



## Flexible Technologies for Future Cities

Accelerating Safety in the Public Sector with NTT Smart Platform Solutions

NTT is working with cities throughout the world to improve the lives of citizens by accelerating the implementation of smart technologies, using solutions as diverse as the cities and citizens we serve. We started by designing an agile, robust Smart Platform of information and communications technology systems that combine capabilities to make a “smart” safety solution. This Smart Platform serves as a technology engine behind the scenes gathering input from a variety of sources and devices. The Smart Platform “thinks” and can assess multiple data sources, perceive current conditions, and plan, decide and act on those conditions. Our versatile Smart Platform has proven useful in helping cities improve safety and use their data more effectively to make informed decisions.

The built-in flexibility of our Smart Platform offers a wide variety of use cases for cities — from traffic monitoring and crowd management to public safety and data monetization. Our smart safety solutions listed below enable safer streets, parks, venues and schools.

### Detecting wrong-way vehicles

NTT’s Smart Platform automatically detects and records a vehicle going in the wrong direction and generates an alert in the system. The advanced analytics capabilities of our Smart Platform compare past incident data to generate predictions of potential dates and times for wrong-direction vehicle incidents. The resulting data can be used to improve road signs and routes, help prevent potential accidents and save lives.

### Pinpointing vehicles of interest

To aid in locating stolen vehicles and vehicles associated with criminal activities, or to identify vehicles associated with persons of interest, cities are using the NTT Smart Platform solution. Cameras and sensors detect vehicle license plate numbers, which are then matched to a city-provided list of license plate numbers. Any matches to vehicles of interest automatically generate an alert. Cities also find the system useful to compare current data to past incidents analyzing the data to generate predictions of potential dates, times and locations where vehicles of interest will likely be detected in the future.

### Counting vehicles and predicting traffic flow

Effectively managing traffic flow can be a challenge for cities. In addition to automatically identifying vehicle license plate numbers, NTT’s Smart Platform counts vehicles going past a specific location. The Smart Platform’s analytics generates traffic flow trends and patterns, including predictions for a likely vehicle path, surges or reductions in traffic flow. Cities use this valuable information to gain insights and make data-driven decisions, such as improving mobility, traffic flow and road operations, and reducing accidents.

## Identifying loud noises

Rapid identification and detection of loud noises enhances situational awareness and expedites response to potential safety situations. NTT's Smart Platform solution automatically detects gunshots, breaking glass and panic screams to generate an associated alert and get citizens the help they need.

## Detecting persons of interest

Real-time facial recognition capabilities compare and match images against a persons of interest list and generate an alert — aiding in locating lost or missing persons, such as AMBER and Silver Alert situations, or identifying persons associated with unlawful activities. NTT's Smart Platform solution analyzes past incidents to generate predictions of potential dates and times for future persons of interest detection.

## Facilitating crowd counting and predictions

Cities often find the capability to count the number of people in a crowd useful. Up-to-the-minute monitoring enhances situational awareness in public spaces, as well as event venues and other capacity-restricted environments. The NTT Smart Platform solution takes crowd counting one step further by analyzing both past crowd count data and other data sources, such as weather forecasts, to predict crowd counts and identify abnormal crowd situations. Crowd count data trends and insights can be used to more efficiently allocated first-responder resources, and in resource planning for economic development and businesses in the vicinity and improving citizen services.

## Monitoring occupancy and sending notifications

The NTT Smart Platform solution can also monitor geographic areas within a city. Officials find this capability useful to determine if an individual remains in a designated area for an extended time or stays in an area beyond designated hours. The system generates an alert in these conditions, and automatically plays a prerecorded message to notify the person(s) in the area. City officials also have the option to speak directly to individuals at a monitored location. Data can be used to determine occupancy trends and patterns or to monitor private or public areas, such as parks, historical sites or buildings.

## Accelerating Safety in the Public Sector via:

- Crowd monitoring, notification and prediction
  - Detect a person of interest (such as a missing person or police suspect)
  - Count the number of people in an area
  - Predict the number of people expected in an area
- Vehicle identification, notification and prediction
  - Detect a vehicle of interest (for example, a stolen car or vehicle involved in an AMBER Alert)
  - Detect a vehicle driving in the wrong direction
  - Count the number of vehicles crossing a point
  - Predict occurrences of a vehicle of interest
  - Predict potential wrong-direction vehicles
  - Predict the number of vehicles expected in a specific location
  - Predict the likely path a vehicle will take
- Sound monitoring and notification
  - Detect gunshots, breaking glass and panic screams
  - Occupancy and notification and prediction
  - Detect if anyone is in the area
  - Detect if anyone is climbing a sign or object
  - Count how many people walked through or are in the area
  - Notify or broadcast a message to people
  - Predict how many people will walk through or will be in the area

## The NTT Smart Platform can help you improve:

- Situational awareness
- Decision making
- Quality of life
- Efficiency
- Cost reduction
- Risk/security posture

For more information, visit [nttdata.com](http://nttdata.com) or contact a representative from our Accelerating Smart team:

William Baver, [william.baver@nttdata.com](mailto:william.baver@nttdata.com)  
 John Saez, [john.saez@nttdata.com](mailto:john.saez@nttdata.com)  
 Joe Kyle, [joseph.kyle@nttdata.com](mailto:joseph.kyle@nttdata.com)