



# State and Local Government

## Keeping Up With Consumer Expectations Using Speech and Natural Language Understanding

### Nuance Government Customers

Australian Bureau of Statistics  
Metropolitan Transit Authority  
Bay Area 511  
New York City 311  
and many more...

### Overview

Today's consumers demand quick, accurate information and service delivered via their channel of choice when engaging with companies—from retailers and financial institutions to travel, phone and utility providers. These same consumers are also citizens who now expect higher levels of service from state and local government agencies as a result of their ever-improving service experiences in the private sector.

When citizens call into public agencies—libraries, schools, housing authorities, parks and recreation, tax services, public transportation, voter registration, public works, and more—it's no longer acceptable for callers to be presented with confusing menu trees, busy signals or lengthy hold times. All this adds up to caller frustration and added costs.

### Enhance Service and Cut Costs with Automated Speech Self-Service Solutions

Faced with budget constraints and escalating constituent demands, public sector leaders at all levels are looking to model private sector initiatives that leverage technology to improve service delivery and reduce cost. As they make better service a high priority, these leaders are recognizing the important role technology can play in enhancing the service experience while driving operational efficiencies. That's why government contact centers are deploying automated, speech-based Interactive Voice Response (IVR) solutions to increase self-service automation, improve call routing accuracy, and allow agents to focus on more complex inquiries. The results are increased contact center efficiency, lower operating costs and a superior customer service.

Nuance provides customer service solutions and speech-driven agency directory applications that are helping government offices and agencies deliver cost-effective and differentiated service—even in the face of tight budgets, staffing shortfalls and growing citizen expectations. Now citizens can self-serve to access government benefit claim inquiries, tax refund status, city 311 information, public transportation travel itinerary information and park and recreation center reservations to name a few.





**“The Trip Planner Voice system acts as a virtual customer service agent. By taking advantage of the efficiencies this technology provides, we’re able to extend the number of hours callers can obtain travel plans while simultaneously providing our agents with the time to interact with customers that have complex requests that require more attention.”**

—Greg Bullock, Senior Director of Systems Administration for Customer Services  
New York Metropolitan Transportation Authority

## Leverage Inbound and Outbound Speech Technology to Enable Cost-Effective, Automated Service Experiences

Government contact centers, which have traditionally experienced high or spiky call volumes, are increasingly deploying automated, speech-based self-service solutions to increase call automation, improve call routing accuracy and reduce agent call volume for higher caller satisfaction and operational cost savings.

— **Investing in conversational speech technology is critical for government agencies concerned with improving citizen satisfaction.** In a recent Nuance survey, 51% of people said that a conversational interface makes it easier to get things done when engaging with an organization or bureau—regardless of whether they are using IVR, Web or a mobile app. Intelligent speech-enabled IVR applications tailored to each caller enable faster, more efficient interactions while reducing contact center operating costs. When hiring 29,000 workers for the 2011 census, the Australian Bureau of Statistics expected to receive more than 100,000 calls over a three-week period. To reduce agent call volume, the Bureau deployed a Nuance speech self-service application to handle job role inquiries and application completion; non-standard inquiries were routed to live agents when required. Total call center agents were reduced by 70% compared to the initial forecast, and 80% of applicant details were successfully captured with no need for outbound calls.

## Solutions for Government

### Inbound

- Authentication – Security/Privacy
- Government Medical Eligibility and Benefits
- Unemployment Benefits Filing
- Benefits Claims Status
- Library Book Renewals
- Reporting Public Service Outages
- Duplicate ID Card
- Agency Provider Directory
- Change of Address
- Tax Refund Status
- License Renewal
- Booking Park Reservation
- Public Transportation Booking/Schedule

### Outbound

- 511 Travel Information
- Unpaid Ticket Notification
- License Renewal Notification
- Benefits Enrollment Notification
- Confirm ID Card Replacement
- Confirm Address Change
- Confirm Add/Remove Member
- Return Calls from On-hold Queue
- Late Payment Reminders/Collections
- Satisfaction Surveys
- Transportation Delays
- Emergency Services Notification
- Regulation Updates
- Service Interruption Notification
- SMS and Email

— **Replacing frustrating menu mazes with natural language call routing makes self-service more intuitive and effortless.** Natural language allows callers to state the reason for their call in their own words. The IVR uses the conversational input to route callers directly





to the right self-service application for higher call containment rates. And when callers need to speak with a live person to address more complex inquiries related to taxes, claims eligibility, benefits enrollment and more, accurate routing gets them to the appropriate agency the first time. Agents can automatically receive collected data such as Social Security numbers, reservation identifications or claims reference numbers so citizens don't have to repeat information. Two of a European country's main government departments are using a Nuance speech-enabled IVR solution to capture callers' intent and route them to the correct resource the first time. When a call is transferred, agents know what the caller needs, which results in a more efficient and personalized experience.

– **Integrating personalized, proactive outbound communications with a well-designed IVR helps keep citizens informed and engaged.**

Government agencies are significantly reducing inbound call volumes by sending proactive outbound notifications to inform citizens of jury duty, benefit claims status, transportation service delays and reroutes, traffic ticket payment reminders and more. By anticipating citizens' needs and questions and communicating proactively, agencies can boost public perception of government services while driving operational efficiencies and reducing costs.

## Success Story

### New York Metropolitan Transportation Authority (MTA)

#### Goals

Add convenience for subway, bus and commuter train service for the largest city in North America, serving over 14 million people and with an average weekly ridership of over 8.5 million

Provide citizens with the ability to access travel information via the phone through an automated system

Reduce the wait time customers experience on Travel Information Center phone lines

#### Solution

Launched New York MTA Trip Planner Voice, among the most complex speech systems in existence today

Features one of the largest grammar sets ever deployed (over 21,000) to accommodate the city's extensive location options and range of possible caller pronunciations

Delivers spoken directions through a combination of live recordings and text-to-speech (TTS) playback

#### Results

Upon initial deployment, 20% of callers opted to use new self-service system available 24x7

Post-pilot tuning doubled self-service usage to 40%

Reduced agent-related costs and call length





## Why Nuance

A deep understanding of industry-specific needs, business objectives and evolving consumer expectations is central to how Nuance builds technology and designs solutions. Our customer service solutions blend the best conversational technologies, IVR self-service, call routing applications and reporting to meet each organization's unique business needs while providing a superior customer experience.

Having the best technology is crucial, but leveraging those technologies to deliver on a customer's specific requirements and goals is key. Nuance collaborates with our best-in-class partners to develop and deliver solutions that help contact centers of all sizes to increase efficiency, achieve competitive differentiation, and improve customer satisfaction. With more than 5,000 speech-enabled self-service deployments and a proven delivery system that ensures quality at every stage of the solution lifecycle, Nuance offers unparalleled leadership and expertise to help organizations earn happy, loyal customers while reducing costs.

## About Nuance Communications, Inc.

Nuance Communications, Inc. (NASDAQ: NUAN) is a leading provider of voice and language solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with devices and systems. Every day, millions of users and thousands of businesses experience Nuance's proven applications. For more information, please visit [www.nuance.com/go/CEX](http://www.nuance.com/go/CEX).



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