

Arlington County Safety and Innovation Zone Feature Set

Feature	Sensor Type	Feature Definition	ACG Implementation
Lighting Features			
Street lighting	N/A	Highly efficient LED lighting	Implemented
Lighting control	N/A	Controllable lighting such as dimming and scheduling	Implemented
Change color of lights	N/A	Ability to change temperature (kelvin) and full spectrum color	No plans to implement
Environmental Features			
Air quality	Environmental Sensor	CO (Carbon Monoxide) level reading in time series	Implemented
Noise level	Environmental Sensor	Decibel level reading in time series	Implemented
Humidity	Environmental Sensor	Relative humidity level reading in time series	Implemented
Distress call (audio)	Noise Sensor	Noise analytics software that counts, compares, and aggregates the number of noises that can be classified as a distress call for help. Does not require storage/recording of audio.	Plan to work with Juganu for implementation in Phase 3 (Q1 2022)
Temperature level	Environmental Sensor	Temperature level reading in time series	No plans to implement
Gunshot detection	Noise Sensor	Noise analytics software that counts, compares, and aggregates the number of noises that can be classified as a gunshot.	No plans to implement
Pedestrian Related Features			
People count	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as a pedestrian in a predetermined area.	Implemented
Crowd density	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as pedestrian in	Implemented

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		a predetermined area relative to other predetermined areas.	
Object detection (crowd safety)	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of any defined object as requested. (ex. Object blocking traffic/sidewalk)	Plan to work with Juganu for implementation in Phase 3 (Q1 2022). Objects under consideration include bags, packages, non moving bicycles, scooters.
Fall detection	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as pedestrians with movement that can be categorized as a slip and fall.	Plan to work with Juganu for implementation in Phase 3 (Q1 2022).
Distress movement	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as pedestrians with movement that can be categorized as a distress call for help.	Plan to evaluate value for County purposes.
Aggression detection (Physical Altercation Counts)	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as pedestrians with movement that can be categorized as a physical altercation.	No plans to implement
Public Wi-Fi	Wi-Fi Access Point	Consistent, high-performing managed Wi-Fi connection. Multiple SSIDs available.	Plan to evaluate value for County purposes.
Wi-Fi Analytics	Wi-Fi Access Point	Technology solution that analyzes Wi-Fi usage data.	No plans to implement
Facial detection	Optical Sensor	Computer vision software that identifies and aggregates objects	No plans to implement

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		classified as a human face being present	
Stream live video	HD Camera	Ability to view near Realtime video stream from an IP video camera	No plans to implement & not possible with current deployed hardware
Record live video	HD Camera	Video management system that stores and organizes video captured from an IP video camera	No plans to implement & not possible with current deployed hardware
Facial recognition	Optical Sensor	Computer vision software with deep learning technology that identifies and matches a specific human face with a database of faces. This feature is typically used for access control to secure areas.	Not permitted by VA State Law & not possible with current deployed hardware
Cell phone location tracking	Wireless application	Technology application used to track the geolocation of wireless connected devices.	No plans to implement & not possible with current deployed hardware
Mobility Related Features			
Vehicle count	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of any object classified as a vehicle	Plan to work with Juganu for implementation in Phase 3 (Q1 2022)
Micro mobility count	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of any object that is classified as a bicyclist or scooter rider.	Plan to work with Juganu for implementation in Phase 3 (Q1 2022)
Parking Safety (Illegally parked vehicle counts)	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as vehicles categorized as parked in a predetermined area (such as crosswalk or tow zone etc.)	Plan to work with Juganu for implementation in Phase 3 (Q1 2022)

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Vehicle Classification	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of any object classified as a vehicle by subcategory: Truck, Van or Car.	Plan to evaluate value for County purposes.
Automated License Plate Reader	Optical Sensor	Computer vision software that identifies and aggregates objects classified as vehicles and captures license plate numbers. Typically used for access control for parking sites/facilities.	No plans to implement
On Street Space Utilization	Optical Sensor	Computer vision software that counts, compares, and aggregates the number of objects classified as vehicles categorized as parked in a predetermined parking area past allowable time frame. Typically used for parking enforcement activities.	No plans to implement