TXShare

REQUEST FOR PROPOSALS
For
Road and Highway Asset Management Software
RFP # 2024-096

Sealed proposals will be accepted until **2:00 PM CT, Monday, July 29, 2024** and then publicly opened and read aloud thereafter.

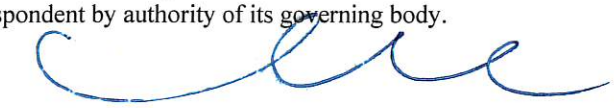
Blyncsy, Inc.
Legal Name of Proposing Firm

Mark Pittman	Director of Transportation AI
Contact Person	Title
(385) 216-0590	mark.e.pittman@blyncsy.com
Telephone Number	E-Mail Address

650 S 500 W, STE 360	Salt Lake City, UT	84101
Street Address of Principal Place of Business	City/State	Zip
650 S 500 W, STE 360	Salt Lake City, UT	84101
Complete Mailing Address	City/State	Zip

Acknowledgment of Addenda: #1 X #2 _____ #3 _____ #4 _____ #5 _____

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 Respondent by authority of its governing body.



Authorized Signature

Certificate of Respondent and Statement of Understanding

TXShare
REQUEST FOR PROPOSAL

Blyncsy, Inc.
650 S 500 W, STE 360
Salt Lake City, UT 84101
385-216-0590

Blyncsy is pleased to provide this response to the TXShare request for proposal on Road and Highway Asset Management Software. The solution described in this proposal is Blyncsy's AI-centric approach specifically for the North Central Texas Council of Governments ("NCTCOG") that supports the needs of the agency today and provides a flexible architecture to support the ever-evolving future.

Blyncsy agrees to the terms in this RFP and submits the following proposal. Blyncsy understands the work requirements and desired deliverables in this solicitation.

We look forward to hearing back from you regarding next steps.

Sincerely,

Mark Pittman
Founder & Director of Transportation AI
Blyncsy, Inc.
385-216-0590
mark.e.pittman@blyncsy.com

Key Personnel

Mark Pittman - Director of Transportation AI
Mark is the CEO and founder of Blyncsy. While in law school, Mark realized a need for using the power of movement data and analytics to help organizations make smarter decisions and created a company based on this need. In 2015, Mark took his company to market with the goal of using data science and AI to improve transportation systems. Mark has a J.D., MBA, M.S., and a B.S, from the University of Utah.

Mark will serve as the executive sponsor for this project, ensuring overall satisfaction for the agency.

Dallin Starr - Senior Manager, Operations
Dallin is the Senior Operations Manager at Blyncsy, primarily focused in the area of field operations and project management. Dallin oversees the deployment of data collection devices in every project, across the United States and Canada. We cover/collect images from roadways all across the nation every day and Dallin sees to it that Blyncsy is scaling coverage and improving the speed of delivery. Prior to working at Blyncsy, Dallin was at Morgan Stanley for a decade. Dallin has an MBA and B.S. from the University of Utah and has his Project Management Professional (PMP) designation.

Dallin will oversee the implementation and service delivery for the project. He ensures the project will be delivered on time and meets the specifications of this response.

George Vejar - Data Engineer
George leverages Blyncsy's vast image data to build machine learning models for object detection and classification. He received specialized training in data science through the LSSTC Data Science Fellowship, a program aimed at providing astronomers with a variety of skills required for dealing with big data. George has a B.S. and M.S. in Physics and obtained his PhD in Astrophysics from Vanderbilt University in 2022, where he studied planetary nebulae and exoplanets. He has published works in the Astrophysical Journal, given talks at national astronomy conferences, and contributed open-source software to the astronomical community. While his love for space has not waned, he now utilizes his technical background to solve down-to-earth problems.

George will serve as the technical lead for the project and will work with NCTCOG and participating entities' technical personnel to achieve success.

Adam Freeman - Operations and Mapping Specialist
Adam focuses on supporting the Operations team by managing the day-to-day operations of our nationwide sensor network, GIS mapping/annotations for our AI Machine Learning technology Blyncsy, and support for other staff (demo's, system trainings, correspondence, marketing). Adam graduated in 2020 from Plymouth State University with a major in Environmental Science. He has an

extensive background in GIS and mapping.

Adam will be involved in meeting GIS-related needs for the asset deliverables.

Naji Rizig - GIS & Operations Associate
Naji is a recent hire at Blyncsy and Bentley Systems, serving as a GIS & Operations Associate. He holds a Bachelor's degree in Geoscience, a Post-Graduate Certificate in Remote Sensing, and a Master's degree in GIS, from Penn State University. He has an extensive background in various GIS software and sensor technologies, including LiDAR, drone aerial imagery, and satellite imagery, as well as coding experience.

Naji will be serving alongside Adam in the Operations team to ensure the successful assessment and analysis of all asset deliverables.

Jen Cantwell - Senior Engineer
Jen has been with Blyncsy for 5 years and during that time she has contributed to the development and maintenance of every backend product at the company. Jen manages the back-end system at Blyncsy and supports the roadway imagery coverage and scaling efforts nationwide. Jen has worked in numerous languages including Python, C++, Ruby, and Scala and has worked on Blyncsy's Machine Learning pipeline and the development operations infrastructure. Prior to Blyncsy, Jen worked for L3 Communications (now L3 Harris) for a decade where she was a key contributor to the embedded communication system on the Northrop Grumman MQ-4C Triton. Jen holds a B.S. Computer Science, University of Utah.

Jen will be involved in consulting with participating entities on an as-needed basis.

Patrick Brown - Data Engineer
Patrick has been working in early-stage startups for almost eight years now: co-founding two as the technical co-founder and working for a third as the boots on the ground technical operator. Pat has extensive knowledge and skills developing AI and Machine Learning (ML) models that are critical components of the technical stack and deliverables. He prides himself on the ability to deliver big and quickly. Over the last few years, he has worked very hard to develop good product sense and fundamentals.

Pat will be involved in consulting with participating entities on an as-needed basis.

Name	**Phone**	**Email**
Mark Pittman	(385) 216-0590	mark.e.pittman@blyncsy.com
Dallin Starr	(385) 216-0590	dallin.starr@blyncsy.com

Adam Freeman	(385) 216-0590	adam.freeman@blyncsy.com
Jen Cantwell	(385) 216-0590	jen.cantwell@blyncsy.com
Patrick Brown	(385) 216-0590	patrick.brown@blyncsy.com
George Vejar	(385) 216-0590	george.vejar@blyncsy.com
Naji Rizig	(385) 216-0590	naji.rizig@blyncsy.com

References

Organization Name	**Reference**
City of Fort Worth 900 Monroe Street Fort Worth, TX 76102	Annie Anand Business Process Manager (817) 392-6785 Annie.anand@fortworthtexas.gov
HiDOT (Hawaii Department of Transportation) 869 Punchbowl Street, Room 511 Honolulu, HI 96813	Robin K. Shishido robin.k.shishido@hawaii.gov
Horrocks Engineering 1265 East Fort Union Boulevard Suite 200 Cottonwood Heights, UT 84047	Derrick Sharp Innovative Technology Director 208-241-4650 derricks@horrocks.com
Port Authority New York New Jersey (PANYNJ) 4 World Trade Center 150 Greenwich Street, 19th Floor New York, NY 10007	Kevin Walkes, P.E. Traffic Engineering – Operations & Customer Experience (212) 435-5706 kwalkes@panynj.gov

Project-Related Experience and Qualifications

PROPOSAL

The following proposal is developed for NCTCOG. Blyncsy can conduct an automated, AI-powered analysis of roadway conditions and asset inventory. We can detect any number of dozens of road issues, from pavement cracking and potholes to road striping visibility, crosswalk detection, road sign inventory and condition, guardrail damage and much more. Blyncsy will partner with the participating agencies to determine specific detections based on a priority of needs. Blyncsy's product is also compatible with GIS databases and maintenance management systems, including our partnership with Atom AI and Bentley Assetwise.

Company Background

Blyncsy, acquired by Bentley Systems in 2023, develops software and technology for processing crowdsourced imagery from hundreds of thousands of vehicles already on the roads, in many cases processing images within 60 seconds from the time of collection. Blyncsy can provide an up-to-date view of roadways from around the state of Texas without ever scheduling someone to drive the roads. The results can be dramatic. Blyncsy can reduce or eliminate the need to schedule drives to survey roads, and raw imagery that is collected is automatically stored in the cloud for historical review. The cost of automated data collection using Blyncsy can cost as much as 85% less than an equivalent scheduled or manual inspection. Additionally, the street-level imagery that is collected by Blyncsy can be used for a wide range of applications, like debris detection, paintline quality, road sign quality, and vegetation encroachment, which can lower the costs of data collection even further by sharing it across communities.

Blyncsy is not just a big data and analytics company; we deliver key analytic insights, based on a rich stream of aggregated data, to drive action. Blyncsy's innovative software and artificial intelligence make it possible for clients to observe what is happening on their roadways without the need for resource-intensive manual surveys.

Blyncsy's technology can detect anything on the roadway that can be seen by a driver, including pavement cracks and potholes. In our proposal, we highlight how Texas can quickly become more proactive in the management of the state's roads, bridges, and airports by using Blyncsy's machine vision technology to detect roadway objects and assets, understand the condition report and provide actionable information directly to the maintenance teams that need it. The tools and data that Blyncsy provides have the power to make dramatic effects on how NCTCOG monitors and maintains its road networks.

Roadway management and asset inventory is a significant logistical and financial challenge for state Departments of Transportation, with safety and financial implications

for everyday motorists and the DOT's that serve them. Promoting preventative and proactive maintenance strategies for roadway assets, from the condition of the pavement to guardrails and work zone signage, is vital to preserving these resources' life span. Blyncsy and its proprietary software allows for up-to-date street-level imagery and data-driven insights to guide decision making for pavement and asset management.

Blyncsy has been assisting public agencies, communities, and Departments of Transportation since 2015 by gathering data on their roadways and delivering actionable insights. In 2022, Blyncsy entered into a Master Services Agreement with NCTCOG for Roadway Workzone Data Reporting Services to governmental entities participating in the Texas SHARE program. We are familiar with the value of the TxShare program and the significant impact it has on the greater Dallas Fort Worth region.

We have developed the tools needed to process and analyze dashcam footage, and we have lowered the bar dramatically for DOTs to make use of them. With innovative techniques like machine learning, AI-powered image processing, and data science, our products help to characterize the state of infrastructure, reveal trends, and provide tools for analysis. Blyncsy is a recent addition to the Bentley Systems, Inc. family of companies.

With our technology, Blyncsy will lower the costs and logistical challenges of roadway maintenance and asset inventory. Thank you for the opportunity to present our proposal.

Existing Partnerships with Maintenance Management Systems and support

Blyncsy supports numerous systems that utilize GIS and Asset Maintenance Management Systems worldwide. Our tools are designed for open compatibility, allowing data to reside in environments like ESRI, Bentley's iTwin, or others. We have access to Bentley's AssetWise maintenance management software and partner with AtomAI Solutions for their Atom Solutions management software. Blyncsy can also integrate with existing maintenance management systems used by clients.

Once data is integrated into the Atom platform, the AtomAI team categorizes various assets, such as signs, signals, crosswalks, curbs, and transit stops. This asset data is filterable in reports and the Atom Map Portal by type, condition, and other relevant attributes for planning purposes.

The Atom Map Portal allows users to visualize asset and work order layers on a Google Map. Users can click on asset or work order icons to access detailed information directly. Bentley AssetWise offers similar integration and features.

Technical Proposal

TAB D – A. Proposal Narrative

Service Category #1: Road and Asset Management Software

1. Blyncsy is a roadway insights platform derived from crowd-sourced or fixed imagery collection video data system combined with our proprietary machine learning models. Through Blyncsy's dash cam data, or partner feeds, we can aggregate instant video collection from commuters already out on your roadways. This video is uploaded by Blyncsy via an automated cellular connection. It is validated to see whether it meets certain qualifications; for example, removing videos with glare, low visibility, etc. The uploaded video that meets criteria is split into composite frames and run through a segmentation model to identify differing road assets. All insights are easy to integrate into your existing workflow through an intuitive Application Programming Interface (API) or are available in a partner computerized management system. With this knowledge you'll be able to proactively respond to change, complaints and issues to better manage roadway, safety and assets.

2. Blyncsy provides data to the client in a variety of ways, as best tailored to the organization including through an open API connection to our Asset Maintenace Management Software partners, with data fed into any systems and platforms the client already uses. Therefore, clients and end users do not have to install any software or mobile apps or learn new systems. This superior method of data delivery increases use of the platform by the client and increases efficiency.

3. Data is collected through crowdsourced dash camera imagery and does not require the installation of any specialized hardware. The data collection also does not require the use of a mobile device; Blyncsy is able to access real-time imagery from over 1,000,000 vehicles already driving the roads, with dash cameras mounted on the windshield. As these dash cameras are constantly recording the road, Blyncsy can instantly request imagery from any location, and footage will be automatically pulled from any of these cameras in that location, often within minutes. Our proprietary software analyzes the images captured by these cameras and performs the required detections automatically.

4. Our data includes the image used for data analysis at each point on the roadway, including date, time and geolocation via latitude and longitude EXIF data.

5. Blyncsy's use of crowdsourced imagery from dash cameras ensures the safest form of data collection possible, even safer than a smartphone mounted on the windshield of a maintenance vehicle. For privacy concerns, no audio is recorded by these cameras, as an audio component to the data collection process would require a lengthy manual review of all videos recorded for each project to determine if there was any pertinent information recorded via audio that was not captured in image form.

6. After image capture, visual access to the data is always available in less than 30 calendar days after capture, and is often available within hours, allowing for maintenance crews to prioritize repairs or work on issues that pose a significant safety risk to the public.

7. The Blyncsy software uses trained artificial intelligence models to independently detect and analyze over 50 distinct roadway issues and assets, both on the surface of the roadway and adjacent to the roadway.

8. Blyncsy's AI model is trained to detect material assets, including street signs with MUTCD classification, and can be trained to detect any assets on or adjacent to the roadway, including manhole covers and catch-basins.

9. Yes, the Blyncsy data includes date and time for each image collected as well as direction and heading.

10. The Blyncsy software is trained to detect the presence and condition of roadway assets, including damage, malfunction, graffiti or vegetation that is blocking the asset visually. These safety risks are identified to the client so maintenance crews can perform quick repairs, ensuring safe roadways for all users.

11. The software can detect and analyze over 50 unique detections, however only the detections purchased by the client are provided to the client. The client can adjust the detections they receive, and existing images already captured by the software can be re-analyzed for different detections, eliminating the need for maintenance crews to drive the same roads again for updated data. Furthermore, the client has the ability to enable new detections that are developed in the future on historical imagery allowing for backwards compatibility.

12. Yes, the software is capable of detecting and classifying damage to the roadway as well as identifying the severity of the damage. Examples of such detections include potholes, pavement cracking by type, and roadside assets including signs

13. The software uses an established assessment methodology to provide 100% objective scoring and can also be customized to the unique scoring methods of the client.

14. System layers can be toggled on/off to display any of the asset types under review.

15. Yes, the Blyncsy technology can identify and classify street-signs within the right-of-way based on the Manual on Uniform Traffic Control Devices (MUTCD). In addition, night-time imagery collection can allow for a correlated retroreflectivity analysis for sign visibility inspection.

16. The software classifies each street sign based on the Manual on Uniform Traffic Control Devices (MUTCD) code.

17. Yes, the software identifies street sign damage, including fading, street poles that are leaning, if the sign is covered by dirt or graffiti, and vegetation encroachment.

18. Catch basin detection with associated unique identifiers are available, with the ability to add road debris or vegetation encroachment models to identify potential risk of flooding.

19. Not a current model, but Blyncsy can work with NCTCOG to review examples and test out the functionality. Currently in Beta stage.

20. Yes, Blyncsy AI models can detect manholes within the right-of-way.

21. System can assign an ID to any item detected. ID naming convention can be defined by client and consistently maintained for forward compatibility with new collections

22. Not a current model, but Blyncsy can work with NCTCOG to review examples and test out the functionality. Currently in Beta stage.

23. Blyncsy provides a web application to access and view the collected data, additional the data can be accessed through an open API connection into the client's existing mapping software and platform, eliminating the need for end users to log in to or otherwise access a third-party web application. This includes a WMS/WFS connection for GIS compatibility such as ArcPro.

24. Blyncsy provides an endpoint server that is an open-geospatial (OGC) compliant Web Map Service (WMS) and Web Feature Service (WFS) server, secured by OAuth2 capable of producing Esri ArcGIS compatible layers. These layers can be pulled into clients' existing Maintenance Management Systems for task management, tracking and alerts, including Assetwise and Atom and others. Pavement condition for pavement management

25. Blyncsy model layer style can be customized to include levels of severity and class. Each crack is detected individually, and the end use can determine the length of each roadway segment for severity adjustment. This allows the end user to determine the level of granularity they desire for damage severity. For example, PASER default is 1-10 scoring with 1 being the worst and 10 best.

26. Yes, each image used in the data collection process is available to view with all pertinent metadata, including date and time of collection, coordinates, heading, speed of the vehicle, and more.

27. Blyncsy provides an endpoint server that is an open-geospatial (OGC) compliant

Web Map Service (WMS) and Web Feature Service (WFS) server, secured by OAuth2 capable of producing Esri ArcGIS compatible layers. Each image has its own associate lat/long cooridnate and a user can filter road conditon by their determined segment, which pulls in the corresponding imagery within that roadway segment. Segments are based on client provided basemap meta data, allowing for corner-to-corner customization. Layer filtering based on features in the client system, maintenance management software or other systems used to view the data, including Assetwise and Atom.

28. Individual detections include meta-data including geolocation of the image and the estimated location of the localized asset based on the camera image. Each individual asset image is scored based on the rating system specified. This includes the individual distress and severity of the asset in the image

29. The individual scored images in #28 are aggregated together to create segment scores based on the individual averages or weighted based on the end users preferences.

30. Scoring is identified in the image “additional information”, which includes the score, geo location, severity labels (if applicable). For Segment condition, that is the aggregated average of the point scores. Layers are color coded based on style, which can include severity, count etc... System allows for unlimited classes, but they must be pre-defined if they are going to be utilized. Segment sizes are pre-defined or can be matched to client provided segment maps.

31. Blyncsy collects data on all road types, but the default includes the main OSM (Open Street Map) classifications:
Motorway, Trunk, Primary, Secondary, Tertiary and Residential. Imagery can be collected on any roadway.

32. Blyncsy models currently run on asphalt and concrete but can determine other non-paved types including gravel or dirt.

33. Blyncsy primary distress options include:
- Cracking
    - Longitudinal
    - Transverse
    - Alligator

-Potholes
-Utility Cuts
    - Good, fair, poor condition assessment

-PASER

34. Based on severity, low PASER scores or high presence of cracking/potholes, layers can be filtered to focus on high damage areas this threshold can be customized by the end user to determine which areas require immediate treatment

35. Blyncsy layers can be used to supplement design/planning review of areas in need of improvement. Because of the ease of pulling Blyncsy data into Esri or other tools, combining datasets such as AADT, and other planning data you can pick and choose which insights to combine.

36. Blyncsy provides an endpoint server that is an open-geospatial (OGC) compliant Web Map Service (WMS) and Web Feature Service (WFS) server, secured by OAuth2 capable of producing Esri ArcGIS compatible layers. Segments are based on client provided basemap meta data. Layer filtering based on features in the client system, maintenance management software or other systems used to view the data, including Assetwise and Atom.

37. Blyncsy partners with Atom, a world-class google inspired, asset management workflow platform where Blyncsy data seamlessly integrates.

38. Blyncsy can see logins to the front-end dashboard, but not the user movement within the clients own GIS system.

39. Blyncsy can generate layers of high severity items for review or integrate with maintenance management system for safety alerts to be generated based on these items.

40. All layers are exportable in multiple formats including .geojson, .shp or .csv. If using the WFS/WMS connection, export options are based on client system functionality.

41. No. Blyncsy can integrate with clients' existing or new maintenance management systems chosen, including Assetwise and AtomAI. Should the user decide to purchase Assetwise or AtomAI software those respective teams will work in coordination with Blyncsy to implement both solutions.

42. Layer delivery is determined by the coverage of our crowd sourced dash cam fleet cameras. If coverage is sufficient, the images can be collected/processed, and the AI detection models will be generated. Expected duration of collection/layers/deliver 2-3 months.

    - Phase 1 - Post contract and Notice to Proceed. Customer to confirm the monitored area and roadway for the project. (1-2 days once layer is received)
        - geojson/GIS layer provided by client that covers the roadways to be captured
        - Discussion/integration testing of existing client system
    - Phase 2 - Blyncsy will start image collection to set coverage baseline (1 week)
        - Bi-weekly coverage checks until the map is completed. (1 month expected timeframe to capture all roads).

- Phase 3 - Image processing, Analytics and layer creation (2-3 weeks)
    - Includes system integration testing WFS/WMS, API into client system of live data.
- Phase 4 - Final review of deliverables with the client.
    - Customer virtual trainings/system walkthrough
    - Customer signoff of live product layers
- Phase 5 - Follow Ups and Feedback with the client.
    - Next steps discussion
    - Additional image collection and layers

TxShare, NCTCOG Road and Highway Asset Management Software

Blyncsy, Inc.

Project Start Date: 9/2/2024 (Monday) Display Week: 1

Project Manager: Blyncsy

WBS	Task	Start	End	Days	% Done	Work Days
1	**Phase 1**	Mon 9/02/24	Thu 9/05/24	4		4
1.1	Notice to Proceed	Mon 9/02/24	Mon 9/02/24	1	0%	1
1.2	Confirm map area	Tue 9/03/24	Wed 9/04/24	2	0%	2
1.3	Kick-off Call Scheduled and Agenda Communicated	Thu 9/05/24	Thu 9/05/24	1	0%	1
2	**Phase 2**	Mon 9/09/24	Fri 2/28/25	173		125
2.1	Start Image Collection	Mon 9/09/24	Sun 9/15/24	7	0%	5
2.2	Bi-Weekly Coverage Checks	Sun 9/15/24	Mon 10/14/24	30	0%	21
3	**Phase 3**	Tue 10/22/24	Fri 2/28/25	130		94
3.1	Image Processing	Tue 10/15/24	Mon 10/21/24	7	0%	
3.2	Analytics	Tue 10/22/24	Mon 11/04/24	14	0%	10
3.3	Layer Creation	Tue 11/05/24	Thu 11/14/24	10	0%	8
3.4	WFS/WMS API connection testing	Tue 11/05/24	Thu 11/07/24	3	0%	
3.4.1	Live data feed test	Thu 11/07/24	Sat 11/09/24	3	0%	
4	**Phase 4**	Fri 11/15/24	Fri 2/28/25	106		76
4.1	Final review of deliverables	Mon 11/11/24	Thu 11/14/24	4	0%	
4.2	Customer virtual trainings/system walkthrough	Fri 11/15/24	Fri 11/15/24	1	0%	1
4.3	Customer signoff on live product layers	Fri 11/15/24	Fri 11/15/24	1	0%	1
5	**Phase 5**	Thu 11/28/24	Fri 2/28/25	93		67
5.1	Followup and Feedback sessions	Mon 11/18/24	Wed 11/27/24	10	0%	
5.2.1	Next Steps Discussion	Thu 11/28/24	Sat 11/30/24	3	0%	2
5.3	Additional Image Collection and Layers	Sun 12/01/24	Fri 2/28/25	90	0%	

43. Blyncsy's Ongoing Operations, Support and Maintenance
    - Blyncsy provides quick response times to customers during the work week between the hours of 8:00 am - 7:00 pm (MST) and monitors communication outside of those hours.
    - Blyncsy support staff continuously monitors the Blyncsy system and dependencies and will provide email alerts and/or phone notifications depending on the severity of the issue.

    Escalation Procedures/Error Resolution
    - Issue response, tracking, resolution and close-out: All issues are logged and tracked by our internal sprint planning project management system. This includes discovery notes/images, response progress and resolution actions.
    - Track defects: Blyncsy tracks defects found during all phases of the project, assesses the severity, priority, corrective actions, Level of Effort (LOE) to resolve and impact on deployment/schedule.
    - Proactive risk management: Blyncsy identifies and acts on risks quickly. We have systems in place to automatically detect any potential issues. Blyncsy engineers solve the issue internally and communicate with clients if this issue affects client layers.

44. Blyncsy system can be accessed fully remotely, and training/kick-off calls can be handled via video calls. Optional in-person training available upon request.

45. Blyncsy can follow this quote format. This will include the terms, fees, pricing and any discounts. Pricing is broken out by layer delivery and asset requirements.

Service Category #2: Other Ancillary Services

46. Blyncsy has an existing Master Services Agreement with NCTCOG to provide Roadway Workzone Data Reporting Services to governmental entities participating in the Texas SHARE program. See case studies following Tab D-B section 5.0.13 for expanded use cases and deliverables that Blyncsy can provide. This is priced the same as stated in Attachment A. As mentioned above, Blyncsy also has a partnership with AtomAI maintenance management software that can currently ingest and utilize the Blyncsy layers. Blyncsy also has manual dash cams available to supplement the crowd-sourced fleet or for additional use-cases where agencies want to drive their own roads for analysis.

Tab D - B. Proposed Scope of Services

Please see Blyncsy response for each of the following scope categories

5.0.1 Platform:

Blyncsy is a roadway insights platform derived from crowd-sourced video data collection combined with our proprietary machine learning models. Through Blyncsy's dash cam data, or partner feeds, we can aggregate instant video collection from commuters already out on your roadways. This video is uploaded by Blyncsy via an automated cellular connection. It is validated to see whether it meets certain qualifications; for example, removing videos with glare, low visibility, etc. The uploaded video that meets criteria is split into composite frames and run through a segmentation model to identify differing road assets. All insights are easy to integrate into your existing workflow through an intuitive Application Programming Interface (API) or are available in a partner computerized management system. With this knowledge you'll be able to proactively respond to change, complaints and issues to better manage roadway, safety and assets.

5.0.2 Collection of Data:

Blyncsy imagery is collected from existing crowd sourced fleet dash cameras and Blyncsy procures those images. A client based mobile device is not required for collection of imagery, a client may elect to use existing hardware already in their office such as a GoPro camera or other dashcam many of which are compatible with Blyncsy.

5.0.3 Manual Collection of Data:

Blyncsy has manual dash-cams available for areas where crowd sourced coverage is lacking, and the client can supplement the data. Video collection is uploaded and processed with the rest of the crowd sourced data.

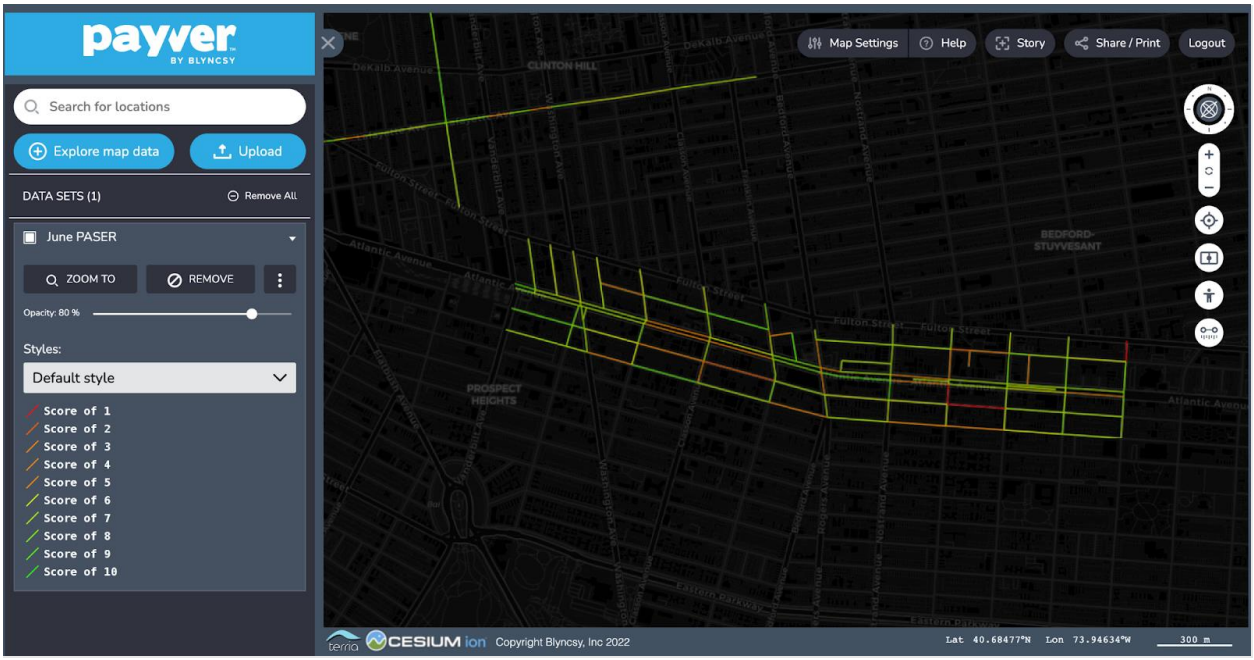
5.0.4 Artificial Intelligence:

Blyncsy's cutting-edge software and artificial intelligence (AI) models can detect and

classify damage to the roadway surface automatically. The software can detect potholes and pavement cracks, while classifying the severity of the damage and the type of crack. This data is transmitted in near real-time to the Blyncsy front-end web viewer or directly to the client's preferred management system via API/WFS/WMS connection. Alerts can be automatically generated based on this data, ensuring the maintenance crews are notified of issues posing a safety hazard and the problem can be fixed within a matter of hours, not days or weeks.

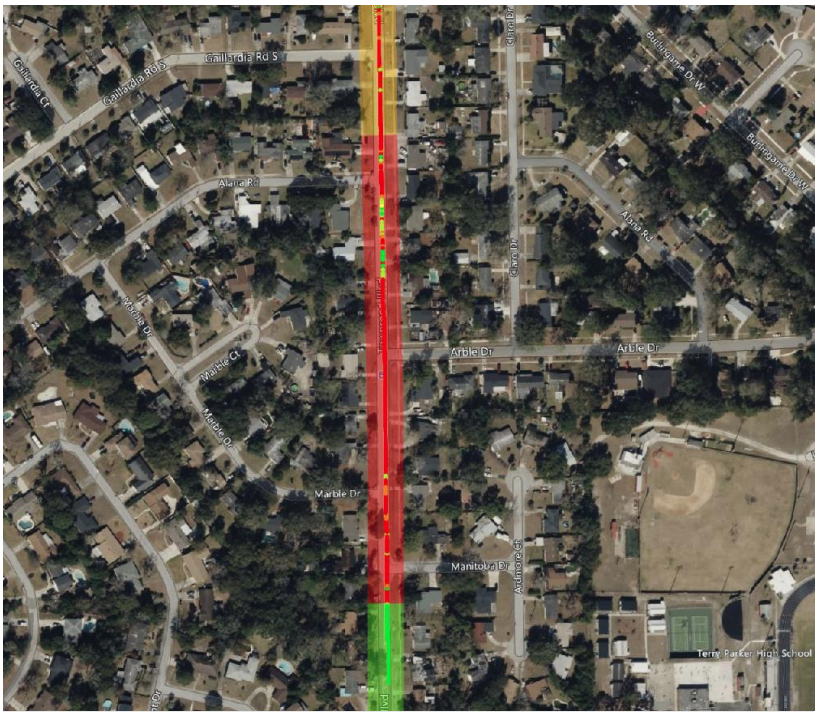
5.0.5 Artificial Intelligence for Pavement Condition Assessments: **Pavement Condition Index (PCI)**

Blyncsy can conduct a full PASER analysis on roadways. Using crowdsourced imagery and AI, Blyncsy analyzes the presence and severity of issues like cracking, potholes, and overall distress to determine an overall Pavement Condition Index (PCI) score for segments of roadways. The example provided shows a scoring scale 1-10 (1 being worst and 10 being best). Each of these scores are associated with a color, so agencies can easily visualize and pinpoint areas that need to be prioritized during pavement maintenance. Blyncsy will partner with the City of Pasco to determine specific scoring criteria prior to implementation. Blyncsy's product is also compatible with GIS databases.



For general road grading systems, having both high quality imagery, and multiple viewpoints of the same section of road is crucial.

a. Blyncsy utilizes images of varying quality for various purposes. Images can be filtered by quality if quality is required to be consistent at the cost of some imagery/coverage.



5.0.6 Artificial Intelligence for Asset Management: Street Signs

Road Assets/Inventory Management

Inventory assets for road signs tend to be outdated due to changing or damaged signs and the cost to survey.

- Blyncsy sees and maps out signs without the need for field surveys.
- Every detection comes with images to verify data
- Each sign can have a Unique ID along with the MUTCD Sign code
- Damage assessment includes physical damage, graffiti, missing signs (once the baseline asset map has been generated)

5.0.7 Artificial Intelligence for Asset Management: Catch-Basins

Catch basin detection with associated unique identifiers are available, including position relative to the pavement surface. Blyncsy does not currently have a catch-basin AI model but can work with the client to test one out during the project. Once the model has been built, any assets in the image can be assigned a unique ID.

5.0.8 Artificial Intelligence for Asset Management: Manholes

Blyncsy can detect the presence of manhole covers, if they are available from the view of the dashcam. Manhole deficiencies including lowered or outsticking are not part of our current model but can work with the client to build out this feature based on the specification of the agency.

5.0.9 Web Application for Management of Data

Blyncsy partners with Atom for a standalone web application for maintenance management. Blyncsy provides an endpoint server that is an open-geospatial (OGC) compliant Web Map Service (WMS) and Web Feature Service (WFS) server, secured by OAuth2 capable of producing Esri ArcGIS compatible layers. Segments are based on client provided basemap meta data. Layer filtering based on features in the client system, maintenance management software or other system used to view the data.

5.0.9.1 Pavement Condition Module (PCM)

Blyncsy layers have all metadata available, including the OSM Road Type classifications attached. A filter can be added to any layer to more easily sort insights. Layers viewed in the Blyncsy viewer, or once pulled into a maintenance management system, can have a colored styling applied to easily distinguish between areas in more urgent need of repair. Examples below of a few of the layer type criteria. Paintline of 0 is colored red for worst and 4 colored green for best condition.

- Paintline condition (0-4 scoring)
- Retroreflectivity (RL <125 to 150+)
- PASER (1-10 scoring scale)

Surface Type:
Blyncsy models currently run on asphalt and concrete but can determine other non-paved types including dirt. Filters can be added to sort by this category.

Distress Type:
Blyncsy primary distress options include:
- Cracking
    - Longitudinal
    - Transverse
    - Alligator
-Potholes
-Utility Cuts
    Good, fair, poor ratings
-PASER

Reconstruction Suggestions:
Blyncsy layers can highlight areas/segments with severe damage or assets in need of more immediate repair.

5.0.9.2 Construction Planning Module (CPM)
Blyncsy simplifies construction zone inspections by identifying traffic control devices automatically and comparing those to the approved traffic control plan. The MUTCD library automatically notifies project managers, region traffic engineers and project personnel if there are anomalies that need addressing. Blyncsy identifies issues such as construction barrels that have been knocked over and may affect the traveling lanes, or

improper traffic control device spacing or tapering that could contribute to accidents. Each individual instance of improper traffic control equipment could impact the client, in addition to the fact that client pays vendors to deploy this equipment conforming to their traffic control requirements. Blyncsy helps ensure vendors are deploying traffic control services as contracted. In large design-build projects, contractors or consultants often perform the construction inspection portion of the project. Blyncsy technology can augment or replace that traditional process.

Blyncsy partner, AtomAI Maintenance Management System has functionality to support Construction Planning if their system is utilized in the project. AtomAI, in particular, has a unified product with seven portals (Analytics, Maps, Asset, Team, Work, Schedule, Budget) that can work with Blyncsy data to provide insights and calculations for construction planning.

5.0.9.3 Asset Based Task Management Module

Blyncsy does not have a maintenance management system. Blyncsy system can integrate asset layers, including changes, damage and new items directly into existing maintenance management systems.

5.0.9.4 GPS Tracking Module

Blyncsy system does not track employees as images are sourced from existing crowd sourced fleet cameras.

5.0.9.5 Road Safety Alerts Module

Blyncsy layers can be ingested into the clients existing maintenance management system and can highlight damage/road safety issues detected that should be sent as alerts.

5.0.10 Sharing of Data: Emails, Printing, Excels, Interoperability

The Blyncsy web viewer platform allows users to Share the current map view as a unique URL that can be copied into an email, generating a printable map view that prompts the user to send the document to their printer of choice. In addition, each image at a specific location can be shared and can be downloaded in high resolution. Individual geographic points and individual segments can be exported to Excel-compatible CSV or JSON file for easy sharing among colleagues.

5.0.11 Cybersecurity Capabilities

System is maintained/owned by Blyncsy and adheres to security standards of Bentley Systems, of which Blyncsy is a part.

Data is stored in Google Cloud which has stringent security standards. Google has the following compliance offerings, including ISO/IEC 27001/27017/27018/27701, SOC 1/2/3, PCI DSS, VPAT (WCAG, U.S. Section 508, EN 301 549) and FedRAMP certifications.

This includes FedRAMP compliance referenced here:

https://cloud.google.com/security/compliance/fedramp#google-clouds-fedramp-compliance

Blyncsy also provides an endpoint server that is an open-geospatial (OGC) compliant Web Map Service (WMS) and Web Feature Service (WFS) server, secured by OAuth2 capable of producing Esri ArcGIS compatible layers. OAuth2 is used for personnel access and user management security.

5.0.12 Automated Construction Cost Calculation
Blyncsy does not have a construction cost calculator. Clients can use insights from Blyncsy layers to determine areas in need of repair and prioritize maintenance. This includes integrating into the clients' existing maintenance management system, including Assetwise and Atom. AtomAI, in particular, has a unified product with seven portals (Analytics, Maps, Asset, Team, Work, Schedule, Budget) that can work with Blyncsy data to provide insights and calculations.

5.0.13 Roadway Lifecycle and Financial Forecasting
Blyncsy does not have a road lifecycle or forecasting tool. Blyncsy insight layers can be used for change detection of assets and to compare multiple historical layers to assess rate of change. For example, the historical layers of paint condition can be compared to assess the rate of degradation and formulate a maintenance plan. These layers can be integrated and utilized within the features of clients' existing maintenance management systems, including Assetwise and Atom.

Atom has a unified product with seven portals (Analytics, Maps, Asset, Team, Work, Schedule, Budget) that can work with Blyncsy data. The Budget portal in particular helps managers optimize/improve the budget funds at their disposal for maximum impact. The Budget Portal helps organizations allocate more resources to meet key metrics and milestones.

Regulatory Compliance

The US Department of Transportation’s Federal Highway Administration (FHWA)

announced a final rule in 2022 that will improve safety for all road users by ensuring that pavement markings are made more visible in dark or low light conditions. Under the final rule, the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) provides a new minimum standard for pavement marking “retroreflectivity”. The final rule also requires state and local agencies such as NTCOG agency members to implement a method within four years for maintaining pavement marking retroreflectivity at or above minimum levels. Pavement marking improvements are also eligible for up to 100 percent Federal-aid funding. By partnering with Blyncsy, NCTCOG agency members will ensure that they are compliant with this new federal requirement by the 2026 deadline.

NCTCOG as an AI Leader

The traditional method of inspecting roadways includes manually scheduled drives using maintenance crews to find issues, log the problem and geo-location, and then input this information into the DOT system to generate work orders. In addition, crews can use expensive LiDAR scanning equipment to measure road conditions and detect potholes, cracks or other degradation to pavement. This process is expensive, time-consuming, and often creates a safety hazard not only for the inspection crew but for motorists and other roadway users. Also, these crews are usually only looking for specific problems and may not be able to detect additional roadway issues such as damaged or missing signs, guardrail damage, street light malfunctions, or roadway paint striping that needs to be replaced.

By implementing an AI solution like Blyncsy, NCTCOG member agencies can immediately eliminate the need for these expensive manual surveys and take a proactive approach to roadway maintenance, extending the life of pavement and other road assets, which will create further long-term cost savings as small issues can be fixed before they become big expensive problems.

Other companies are utilizing similar AI-powered detections of roadway issues and assets. Other companies can do similar inspections and analysis using artificial intelligence, however only Blyncsy is using crowdsourced imagery. Why is this important?

With these other solutions, NCTCOG member agencies would pay for their teams to drive the roads and collect the data, or NCTCOG member agencies would be provided with a set of cameras to install in their maintenance vehicles, capturing data and imagery as these official vehicles make their regular drives. These solutions are both more expensive but also more time consuming, and there is no ability to increase the frequency of data collection. Thanks to the crowdsourced data collection that Blyncsy implements, NCTCOG member agencies can conduct regular inspections of roadways, identifying changes over time or monitoring key roadways on a daily, weekly or monthly basis.

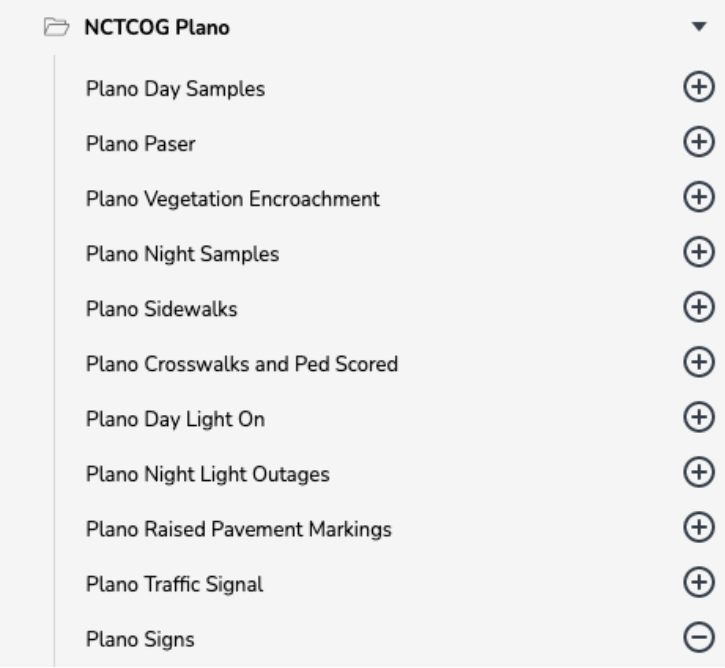
AI Hub support and engagement
As a solution developed specifically for transportation agencies, Blyncsy can support the maintenance efforts of the NCTCOG member agencies as well as other agencies that have jurisdiction over public or private roadways where our inspections and analysis would be needed. In other regions, this includes the Port Authority of New York and New Jersey (PANYNJ) which has already conducted a pilot program with Blyncsy to run detection and inspections on select PANYNJ roads.

The insights derived from the AI models can assist in expanding projects in other jurisdictions or departments with similar maintenance and safety requirements.

Similar Projects and Case Studies

- Blyncsy has worked with multiple agencies to evaluate Blyncsy's ability to detect and analyze pavement markings and other roadway assets. The following is a summary of 5 recent projects:

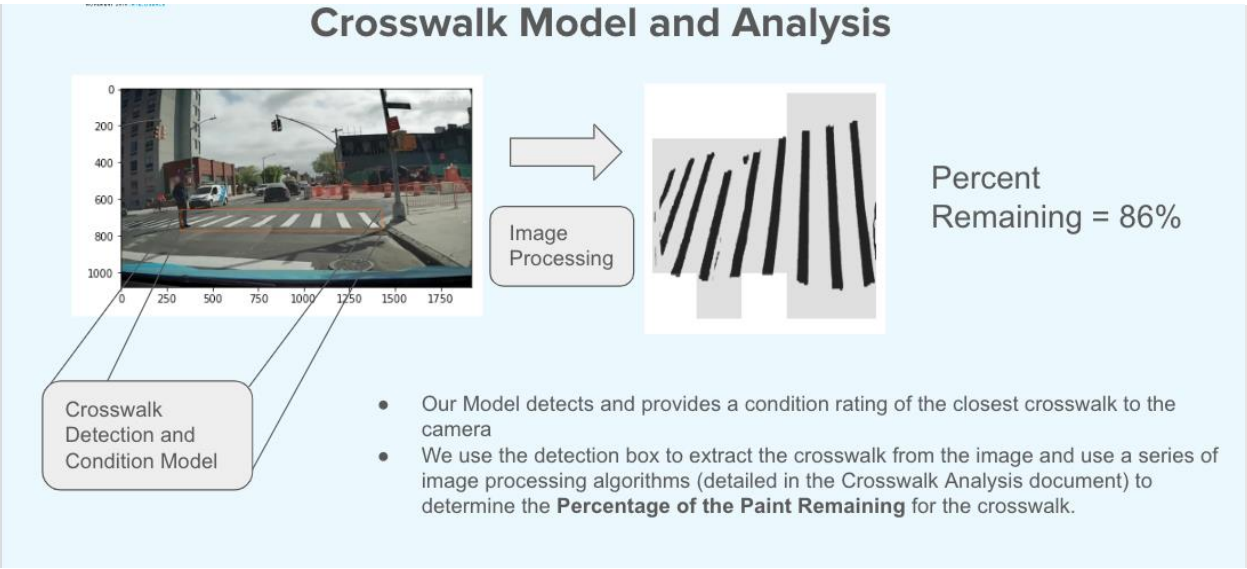
    - **DOT of Plano, TX**
      Blyncsy collected crowdsourced dashcam imagery and analyzed the imagery collected using machine learning algorithms. Plano gets to see their roads through the lens of machine vision. Blyncsy surveyed 4 miles of roadway for 11 different asset types shown in the image below. A key highlight from this project was the in-depth pavement review of those 4 miles to generate detections for their PASER rating which included paint analysis, cracking, raised pavement marking and reflectivity. All of this data was uploaded to the Blyncsy platform for Plano employees to view.



See attached full Plano Case Study put together with the DOT, also linked here: LINK "#1 Plano_Blyncsy Situational Awareness App Final Case Study"

- **Port Authority of New York & New Jersey (PANYNJ)**
  The 12-month project was designed to remove the need for over 70% of physical surveying of predefined infrastructure assets including lane markings, pavement condition, and signs. Using crowd-sourced imagery, Blyncsy delivered image processing insights to the Port Authority of New York and New Jersey (PANYNJ).
  - Pavement markings- Provide asset data (MUTCD type, point vs linear, width, color, etc.). Condition of pavement marking as whole road and individual markings including grading of visibility and luminosity correlated retro-reflectivity grade
  - Sign Asset Data and Retroreflectivity: Provide asset data (MUTCD code, type, etc.) Analyze signs for luminosity and general condition. Run differential analysis using existing asset data to add detection data for existing signs.
  - Pavement Condition Assessment: Deliver cracking and pothole analysis, PASER Score and retroreflectivity.
  - The FHWA new minimum retroreflectivity ruling goes into effect in 2026. These layers were generated to start that analysis to check the baseline and recognize where the minimum retroreflectivity levels are not being met. Images below show a high vs low RL rating for retroreflectivity scored by our system.

- **New York Department of Transportation (NYCDOT)**
  The pilot was designed to highlight how AI vision will change road management and maintenance for NYC with accurate and actionable information. Detect crosswalks and score markings based on “percent remaining” styling, as well as track historical change over time.



- **Tennessee Department of Transportation (TNDOT)**
  Blyncsy partnered with an engineering partner to derive a methodology for a sign and striping nighttime inspection to validate and analyze striping, sign night-time visibility and its associated correlated retro-reflectivity. Blyncsy image AI scoring was compared to in-field manual inspections and used to reduce the need for manual in-field inspections.

- **Hawaii Department of Transportation (HIDOT)**
  In 2022 Hawaii and HIDOT set out to determine the extent to which manual drives, increased CCTV coverage, and manual roadway surveys in Hawaii can be replaced and automated using crowdsourced dashcam imagery and machine learning. The project encompasses 1,013 miles of roadway, which is most DOT public roads in the state and covers the 4 main islands of Hawaii (Maui, Hawaii, Kauai, and Oahu).

  To address the needs of HIDOT, Blyncsy provided crowdsourced dashcam imagery from dashcams on Hawaii's roadways along with machine learning models to deliver thousands of on road images per mile and automatically survey roadways for multiple different assets each week. Specifically, these surveys provided information on:

  - Striping visibility
  - Barrel detection
  - PASER (Pavement Surface Evaluation and Rating System)
  - Guardrail damage detection
  - Roadway vegetation encroachment

- Stop signs
- Debris
- Cracking

See attached full HDOT Case Study for complete analysis and insights: “#2 HDOT Case Study”

Pricing

See Exhibit A and B in the following attachment section pages 43-47 for pricing breakdown and sample market basket.

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 29 - Attachment I: Instructions for Proposals Compliance and Submittal
- ☒ Page 30 - Attachment II: Certification of Respondent
- ☒ Page 31 - Attachment III: Certification Regarding Debarment
- ☒ Page 32 - Attachment IV: Restrictions on Lobbying
- ☒ Page 34 - Attachment V: Drug-Free Workplace Certification
- ☒ Page 35 - Attachment VI: Certification Regarding Disclosure of Conflict of Interest
- ☒ Page 38 - Attachment VII: Certification of Fair Business Practices
- ☒ Page 39 - Attachment VIII: Certification of Good Standing Texas Corporate Franchise Tax Certification
- ☒ Page 40 - Attachment IX: Historically Underutilized Businesses, Minority Or Women-Owned Or Disadvantaged Business Enterprises
- ☒ Page 41 - Attachment X: Federal and State of Texas Required Procurement Provisions
- ☒ Page 44 - Exhibit A: Description of Desired Product Categories for Proposed Pricing
- ☒ Page 45 - Exhibit B: Sample Market Basket Form
- ☒ Page 46 – Exhibit C: Service Area Designation Forms

- ☒ 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.

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.

Compliance with the NCTCOG Standard Terms and Conditions

By signing its submission, Respondent acknowledges that it has read, understands and agrees to comply with the NCTCOG standard terms and conditions.

Acknowledgment of Insurance Requirements

By signing its submission, Respondent acknowledges that it has read and understands the insurance requirements for the submission. Respondent also understands that the evidence of required insurance must be submitted within ten (10) working days following notification of its offer being accepted; otherwise, NCTCOG may rescind its acceptance of the Respondent's proposals. The insurance requirements are outlined in Section 2.2 - General Terms and Conditions.

Name of Organization/Contractor(s):

Blyncsy

Signature of Authorized Representative:

Date: 7/17/24

ATTACHMENT II:
CERTIFICATIONS OF RESPONDENT

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, Mark Pitman (typed or printed name) certify that I am the Director of Transportation AI (title) of the corporation, partnership, or sole proprietorship, or other eligible entity named as Respondent 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 Respondent by authority of its governing body.

Name of Organization/Contractor(s):

Blyncsy

Signature of Authorized Representative:

Date: 7/17/24

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 statues 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):

Blyncsy,

Signature of Authorized Representative:

Date: 7/17/24

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 or 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):

Blyncsy

Signature of Authorized Representative:

Date: 7/17/24

ATTACHMENT V:
DRUG-FREE WORKPLACE CERTIFICATION

The Blyncsy (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 Blyncsy (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 statue 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 statue or requires such employee to participate in a drug abuse assistance or rehabilitation program.

Name of Organization/Contractor(s):

Blyncsy

Signature of Authorized Representative:

Date: 7/17/24

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 the 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 the 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 the NCTCOG.

No officer, manager or paid consultant of the contractor is married to a member of the 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 the 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 the NCTCOG as it relates to this contract.

Name of Organization/Contractor(s):

Blyncsy

Signature of Authorized Representative:

Date: 7/17/24

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

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.**

Blyncsy, Inc.

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.**

None

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.**

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.**

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

7/17/2024

Date

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 1/1/2021

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

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 1/1/2021

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):

Blyncsy

Signature of Authorized Representative:

Date: 7/17/24

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.

Blyncy
(Printed/Typed Name and Title of Authorized Representative)

Signature

Date: 7/17/24

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: Mark Pittman

NAME OF COMPANY: Blyncsy, Inc.

DATE: 7/22/2024

-OR-

☐ **The Contractor or Subrecipient hereby certifies that it cannot 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: _____

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: Mark Dithman

NAME OF COMPANY: Blyncsy, Inc.

DATE: 7/22/2024

-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: Mark Pittman

NAME OF COMPANY: Blyncsy, Inc.

DATE: 7/22/2024

-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
Description of Desired Product Categories for Proposed Pricing

Respondents should furnish a proposal that specifies pricing for the products and services they propose.

Responses are encouraged from vendors who can only provide a handful of products and services. Respondents are not expected to be able to provide the entirety of the desired services, though are welcome to if they are able!

The following selection is not **all-encompassing,** and additional categories are desired if Respondent is capable of providing.

NCTCOG prefers vendors that provide a sole source of responsibility for the products and services provided under a resulting contract. If Proposer requires the use of dealers, resellers, or subcontractors to provide the products or services, the Proposal should address how the products or services will be provided to Members and describe the network of dealers, resellers, and/or subcontractors that will be available to serve TXShare Members under a resulting contract.

NCTCOG desires the broadest possible selection of products/equipment and services being proposed over the largest possible geographic area and to the largest possible cross-section of TXShare current and potential members.

Using as many pages as necessary, please provide your pricing information as Exhibit A of your proposal response. Provide this sheet as your first page.

Please refer to Section 6 for guidance.

CATEGORIES OFFERED

Place a "X" next to each category you are offering in your proposal:

X **Service Category #1: Road and Asset Management Software**

X **Service Category #2: Other Ancillary Goods or Services (List Below)**

Pricing

Attachment A

The example pricing is based on a single image collection of all roadways and the asset layer deliverables. Adding additional collections will allow for change detection over time. Pricing is the same for Service Category #1 and #2

Catalog price	$10.00	per mile per pull
NCTCOG TXShare Discounted Price (with 20% discount)	$8.00	per mile per pull for base images
	$0.25	addon price per mile for each model type detection, see examples below
Roadway Detections	price per CLM/pull	
Striping visibility	$0.25	
Paint Retroreflectivity	$0.50	
Pavement Condition/PASER	$0.25	
PCI	$0.25	
Cracking (Transverse, Longitudinal, Alligator)	$0.25	
Potholes	$0.25	
Curb detection	$0.25	
Sidewalk Inventory	$0.25	
Bike Lane Striping	$0.25	
ADA Ramps	$0.25	
Crosswalk Striping Visibility	$0.25	
Pedestrian Crossing Striping Visibility	$0.25	
Manholes	$0.25	
Gutter Detection	$0.25	
Utility Cuts	$0.25	
Construction Zones		
Barrel/Cone Detection	$0.25	
Barricade Detection	$0.25	
Sign Inventory		

MUTCD Sign Library Compatible	$0.25	
Sign Damage (Change Detection)	$0.25	
Missing Signs (Change Detection)	$0.25	
Sign Retroreflectivity	$0.25	
Safety Barriers		
Guardrail Detection	$0.25	
Guardrail Damage	$0.25	
Cable Barrier Damage	$0.25	
Impact Attenuator Detection	$0.25	
Impact Attenuator Damage	$0.25	
Street Lighting		
Street Light Detection	$0.25	
Street Light Out at Night	$0.25	
Street Light On during Day	$0.25	
Vegetation		
Vegetation Encroachment	$0.25	
Debris		
Debris Detection	$0.25	
Debris Size Estimate	$0.25	
Debris in Lane	$0.25	
In-development		
Catch-Basin (beta)	$0.25	

Third Party Software Estimate for optional AtomAI Solutions Maintenance Management Software	$40-$50k annually	200 internal users

EXHIBIT B
Sample Market Basket Specifications and Pricing Form

This will be used for **evaluation purposes of your response only.**
Please use the information below along with the subsequent sample pricing form to complete this section. The following specifications are derived from manufacturer datasheets and from authorized third-party resellers when data is otherwise not readily available. Each market basket item will be priced at a quantity of one (1) unit.

Respondents are encouraged to provide a market equivalent if their company does not offer the item used to generate specifics.

Market Basket Scenario: The purpose of this exercise is to establish value of a proposal when Respondents propose cost based on percentage-discount options. For example, a 15% catalog discount on products or services results in varying net pricing from firm to firm. The Market Basket presents a uniform scenario that will reveal net pricing value from each proposer.

Scenario: Submit pricing based upon the following conditions that were performed manually for a TXShare Participating Entity in previous years. The analysis was performed in the traditional manual method, and we ask for you to assume that the same conditions would apply for your drive/analysis.

Note: It is understood that there is no information regarding actual pavement condition or degradation. Such items cannot be incorporated into a Market Basket Scenario and are not anticipated for this exercise.

With this last point in mind, please provide market basket pricing for a drive/analysis that would consist of the following conditions:

Description	Quantities to be Used
Pavement Miles	6,000
Sidewalk	5,000
ADA Ramps	100,000
Signs	25,000
Photos	136,000 (For items 1, 2, 3 and 4)
Curb and Gutter (ft)	23,760,000 ft (4500 miles)
In-Pavement Features	2
Participants	1
Training	1
GPR (days)	5
Mobilization Fee (includes all tasks combined into one)	Combined total

Attachment B

Catalog price	$10.00	per mile per pull
NCTCOG TXShare Discounted Price (with 20% discount)	$8.00	per mile per pull for base images
	$0.25	addon price per mile for each model type detection

Description	Quantities to be Used	Blyncsy Price
Pavement Miles	6,000	$48,000.00
Sidewalk	5,000	$1,500.00
ADA Ramps	100,000	$1,500.00
Signs	25,000	$1,500.00
Photos	136,000 (For items 1, 2, 3 and 4)	included
Curb and Gutter (ft)	23,760,000 ft (4500 miles)	$1,500.00
In-Pavement Features	2	$1,500.00
Participants	1	unlimited users
Training	1	training included
GPR (days)	5	not-applicable service.
Mobilization Fee (includes all tasks combined into one)	Combined total	$55,500.00

** Price based on single collection of all assets.

Pricing is based on frequency of collection (image pulls), the number of miles collected and the models ran.

Third Party Software Estimate for AtomAI Solutions Maintenance Management Software	$40-$50k annually	200 internal users

EXHIBIT C

RFP 2023-059	Texas Service Area Designation or Identification		
Proposer Name:	Blyncsy, Inc.		
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	
	x		
	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 2023-059	Nationwide Service Area Designation or Identification Form		
Proposer Name:	Blyncsy, Inc.		
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	
	x		
	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		

ADDENDUM TO THE
REQUEST FOR PROPOSALS
Road and Highway Asset Management Software

ADDENDUM NO. 1 DATE ISSUED: July 25, 2024

REQUEST FOR PROPOSALS NUMBER: NCT-2024-096
ORIGINAL RFP SUBMISSION DATE: July 29, 2024
REVISED RFP SUBMISSION DATE: July 29, 2024 (No Change)

RFP NCT-2024-096, dated June 28, 2024, is hereby amended to incorporate in full text the following provisions:

Questions and Answers

The following questions were submitted by potential proposers and are answered below.

RFP Reference: "The software should utilize Artificial Intelligence to independently detect and classify damage within the surface of the roadway."

Question 1: Could MoDOT clarify the specific types of pavement distress, such as longitudinal, transverse, alligator cracking, and others, which are critical for the AI system to distinguish accurately under various environmental conditions, including wet surfaces or partial snow coverage?

Furthermore, could you provide details on the established thresholds for damage severity that necessitate maintenance actions?

Answer: NCTCOG is interested in all potential solutions presently available on the market, and desires to review as many capabilities as possible. This is the purpose of the deliverable language being as flexible as it is; so as to encourage a wide variety of responses. All capabilities listed are desired – the intent is for the provider to expound upon their product and what its capabilities are.

RFP Reference: "The software should enable the user to toggle between various established pavement condition rating models such as EMI, PCI, and PASER scoring."

Question 2: Are there specific reporting or visualization features you require to accompany the toggling between different pavement condition rating models? Such as, do you need comparative analysis tools or historical trend data integrated into these views?

Answer: Such comparative analysis tools are a desired component of a system, please provide descriptions of your firm's capability to provide are to be provided if so able.

RFP Reference: "Artificial Intelligence for Pavement Condition Assessments"

Question 3: Could MoDOT outline the specific environmental variables and pavement conditions, such as variations in surface types due to seasonal changes or different traffic patterns, that have historically presented challenges in accurately classifying pavement distress using current AI systems? Furthermore, how do these conditions affect the consistency and reliability of the AI's distress classifications?

Answer: NCTCOG is not affiliated with the Missouri Department of Transportation, though contracts made under this RFP will be able to be utilized by any public-sector (city, county, state, special district) within the United States. Any such application scalability (or region specificity) that your firm can provide across a wide swath of geographic regions should be described.

RFP Reference: "The Pavement Condition Module will enable Participating Entities to identify on a granular level the class and severity of damage that exists across the road network."

Question 4: Could you elaborate on the specific types of pavement damage details - such as crack width, depth, and patch quality - that are critical for your assessment processes? What resolution of data, both spatial and temporal, proves most effective in driving your maintenance decision algorithms?

Answer: The intent of this RFP is to result in a contract or contracts with vendors who can provide (at a minimum) the items listed within the Scope of Services. The idea is that vendors will respond with what their current capabilities are and how they can satisfy the deliverables listed in the scope of services. Recognizing that contracts resulting from this RFP can be utilized across the entire United States, it is NCTCOG's intent to provide services for as many geographic regions as possible, while allowing TXShare customers the ability to choose vendors that best fit their needs and/or budget. Some communities will prefer spatial resolution, while others may prefer temporal. As such, responding firms should effectively describe the capabilities of their system in their response narrative – recognizing that one service does not necessarily outweigh the other. This answer will be repeated throughout this questionnaire.

RFP Reference: "The software shall include a module that enables Participating Entities to respond more rapidly/efficiently to critical damage within the surface of the pavement."

Question 5: What are the minimum response times your operational protocols require for critical damage notifications, and which digital communication platforms (such as dedicated apps, SMS, or integrated alert systems within existing traffic management software) are you prioritizing for these alerts? Moreover, are there specific data formats or protocols that these alerts must adhere to for integration with other emergency response systems?

Answer: There is not a stipulated minimum response time, though firms should identify what their capabilities are. Further describe which dedicated apps, messaging, or other alert systems are used to do so. There are no specific data formats required – just that the service is capable of doing so. Vendors are asked to describe their capabilities fully. I

RFP Reference: "The software should contain a module that will enable Participating Entities to streamline planning, design, and execution phases of road rehabilitation projects."

Question 6: Could you elaborate on the expected depth of AI capabilities within the project planning module, particularly regarding the use of machine learning models for forecasting project durations and budget requirements based on historical data and real-time inputs? Are there particular aspects of project variability, such as supplier delays or weather disruptions, that the AI should be specifically trained to factor into its predictions?

Answer: The intent of this RFP is to result in a contract or contracts with vendors who can provide (at a minimum) the items listed within the Scope of Services. The idea is that vendors will respond with what their current capabilities are and how they can satisfy the deliverables listed in the scope of services. Recognizing that contracts resulting from this RFP can be utilized across the entire United States, it is NCTCOG's intent to provide services for as many geographic regions as possible, while allowing TXShare customers the ability to choose vendors that best fit their needs and/or budget. As such, responding firms should effectively describe the capabilities of their system in their response narrative – recognizing that one service does not necessarily outweigh the other. Specific capabilities that are unique to any one firm may be of particular interest for this project.

RFP Reference: "AI for Asset Management: Utilizing the photographs referenced in 4.02, the AI should include technology to identify all the Participating Entity's street-signs within the right-of-way."

Question 7: Could MoDOT detail the types of visual obstructions or variations in street-sign designs-such as faded colors, vandalism, or partial occlusions-that the current system might find challenging?

Could you also elaborate on the expectations for the AI system's ability to distinguish between different categories of signs, such as regulatory, informational, or warning signs, under diverse environmental conditions like varying lighting or weather?

Answer: NCTCOG is not affiliated with the Missouri Department of Transportation, though contracts made under this RFP will be able to be utilized by any public-sector (city, county, state, special district) within the United States. Any such application scalability (or region specificity) that your firm can provide across a wide swath of geographic regions should be described. All described obstructions are within the expectation of occurrence throughout the United States, of course. We are interested in hearing any mitigation capabilities that any firm responding may have.

RFP Reference: "The software must utilize an established assessment methodology that provides objective scoring to the rating of its road network."

Question 8: Could you list the additional assessment standards or specialized metrics, like the Surface Distress Index or Network Level Serviceability Index, that are essential for your operations, particularly in areas with unique environmental or traffic conditions? Are there integration requirements for these standards into existing GIS systems or real-time data feeds to support dynamic updates?

Answer: The intent of this RFP is to result in a contract or contracts with vendors who can provide (at a minimum) the items listed within the Scope of Services. The idea is that vendors will respond with what their current capabilities are and how they can satisfy the deliverables listed in the scope of services. Recognizing that contracts resulting from this RFP can be utilized across the entire United States, it is NCTCOG's intent to provide services for as many geographic regions as possible, while allowing TXShare customers the ability to choose vendors that best fit their needs and/or budget. As such, responding firms should effectively describe the capabilities of their system in their response narrative – recognizing that one service does not necessarily outweigh the other. Specific capabilities that are unique to any one firm may be of particular interest for this project. Real-time data feeds were not explicitly mentioned, though may be of interest to multiple TXShare clients. Consider this project as the opportunity to make available everything your firm is capable of providing, for as many potential customers as possible.

RFP Reference: "GPS Tracking Module"

Question 9: What level of positional accuracy is essential for your GPS tracking module to effectively monitor asset locations and movements within your network, particularly in challenging environments like urban canyons or mountainous terrains? Are there specific real-time data processing requirements, such as updates per minute, to ensure operational responsiveness?

Could you also specify if supplemental positioning technologies like Differential GPS (DGPS) or Real-Time Kinematic (RTK) positioning are considered to enhance accuracy in areas known for GPS signal degradation?

Answer: Naturally a high degree of confidence of positional accuracy is essential for this project for repair and mitigation purposes. Processing requirements were specifically not referenced in order to encourage vendors to provide descriptions of what they are capable of providing.

As mentioned, DGPS and RTK are both of interest and serve to offer clients the greatest flexibility of choice in choosing their specific vendor.

RFP Reference: "Road Safety Alerts Module"

Question 10: What specific incident metrics, such as sudden deceleration rates or proximity to known hazard zones, are used to define the thresholds for triggering road safety alerts within your system? How are these alerts designed to interface with local traffic management systems- are there protocols in place for automatic data feeds or does this require manual intervention? Moreover, how do these alert systems utilize data from various sensors to ensure a holistic response to emerging road safety issues, and are there AI-enhanced predictive models involved to forecast potential high-risk events based on traffic flow patterns?

Answer: No such metrics are mentioned in order to encourage vendors to provide thorough descriptions of what they are capable of providing. What you must understand is that no system presently exists – we're asking providers to tell us about their system and how it can meet or exceed our statement of work deliverables.

Reference: "The software should assign each manhole with a unique ID number so that the RFP Participating Entity can begin to manage their data through the software's web application."

Question 11: Do you require advanced geospatial tagging capabilities that support real-time updates from field operations, such as through mobile GIS applications? Furthermore, what are the specific challenges you face with current data consistency or integrity, especially when integrating this information across different municipal systems or databases?

Answer: I believe there is a misconception that we have an existing solution or system that we're going to compare proposals against. We are instead looking for existing providers to explain their solutions and how they can address our statement of work. You also must consider this is not applicable to a single client, but instead will be made available to every public sector entity that has a use for it throughout the Nation. It cannot and should not be specific to a single use-case, but instead expected to be applied on a case-by-case need for each client.

RFP Reference: "Artificial Intelligence for Asset Management: Manholes"

Question 12: What specific variations in manhole cover designs, such as non-standard shapes, camouflage patterns, or partially obscured views due to seasonal debris, pose the most significant challenges for your current AI detection systems?

Answer: There is no current AI detection system in place.

RFP Reference: "Artificial Intelligence for Asset Management: Street Signs"

Question 13: How does your current system handle the frequent updates to street sign regulations and the introduction of new sign designs, particularly in terms of AI model retraining? Are there specific types of errors or misclassifications - such as failing to recognize updated symbols or new color schemes under variable lighting conditions - that you need the AI to improve on? Furthermore, could you provide insight into the desired cycle for retraining the AI models to adapt to these changes, ensuring compliance and accuracy in real-time sign recognition?

Answer: There is no current system in place. Proposers are encouraged to provide great detail about their system's capabilities.

RFP Reference: "The mobile application should enable the user to safely document the right of way without requiring the operator to stop the vehicle and/or remove their hands from the steering wheel."

Question 14: Could you provide details on the desired automation levels for the mobile application used in documenting the right of way? Specifically, what voice command features or hands-free data logging functionalities are you looking for to enhance operator safety?

Are there regulatory compliance standards or ergonomic guidelines that the application needs to meet to ensure it aligns with road safety laws and occupational safety standards?

Answer: Consider that the contracted vendor/s will be providing services to public sector clients across the United States. Regulatory compliance standards may or may not apply at some of

these, and vendors should be diligent in specifying their capabilities and standards in their response. Likewise, they should specify what their system functionality is concerning automation levels, not attempt to match a standard published.

RFP Reference: "The web application should include functionality to directly generate and send data, photographs, and tasks via email."

Question 15: What specific security measures are required for the web application when sending emails that include data and photographs? For instance, do these communications need to comply with certain encryption standards such as TLS (Transport Layer Security) or end-to-end encryption protocols? Furthermore, are there data handling standards or privacy regulations, like GDPR or HIPAA, that we need to consider in the design of email transmission features to ensure data integrity and confidentiality?

Answer: Each client will have varied needs for security and communications. Provide details about what your firm is presently capable of accommodating.

RFP Reference: "Cost Estimation and Budgeting - Functions for estimating project costs including materials, labor, and equipment, and managing budgets throughout the project lifecycle."

Question 16: For the cost estimation and budgeting module, how critical is it to integrate predictive analytics for assessing cost variations due to seasonal changes in material prices or labor availability?

Can you specify if your operations would benefit from advanced anomaly detection features that could alert you to outliers in cost estimates based on historical data trends?

Answer: Such variabilities will have greater impact to some areas of the United States more than other areas (Midwest vs. Southwest, for example), so modularity would be beneficial in this instance. For your latter question, if your solution has this capability it would be beneficial to so state and describe the functionality.

RFP Reference: "Automated Construction Cost Calculation"

Question 17: For integrating automated construction cost calculations, could you specify if your operations require compatibility with advanced predictive analytics for cost estimation, particularly for adapting to fluctuating market prices and resource availability? How critical is the capacity for our system to dynamically pull data from construction-specific indices or real-time market feeds, like those provided by Building Cost Information Service (BCIS) or Turner Construction's Building Cost Index?

Answer: No such metrics are mentioned in the RFP in order to encourage vendors to provide thorough descriptions of what their system is capable of and can deliver. This is a cooperative contract that anticipates numerous clients throughout the country, and each will have specific use desires.

RFP Reference: "The Task Management portion of the Asset Management module should include the ability to create a recurring task."

Question 18: In the context of managing recurring tasks within the Asset Management module, could you clarify if there is a need for AI-enhanced scheduling algorithms that predict and

optimize task timelines based on historical performance data and real-time environmental factors?

What level of automation do you require for notification systems to escalate unresolved tasks, potentially integrating with machine learning models that prioritize tasks based on impact analysis and current operational conditions?

Could you also detail the specific task types and workflows that are frequently managed within your asset-based task management system, such as preventive maintenance checks or emergency repair tasks? How detailed must the task categorization be to effectively track and report on performance metrics, such as completion rates and time to resolution?

Answer: I must repeat myself in that no current system exists, and therefore we have not got comparative metrics to supply. Further, we are procuring on behalf of any public sector entity that wishes to leverage this cooperative contract. The purpose of this RFP is to have firms propose what they are capable of providing and descriptions of their solutions for each deliverable/RFP Reference.

RFP Reference: "Roadway Lifecycle and Financial Forecasting"

Question 19: What specific machine learning models or statistical techniques have proven most effective in your previous implementations for forecasting roadway lifecycle and financial requirements? Are there considerations for incorporating advanced predictive analytics methods, such as neural networks or ensemble methods, to enhance accuracy in future deployments?

Answer: Of course there are/would be considerations for incorporating advanced predictive analytical methods. But there is no existing system at this time to detail which machine learning models are most effective.

RFP Reference: "Construction Planning Module"

Question 20: What project management methodologies, such as Agile, Waterfall, or Lean, must the Construction Planning Module be able to support? How should the system handle the different reporting and milestone tracking requirements associated with these methodologies, especially in large-scale public infrastructure projects? Is there a need for the module to integrate with external project management tools or platforms, and how should data interchange be managed to maintain consistency across tools?

Answer: No project management methodologies are specified as the client base can potentially be utilizing any of the above. Due to these unknown variabilities, proposers are encouraged to describe what their solution is presently capable of at this time in great detail.

RFP Reference: "The software should have a separate module that tracks the movement of all Participating Entity employees who are using the software."

Question 21: Considering the complexity of real-time data analysis, what are the expectations for AI-driven predictions in the employee tracking module? Are there particular models or algorithms, like Hidden Markov Models for route prediction or Decision Trees for behavior pattern analysis, that you find indispensable for optimizing logistical operations and ensuring compliance with safety regulations? How should the system integrate this AI functionality with

existing traffic management systems to enhance predictive accuracy and operational responsiveness?

Answer: We are looking for proposers to describe their current capabilities in relation to each RFP reference/Deliverable. The 'problem' that we are looking to mitigate is to make solutions such as these available on a cooperative contract.

RFP Reference: "The software should allow for seamless integration with existing Geographic Information Systems."

Question 22: What specific AI-driven enhancements are you looking to implement to facilitate real-time geospatial data analysis within your GIS integration? For example, are there particular computational bottlenecks in handling live traffic data overlays or predictive modeling of infrastructure wear that AI could address? What format compatibility and data exchange standards should the integration support to ensure seamless functionality across different GIS platforms?

Answer: We are looking for proposers to describe their current capabilities in relation to each RFP reference/Deliverable. The 'problem' that we are looking to mitigate is to make solutions such as these available on a cooperative contract.

RFP Reference: "The software should utilize Artificial Intelligence to detect and classify damage."

Question 23: Could you specify the precision levels and real-time processing capabilities required from the AI system for effectively distinguishing between types of road damages, such as distinguishing hairline cracks from sealant in asphalt? What are the desired confidence thresholds for AI classifications in mixed-damage scenarios, where environmental factors like shadows or wet surfaces may affect detection accuracy?

Answer: We are looking for proposers to describe their current capabilities in relation to each RFP reference/Deliverable. The 'problem' that we are looking to mitigate is to make solutions such as these available on a cooperative contract. Proposers will increase their likelihood of award by addressing each item, confirming if they are capable of providing this resource, then meticulously describing how their solution addresses each task item.

RFP Reference: "Automated cataloging and identification of damage of assets."

Question 24: How critical is the AI's capability to accurately catalog modified or irregular assets, such as uniquely designed or historically preserved street signs, without manual corrections? Are there specific types of machine learning models or computer vision techniques, like convolutional neural networks or adaptive thresholding, that you have found necessary or particularly effective for recognizing these asset anomalies in existing systems?

Answer: We are looking for proposers to describe their current capabilities in relation to each RFP reference/Deliverable. The 'problem' that we are looking to mitigate is to make solutions

such as these available on a cooperative contract. Proposers will increase their likelihood of award by addressing each item, confirming if they are capable of providing this resource, then meticulously describing how their solution addresses each task item. Customers will be located throughout the United States with varying needs, and therefore a single standard cannot be stipulated.

RFP Reference: "Web Application for Management of Data"

Question 25: Could you detail the specific types of data that require automated categorization within the web application, such as incident reports or maintenance records, and the urgency levels associated with them? How does the current system handle the classification of these data types, and what improvements are you seeking through AI integration, such as enhanced decision trees or prioritization algorithms based on real-time data inputs?

Answer: We are looking for proposers to describe their current capabilities in relation to each RFP reference/Deliverable. The 'problem' that we are looking to mitigate is to make solutions such as these available on a cooperative contract. Proposers will increase their likelihood of award by addressing each item, confirming if they are capable of providing this resource, then meticulously describing how their solution addresses each task item. Customers will be located throughout the United States with varying needs, and therefore a single standard cannot be stipulated.

RFP Reference: "The software should enable AI-driven predictive maintenance scheduling."

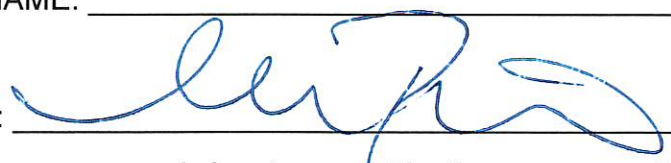
Question 26: What accuracy thresholds are you aiming to achieve with AI-driven predictive maintenance for different asset classes, such as road surfaces versus bridge structures? Are there existing predictive models you've utilized, and what are the gaps in their performance, especially under varying environmental conditions or operational loads?

Answer: We are looking for proposers to describe their current capabilities in relation to each RFP reference/Deliverable. The 'problem' that we are looking to mitigate is to make solutions such as these available on a cooperative contract. Proposers will increase their likelihood of award by addressing each item, confirming if they are capable of providing this resource, then meticulously describing how their solution addresses each task item. Customers will be located throughout the United States with varying needs, and therefore a single standard cannot be stipulated.

Craigan Johnson
Senior Purchasing Manager

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

COMPANY NAME: Blyncsy, Inc.

SIGNATURE: 

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