approach to building a reliable, trusted source of work zone data, the WZDi™ has agreed to support iCone in the development of the R.O.A.D.™ database and Device Feed.

This Appendix portrays a significant representation of the entities that have come together to contribute to the development of R.O.A.D.™, whether it be through the supply of real-time work zone data, technical expertise, software development, public agency support, academic support, or investment in the technology as an OEM equipment builder or contractor.

Appendix 1.1 WZDi™ – Data Suppliers

Company	Website
iCone	iconeproducts.com
Wanco	wanco.com
Stinson	stinson.ca
Solar-Tech	solartechnology.com
PSS	pss-innovations.com
Skip-Line	skipline.com
Epic Solutions	epicsolutions.us
Trafcon	trafcon.com
Horizon Signal	horizonsignal.com
SAWS	sawsinc.net
Ver-Mac	ver-mac.com



July 25, 2022

To Whom it may concern:

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of EPIC Solutions Inc, a supplier of data logging systems for the road striping industry, would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

EPIC has been built around a mission of protecting the lives of workers and travelers in the highway industry. EPIC is excited to work with iCone to create Real Ontime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

EPIC Solutions Inc. is positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone to get this data to clients like the NCTCOG.

Sincerely,

Jeff Wilkens
President, EPIC Solutions Inc.
www.epicsolutions.us

August 10, 2022

Mr. John Brod, CEO
iCone Products, LLC
3279 Cottrell Road
PO Box 247
Cato, NY 13033

**RE: North Central Texas Council of Governments
Roadway Work Zone Data Reporting Services – RFP
Letter of Reference**

Dear Mr. Brod:

On behalf of Skip-Line, LLC, a supplier of data logging systems for the road striping industry, we would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

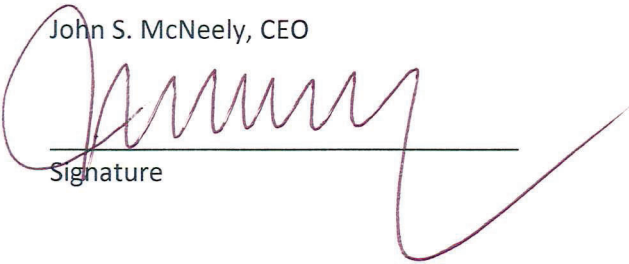
Skip-Line has been built around a mission of protecting the lives of workers and travelers in the highway industry. Skip-Line is excited to work with iCone to create Real Ontime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

Skip-Line, LLC. is positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone to get this data to clients like the NCTCOG.

Sincerely,

John S. McNeely, CEO



Signature

8/15/22

Date

July 22, 2022

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of Stinson Equipment Limited and Stinson ITS Inc., suppliers of temporary traffic control equipment for the work zone industry, I would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

The Stinson companies have been built around a mission of protecting the lives of workers and travelers in the highway industry. We are excited to work with iCone to create Real OnTime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

Stinson Equipment and Stinson ITS are positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone to get this data to clients like the NCTCOG.



James Delamere
President



**81 Texaco Road
Mechanicsburg, PA 17050-2623
(717) 691-8007**

July 21, 2022

Re: Roadway Work Zone Data Reporting Services for the NCTCPG TXShare Program

Trafcon Industries Inc., a manufacturer of temporary traffic control equipment for the work zone industry, would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

Trafcon Industries Inc. has been built around a mission of protecting the lives of workers and travelers in the highway industry. Trafcon Industries Inc. is excited to work with iCone to create Real Ontime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data. We have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

Trafcon Industries Inc. is positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone to get this data to clients like the NCTCOG.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Brett Newhart", with a stylized flourish at the end.

W. Brett Newhart
President



To whom it may concern,

I write to you today regarding the RFP for Roadway Work Zone Data Reporting Services for the North Central Texas Council of Governments (NCTCOG) TXShare Program.

On behalf of PSS, a supplier of temporary traffic control equipment for the work zone industry, we would like to express our support for the Real Ontime Accurate Data (R.O.A.D.) WZDx Device Feed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

For forty years, PSS has been built around a mission of protecting the lives of workers and travelers in the roadway safety industry. PSS is thrilled to work with iCone to create R.O.A.D., to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

PSS is positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone, to get this data to clients like the NCTCOG.

Sincerely,

David E. Cowan

David E. Cowan
President & CEO



1127 N. Westmoreland Rd.
Dallas, TX 75212
512-810-6989
dario@sawsinc.net

To the North Central Texas Council of Governments:

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of Solar Advanced Warning Systems (SAWS), an international supplier of temporary traffic control equipment for the work zone industry I would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to supply work zone device data to the NCTCOG.

SAWS has been built around a mission of protecting the lives of workers and travelers in the highway industry. As such SAWS is excited to be working with iCone to create R.O.A.D. to aggregate digital work zone activity data as unique resource for infrastructure owner/operators (IOO) as well as automakers. Connecting temporary traffic control equipment results in high quality situational awareness data and we are confident that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

As SAWS focuses on work zone fatalities and utilizing our smart work zone technology to make TX work zones safer through connected equipment, we find that systems like iCone help us to provide a safer work zone by providing more information to the people that need it.

SAWS is ready to supply connected equipment throughout Texas and is working with iCone to get this data to clients like the NCTCOG.

Sincerely,

Dario Alvarez
National Sales Manager
SAWS Inc.



July 28, 2022

From: Wanco

To: NCTCOG

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of Wanco, a supplier of temporary traffic control equipment for the work zone industry and a direct supplier of NCTCOG, we would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

Wanco has been built around a mission of protecting the lives of workers and travelers in the highway industry. Wanco is excited to work with iCone to create Real Otime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

Wanco is positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone to get this data to clients like the NCTCOG.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Matthew Wanasz', with a stylized flourish at the end.

Matthew Wanasz
COO and President

Appendix 1.2: ACADEMIC RESEARCH CENTERS

IOWA STATE UNIVERSITY

Institute for Transportation

2711 S. Loop Drive, Suite 4700
Ames, IA 50010-8664
515-294-8103
FAX 515-294-0467
www.InTrans.iastate.edu

July 25, 2022

To Whom It May Concern

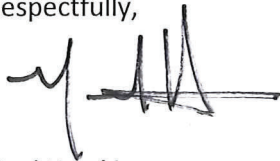
Re: Use of the iCone R.O.A.D. database

As the Director of the Center for Transportation Research and Education (CTRE) at Iowa State University I served as the project Principal Investigator supporting the development of the Iowa DOT's Smart Arrow-Board Communications Protocol. Now as Associate Director for the Institute for Transportation (InTrans) here at Iowa State University I have continued working with my colleague Skylar Knickerbocker and others to research connected work zone capabilities as technologies continue to advance in North America.

We have worked closely with iCone Products over many years beginning with our collaborative early field tests of the first smart arrow boards and work zone connected pins as well as use of accompanying data streaming techniques, and protocols. We are pleased that iCone, and the companies that work with them in the R.O.A.D. system, are now streaming data to the Iowa DOT Traffic Operations Bureau to be used in their Work Zone Data Exchange (WZDx) process.

At CTRE we continue to work with the iCone and the R.O.A.D. team to develop new techniques to assess real-time work zone activity data for static and moving conditions at both known and unknown work zone locations statewide.

Respectfully,



Neal Hawkins



Neal Hawkins, PE (IA)
Associate Director
Mobile: 515-689-7848
hawkins@iastate.edu



Texas A&M Transportation Institute
3135 TAMU
College Station, TX 77843-3135
979-317-2142
<http://tti.tamu.edu>

July 18, 2022

To Whom It May Concern

Subject: Use of the R.O.A.D. TM Database

R.O.A.D.TM is currently collaborating with researchers at the Texas A&M Transportation Institute on the Connected Work Zone Demonstration project in central Texas, funded by FHWA and administered by TxDOT. Specifically, R.O.A.D. data in Texas is being made available to researchers at no charge to identify the challenges that exist in trying to merge the real-time accurate work zone event data in R.O.A.D. with planned work zone data that agencies typically develop and disseminate, and potential strategies for reducing or eliminating those challenges.

If there are further questions regarding this ongoing collaboration, I can be reached at 979-317-2142 or at g-ullman@tti.tamu.edu.

Sincerely,

A handwritten signature in cursive script that reads "Gerald L. Ullman".

Gerald Ullman, Ph.D., P.E.
Regents Fellow

APPENDIX I.3: TECHNOLOGY SERVICE PROVIDERS





July 22, 2022

Ross Scheckler
President and CTO
iCone
3279 Cottrell Road, PO Box 247 Cato NY 13033

RE: Letter of Support for Roadway Work Zone Data Reporting Services, RFP #2022-035

Dear Mr. Scheckler:

Trihydro Corporation (Trihydro) is pleased to offer our support of iCone for the Roadway Work Zone Data Reporting Services proposal to the North Central Texas County of Governments (NCTCOG). We recognize the important safety benefits that the Work Zone Data Exchange project can bring to the transportation network and recognize the importance of sharing accurate work zone data with third parties. Trihydro recognizes the importance that real-time data can bring to the accuracy and consistency of Work Zone data and believe that iCone's solution in this area is a valuable piece of ensuring a lasting solution to providing accurate and timely Work Zone information to Connected and Autonomous Vehicles.

Trihydro is recognized as one of the top U.S. environmental engineering firms and since 2015 has been working on Connected Vehicle technology alongside the Wyoming Department of Transportation. As a part of this Connected Vehicle technology evolution, Trihydro has developed and managed a Connected Vehicle data exchange platform known as the Situation Data Exchange (SDX). The SDX is a secure, universal platform for sharing Connected Vehicle messages with third parties. Initially developed to support Traveler Information Messages (TIMs), the SDX has since expanded to support Work Zone Data Exchange feeds as well.

Trihydro has invested in helping federal, local, and regional transportation departments develop the SDX platform to streamline sharing Connected Vehicle and Work Zone Data Exchange messages with third parties. Our company is headquartered along a stretch of road known for extreme weather conditions and frequent construction projects, and as a result we have a unique understanding of the need for sharing data with third parties and broadcasting messages to as many drivers on the roadway as possible.

Trihydro is committed to maintaining a third party data sharing platform that is open to all state and local transportation departments. We are committed to integrating the iCone data from smart work zone devices into the SDX. We are excited about the positive impact that this project will have for work zone safety across the country. Feel free to contact me if you have any additional questions regarding Trihydro's support for the iCone proposal.

Sincerely,
Trihydro Corporation

A handwritten signature in black ink, appearing to read "Shane Zumpf".

Shane Zumpf

Technology Services and Solutions Business Unit Leader



August 10, 2022

Mr. Ross Sheckler
iCone
President and CTO
3279 Cottrell Road
Cato, NY 13033

Subject: NCTCOG Roadway Work Zone Data Reporting Services (RFP #2202-35)

Dear Mr. Sheckler:

Mixon Hill offers this reference letter in support of iCone's proposal to the North Central Texas Council of Government's (NCTCOG's) solicitation for Roadway Work Zone Data Reporting Services (RFP 2022-035). We understand iCone and Mixon Hill are both individually responding to this RFP; however, we recognize that the Dallas/Fort Worth regional partners will benefit from the collaboration between our two solutions. Prior to the NCTCOG RFP, we have worked together over the past year to integrate our solutions using the USDOT's Work Zone Data Exchange (WZDx) specification. We have demonstrated that real-time position and status data of devices from iCone and their partners in the R.O.A.D. database can populate Mixon Hill's TerraForm Manager platform to provide comprehensive, real-time work zone information to support the planning, operation, and maintenance of work zones. As NCTCOG and the agencies in the Dallas/Fort Worth region procure bid services from both Mixon Hill and iCone Products, the integration of the iCone R.O.A.D. DeviceFeed into TerraForm Manager platform will increase the regional real-time situational awareness of work zone activities and provide a more robust data feed to the NCTCOG's regional traveler information system (i.e., www.511DFW.org).

We look forward to collaborating with iCone and their partners on real-time work zone data reporting in the Dallas/Fort Worth region if we are both successful in this solicitation. If there are any questions or if we can provide further information to support your bid proposal, please do not hesitate to contact us.

Sincerely,

Christopher M. Poe, Ph.D., P.E.
Director, Product and User Experience
Mixon Hill, Inc.



August 4, 2022

Mr. John Brod, CEO
iCone Products, LLC
3279 Cottrell Road
PO Box 247
Cato, NY 13033

**RE: North Central Texas Council of Governments
Roadway Work Zone Data Reporting Services – RFP
Letter of Reference**

Dear Mr. Brod:

NZDOTech LLC dba Butterfly Junction Technologies is pleased to offer this reference letter in support of iCone Products, LLC proposal to the North Central Texas Council of Government's (NCTCOG's) solicitation for Roadway Work Zone Data Reporting Services (RFP 2022-035).

In recognition of the spirit of collaboration the NCTCOG is striving to achieve with this RFP and other efforts, and acknowledgement that we are both responding with our independent solutions, we believe we have significant synergies that will be recognized from our efforts working together. We have built integrations for iCone Product's device data feeds and your R.O.A.D. database providing enhanced visibility into real-time work zone information. This integration extends iCone Products and R.O.A.D. database solutions by providing the ability to transmit data to the Work Zone Data Exchange (WZDx), regional traveler information systems (such as DFW511), and to leverage business rules set in our platform's action engine to manage intelligent transportation system (ITS) device behavior.

BumbleDrive, our Traffic Management System (TMS) and ZoneAware, our Worker Presence and Safety platform, integrate and orchestrate functions from all integrated ITS devices and systems, allowing for comprehensive management and operations of traffic and roadways, including work zones. We are also uniquely in position to feed data to an agency's existing systems via our APIs and purpose-built components.

We look forward to further collaboration on enhanced work zone data reporting services across the NCTCOG partner regions if we are successful in this solicitation.

If you have any questions or require further information to support your bid proposal, please do not hesitate to contact us.

Sincerely,

NZDOTech LLC dba Butterfly Junction Technologies

A handwritten signature in black ink that reads "Cory Beimesche".

Cory Beimesche, CEO

APPENDIX I.4: NCTCOG COMMUNITY



August 3, 2022

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

To Whom it May Concern:

On behalf of Site-Safe Products, a supplier of temporary traffic control equipment and smart work zone services for the work zone industry in Texas and other states, I would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

Site-Safe and iCone have a long history of working together to protect the lives of workers and travelers in the highway industry. Site-Safe is excited to work with iCone to create Real Ontime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers. As a Fort Worth based company, we are proud to have led the way in adopting connected technologies in our own work zones. At Site-Safe we stand ready to help NCTCOG member agencies and the contractors who support them to get their equipment up to the new connected standard.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

Sincerely,

C. David Rich
President



Street Smart

SALES · RENTALS · SERVICE

7526 4th Ave.
Lino Lakes, MN 55014
888.653.6800

August 15th, 2022

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of Street Smart Rental, a supplier of temporary traffic control equipment for the work zone industry, would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

Street Smart Rental has been built around a mission of protecting the lives of workers and travelers in the highway industry. Street Smart is excited to work with iCone to create Real Ontime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility. In 2022 alone on an average day Street Smart Rental has around 3,000 pieces of connected traffic safety equipment deployed nationwide.

Currently having one of the largest traffic control equipment saturations in Texas we are positioned to immediately supply connected information throughout Texas. We have a strong working relationship with iCone to get this data to clients like the NCTCOG.

Sincerely,

Ryon Sanders
Vice President of Sales
D: 651.802.5076
O: 651.653.4648 ext. 205



8750 W. Bryn Mawr Ave | Suite 400 | Chicago | Illinois | 60631 | P 773-724-3300 | F 773-864-9477

Joe Scarano
President
jscarano@roadsafetraffic.com
312-766-2806

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of RoadSafe Traffic Systems, Inc., a supplier of temporary traffic control equipment for the work zone industry, we would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to deliver work zone device data to the NCTCOG.

RoadSafe has been built around a mission of protecting the lives of workers and travelers in the highway industry, and is excited to work with iCone to create Real OnTime Accurate Data (R.O.A.D.) to aggregate digital work zone activity data as a unique resource for infrastructure owner/operators (IOO) as well as automakers.

Connecting temporary traffic control equipment results in high quality situational awareness data and we have great confidence that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

RoadSafe is positioned to supply connected equipment throughout Texas and has a strong working relationship with iCone to get this data to clients like the NCTCOG.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Joe Scarano', is written over a light blue circular stamp.

Joe Scarano
President
RoadSafe Traffic Systems, Inc.

Date: 7/26/2022

TO WHOM IT MAY CONCERN

The City of Arlington conducted a pilot with iCone as part of the Smart Work Zone data sharing program to evaluate and use of iCone arrow board kit and iPin to place into temporary work zone lane closure locations and share real-time work zone and temporary traffic control data to navigation application. The pilot showed successful demonstration of work zone data sharing. The City also uses their web based platform to track active iCone devices.

iCone is showing great commitment to improve work zone safety, work zone data sharing, and developing Smart Work Zone technologies. I know that they have a long and continuing history working throughout Texas. As the City Engineer for the City of Arlington I would like to express my support for such Smart Work Zone technologies.

Sincerely,

A handwritten signature in blue ink, appearing to read "Monsur Ahmed", with a stylized flourish at the end.

Monsur Ahmed
City Engineer
City of Arlington, Texas
Monsur.ahmed@arlingtontx.gov



2757 N. Westmoreland Rd. Dallas, TX 75212

To the North Central Texas Council of Governments:

Re: Roadway Work Zone Data Reporting Services for the NCTCOG TXShare Program

On behalf of Lite & Barricade, a North Central Texas based traffic control service provider for the work zone industry I would like to express our support for the R.O.A.D. WZDx DeviceFeed and iCone Products' proposal to supply work zone device data to the NCTCOG.

Lite & Barricade's mission has been built around protecting the lives of workers and travelers in the highway industry. As such we are excited to be working with iCone to create R.O.A.D. to aggregate digital work zone activity data as unique resource for infrastructure owner/operators (IOO) as well as automakers. Connecting temporary traffic control equipment results in high quality situational awareness data and we are confident that getting this data out to the rest of the transportation industry will save lives while simultaneously improving mobility.

Since Lite & Barricade's inception in 1969, we have seen the traffic safety industry grow in size and opportunity both for companies like ours and our partners in the business. With this tremendous growth, we've recognized the dangers that come with a growing infrastructure, and the need to rely on good information at all times. Connected equipment is the way of the future, and we stand ready to support the NCTCOG as it develops a connected system within its network of municipalities.

Sincerely,

Shane D. Howell, President
Lite & Barricade



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APPENDIX 2: MARKET PLAN TO SUPPORT NATIONAL ACCEPTANCE

iCone recognizes itself as a primary source of marketing communication to promote the portfolio of devices to the NCTCOG Membership and beyond. While work zone data consumption is the primary goal of the current RFP, success can only be accomplished when work zone safety devices are deployed each day on our roadways.

Success for the NCTCOG, additional Texas COG's and National Cooperative Partners; iCone must thoroughly and properly utilize the awarded contract and services toward the end user. To fully support this opportunity iCone's growth strategies are illustrated below:

Channel Partner Networks: iCone can sell, deliver and service all 50 states and Canada via national work zone equipment manufacturers as defined in Appendix 1.1 and NCTCOG work zone partners as defined in Appendix 1.4, including the additional companies listed by name and geographical presence below:

Street Smart: National

RoadSafe: National

Royal Innovations: National

Traffic Pro Beds: National

Road-Tech: Southwest

Coral Sales: Northwest

Pacific NW Traffic Control: Northwest

Site-Safe: Midwest, Plain States

Striping Sales & Service: Southeast

360NS: MidAtlantic, Southeast

Iowa Plain Signing: Midwest, Plain States

iCone: Northeast

Training of Channel Partners: iCone offers both online (self-paced) via a password protected portal, live stream training and in-person regional opportunities.

Marketing and Sales Methodology: The individual links below represent the product offerings and a representation of collateral distributed at trade shows and/or during training courses to customers.

- iPin Products: <https://www.iconeproducts.com/connected-tech-ipin>
- iFlag Baton: <https://www.iconeproducts.com/connected-tech-flagging-baton>
- iCone Arrow Board Kit: <https://www.iconeproducts.com/connected-tech-arrow-board-kit>
- iCone Hazard Light Kit: <https://www.iconeproducts.com/connectedtech-hazard-light-kit>
- iBarrel: <https://www.iconeproducts.com/connected-tech-icone>
- iCone StrikeAlert: <https://www.iconeproducts.com/strikealert>

Regional & National Conferences: iCone makes significant annual investment in a multitude of industry conferences. With iCone's many innovations for work zone safety, we are invited as subject matter expert speakers or facilitators at many of the conferences listed below:

Traffic Control Safety Organizations

AASHTO: American Association of State Highway and Transportation Officials

ATSSA: American Traffic Safety Services Association

TRB: Transportation Research Board

ITE: Institute of Transportation Engineers

ITSA: Intelligent Transportation Society – America

National General Contractor Safety Associations

AGC: Association of General Contractors

ARTBA: American Road & Transportation Builders Association

APWA: American Public Works Association

IMI: International Masonry Institute

ASSP: American Society of Safety Professionals

Utility (Gas, Electric & Cable) Safety Associations

APPA: American Public Power Association

NUCA: National Utility Contractors Association

UAA: Utility Arborist Association

AGA: American Gas Association

NECA: National Electric Contractors Association

iCone's commitment to the development of comprehensive sales/communication processes for NCTCOG and all affiliates is paramount for all to succeed. With the various key steps stated above, comprehensive product training, education on contract participation; success will be available for all members.

APPENDIX 3: Data Rights, Ownership, And Redistribution (EULA)

END USER LICENSE AGREEMENT

This License Agreement (“Agreement”) is a legal agreement between you and ICone Products, LLC (“Licensor”) regarding the work zone data (“Data”), which may include Data owned by Licensor and Data licensed by Licensor from its data suppliers (“Suppliers”).

The Agreement also applies to any updates, upgrades, revisions, patches, bug fixes, new versions, supplements, and other modifications to, as well as Internet-based services and support services for, this Data and associated Data, unless other terms accompany those items. If so, those terms apply.

By downloading, activating, or using the Data, you agree to be bound by the terms and conditions of this Agreement. If you do not agree to be so bound, you may not use the Data or, if the Data is already downloaded, you must promptly remove it. The Data and any accompanying materials (including, without limitation, any images, photographs, animations, video, audio, music, text, and applets incorporated into the Data, the accompanying media, and printed materials) are owned by Licensor and its Suppliers and protected under U.S. and international copyright laws, and may be protected under additional intellectual property laws. The Data is licensed, not sold, and Licensor and its Suppliers retain all right, title, and interest therein other than those rights specifically granted to you under this Agreement. You accept responsibility for selection of the Data to achieve your intended results, and for installation, activation, use of, and results obtained from, the Data.

LICENSE: Licensor hereby grants you a non-exclusive License to use this Data, without right of sub-license. You may not rent, lease, or lend the Data. You may transfer the Data to a public database only if You have added additional data to the Data. You agree that the Data and any additional materials specific to the Data provided under this Agreement are and shall at all times remain the sole and exclusive property of Licensor and its Suppliers. Except as set forth herein, unauthorized copying of the Data is expressly forbidden. The Data may be patent-pending and/or patented; please refer to documentation accompanying the product, including labels and user guides, for specifics. You may be held legally responsible for any infringement of copyright or other intellectual property rights caused by your failure to abide by this Agreement. The rights granted by this Agreement do not give you rights to implement patents or other intellectual property of Licensor or its Suppliers.

YOUR REPRESENTATIONS and WARRANTIES REGARDING USE OF THE DATA: You represent and warrant that you shall not do any of the following, and shall not cause or knowingly allow others to, do any of the following:

- (a) use the Data unlawfully;
- (b) place harmful data with the Data or use it in connection with the Data, including but not limited to, the generation or dissemination of computer viruses, Trojan horses, time bombs, denial of service attacks, key-logging and other monitoring Data, worms, logic bombs, or other harmful code or programs;

- (c) transfer the Data to a public repository with out adding additional data generated by You.

RESTRICTIONS: You may not use, print, copy, or display the Data in whole or in part except as expressly permitted in writing.

INDEMNIFICATION: Licensee agrees to defend, indemnify, and hold harmless Licensor and its officers, directors, employees, and successors and assigns against any and all claims, demands, causes of action, losses, liabilities, damages, costs and expenses, incurred by Licensor (including but not limited to costs of defense, investigation, and reasonable attorney's fees) arising out of, resulting from, or related to failure to comply with the terms of this Agreement, including but not limited to (1) unauthorized use or disclosure of Data, and (2) use of Data in combination with Data, hardware, systems, or other items not provided by Licensor.

DISCLAIMERS AND LIMITATIONS OF LIABILITY: THE DATA IS NOT FAULT TOLERANT, AND IS PROVIDED AS IS AND WITH ALL FAULTS. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, AND EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT OR, WITH RESPECT TO THE OPEN SOURCE DATA LISTED FOLLOWING, EACH RESPECTIVE OPEN SOURCE LICENSE, LICENSOR, ITS SUPPLIERS AND LICENSORS, AND ANY OPEN SOURCE CONTRIBUTORS (1) DISCLAIM ANY AND ALL PROMISES AND REPRESENTATIONS WITH RESPECT TO THE DATA, INCLUDING ITS CONDITION, ITS CONFORMITY TO ANY REPRESENTATION OR DESCRIPTION, AND THE EXISTENCE OF ANY LATENT OR PATENT DEFECTS, (2) DISCLAIM ALL WARRANTIES, WRITTEN OR ORAL, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS; AND, (3) SHALL HAVE NO LIABILITY FOR ANY DIRECT, INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. IN NO EVENT SHALL LICENSOR OR ITS SUPPLIERS BE LIABLE FOR ANY AMOUNT IN EXCESS OF (1) THE INITIAL LICENSE FEE THAT LICENSOR RECEIVED FROM YOU FOR THE PRODUCTS, IN THE CASE OF LICENSOR, OR (2) U.S. TWO HUNDRED AND FIFTY DOLLARS (U.S. \$250.00), IN THE CASE OF LICENSOR'S SUPPLIERS.. ALL RISK AS TO QUALITY AND PERFORMANCE OF THE DATA IS WITH YOU.

GENERAL: This Agreement is the complete agreement and understanding of the parties with respect to the Data and supersedes all prior oral, written, or other representations and agreements. You acknowledge that the Data is of U.S. origin, and agree to comply with all applicable international and national laws that apply to the Data, including the U.S. Export Administration Regulations, as well as end-user, end-use, and country destination restrictions issued by the U.S. and other governments. If this product is acquired under the terms of a U.S. Government contract, use, duplication, and disclosure are subject to the terms of this license and the restrictions contained in the Rights in Technical Data and Computer Data clause at 252.227-7013 (DOD contracts); and subdivisions (a) through (d) of 52.227-19 as applicable. This Agreement shall be governed by the laws of the State of New York, without regard to its conflicts of law

provisions.

AUTHORIZED PARTIES: In addition to the License rights granted in this License Agreement, parties authorized by Licensor to distribute, resell, or provide Data for use on Licensor's platforms (collectively "Authorized Parties") shall have the right to install and sublicense the Data to End Users solely for the purpose of using the Data for the End User's own business. Authorized Parties shall have the right to advertise or otherwise market the Data. Authorized Parties shall provide this License Agreement with any sublicense to an End User of the Data. Authorized Parties who distribute the Data shall promptly discontinue distribution of the Data to any End User which does not comply with the obligations in this License Agreement and shall notify Licensor and cooperate with Licensor in investigating instances of violation thereof.

CONDITIONS FOR TRAVEL AND ONSITE CONSULTING

For travel to facilitate onsite consulting and support provided to customers, the following conditions are requested.

- Airfare and hotel expenses are covered. Additionally, \$1,400 per consultant is charged to cover actual travel time.
- A daily minimum of 8 hours is charged at the negotiated consulting rate for each consultant supporting onsite tasks.

STANDARD OF WORKMANSHIP AND NON-ASSIGNMENT

All services hereunder shall be performed with due diligence, in a timely manner, and in accordance with professional standards of workmanship.

- Out of Scope Engineering Services - \$150/hour*

*Additional engineering services that may be required to support any of the services provided as part of any of the bid items included in the RFP.

iCone Products shall not, in whole or in part, assign or subcontract any of the services to be performed hereunder without prior written consent.