FAQ List

Data Privacy and Security:

1. Will my personal data be collected and stored? How will you ensure security of my data?
   - No personal data will be collected or stored. Personal information device IDs are anonymized.
2. What kind of personal information does the app collect, and how is it used?
   - The app collects positioning information and timestamps. Personal information device IDs are anonymized.
3. Will my data be shared with other organizations or companies? And if so, who are they and why?
   - Data will not be shared with or sold to other organizations.
4. Is this app developed by a German company?
   - Yes. The app was developed by VMZ, which, along with Yunex Traffic, was part of Siemens until about 3 years ago. The app has been designed to meet MUTCD and ADA standards, and is hosted in North America via Amazon Web Services.

Location Tracking:

1. Does the app track my location continuously, or only when I'm using it?
   - The app tracks the user's location only when the app is active.

Purpose and Use of Data:

1. How will the data collected by the app be used by the government?
   - Data will be used by the North Carolina Department of Transportation and the rest of the project team to understand whether the app is improving traffic operations and safety for all road users.
2. Will the data be used for purposes other than improving traffic safety, like surveillance?
   - Data will not be used for purposes other than improving traffic operations and safety. Data will not be used for surveillance.
3. How does the government's involvement ensure the app's reliability and my safety?
   - The app follows a data management plan approved by NCDOT. The data management plan includes specific requirements for security, reliability and safety that must be adhered to. The app must also conform to standards set forth by the Institute of Electrical and Electronics Engineers (IEEE) and the Society of Automotive Engineers (SAE).

User Anonymity:

1. Can the data collected by the app be traced back to me?
    - Data is anonymized and cannot be traced back to the app user.

Opting Out and Control:

1. Can I opt out of certain data collection features within the app?
    - The app will not function without precise location permission being allowed by the user.

App Permissions:

1. What specific permissions will the app ask for, and why are they necessary?
    - Location is the only permission required. The precise location of the user is needed to have accurate interaction with the system.

Functionality and Benefits:

1. Is the app free?
    - Yes, the app is free to download from the App Store (iOS) or Google Play (Android).
2. How does the app work?
    - Connected vehicle technology communicates messages between vehicles, including transit, and pedestrians by way of infrastructure and mobile devices. The app is wirelessly connected to 27 signalized intersections near the NC State campus in Raleigh. The app collects real-time data from the technology at these intersections to provide road users, including pedestrians, cyclists and drivers with alerts to improve traffic operations and safety near the NC State campus in Raleigh.
3. How will the app benefit me in my daily commute?
    - The goal of the app is to improve traffic operations and safety for all road users at 27 signalized intersections near the NC State campus in Raleigh. For example:
        - Pedestrians will have the opportunity to receive alerts if a vehicle is speeding near the current intersection location of the pedestrian.
        - Drivers will have the opportunity to receive notifications of how much longer the signal will remain green at the intersection they are approaching, the location of the driver, as well as alerts to adjust their speed to save fuel and reduce emissions.
4. Does the app work just as well in the background as foreground?
    - Yes.

Functionality and Benefits Cont.:

5. What are the key features of the app, and how will it improve my experience on the road?
    - Signal Phase and Timing: The current traffic signal phase and remaining green time is displayed on a driver's mobile device as they approach a signalized intersection.
    - Transit Signal Priority: Signal timings are optimized for Wolfline buses in real time to ensure they stay on schedule.
    - Connected Eco-Driving: Drivers receive alerts to modify their speed, which reduces fuel consumption and emissions.
    - Pedestrian in Signalized Crosswalk Warning: Drivers receive alerts when a pedestrian approaches and enters a crosswalk.
    - Mobile Accessible Pedestrian Signal System: Pedestrians can "press" the pushbutton at a signalized intersection remotely via mobile device, and receive cues to safely navigate the crosswalk.
    - Red Light Violation Warning: Drivers receive alerts if, based on their speed and the signal timings, the driver is expected to travel through an intersection in violation during the red phase. Pedestrians receive alerts if a red light violation is expected to occur, or is occurring, while they are in or near a crosswalk.
    - Speed Warning: Drivers receive alerts to reduce their speed.
    - Work Zone Warning: Drivers receive alerts that there is a work zone ahead, and to reduce their speed accordingly.

6. With Vision Zero a high priority in Raleigh and pedestrian and cycling accidents being the highest in this area, how does taking drivers attention away from the road help keep pedestrians safe?
    - The app has been designed to minimize distractions while ensuring that drivers only receive useful information to make travel decisions. If we receive feedback from users indicating that a certain feature is distracting, we will work to make changes accordingly.

7. Can this app be paired with new vehicles to detect pedestrians?
    - No, but this is a potential enhancement. We're looking for user feedback to improve the app.

8. What is the maximum distance from NCSU that the app will function?
    - Distances are derived from the MAP files within the roadside units (RSUs). MAP files were created using a USDOT MAP file tool, and downloaded to each RSU. On-board units that enter the areas defined by the MAP tool will receive alerts. For this project, the range of the system has been set to be generally halfway to the next traffic signal.

9. How are drivers alerted? Will newer cars display this on built in screens or driver phones?
    - Alerts are currently available just on the app, but in-vehicle notifications are a possible enhancement.

Functionality and Benefits cont.:

10. Will the app still be useable after the pilot ends?
    - Yes.
11. When using the app, how do we know when we're in the range of the system?
    - For this project, the range of the system has been set to be generally halfway to the next traffic signal. Device range can be set up to 4 miles if needed.
12. Can crosswalk timing change based on how its being used in the moment? (ex. a bicycle is very quick to cross. vs. elderly or less abled person may take longer)
    - No, but the pedestrian-based application allows for pedestrians to place a call for service at signalized intersections (that have been upgraded as part of the project) by pressing a button in the app instead of pushing the pedestrian button on the signal pole.

Technical Support:

1. How do I download the app?
   The app is free to download from the App Store (iOS) or Google Play (Android).
2. I'm encountering issues with the app – who do I contact for help?
   Please contact **intelligentrafficsystems@yunextraffic.com** for questions or comments. This contact information is also provided in the app.