CITY OF MADISON
311-CUSTOMER REALATIONSHIP MANAGEMENT (CRM)
FEASIBILITY STUDY

PHASE 2: ENVISION REPORT/ ROADMAP

Prepared by ICMA INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION

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PURPOSE OF REPORT

This report is the third and final of three reports commissioned by the City of Madison and prepared by the International City/County Management Association (ICMA). Taken together, these reports examine the feasibility of the City implementing a 311-Customer Relationship Management (311-CRM) system to improve the delivery of services to City residents:

- *City of Madison Phase 0 – CRM Feasibility Study Project Charter*
- *City of Madison Phase 1 – Discovery/Assessment Report*
- *City of Madison Phase 2 – Envision Report/Roadmap*

The first report, *City of Madison Phase 0 – CRM Feasibility Study Project Charter*, documented the City's project vision, principles, objectives, and goals of the feasibility study and a potential 311-CRM system.

The second report, *City of Madison Phase 1 – Discovery/Assessment Report,* documented the current state of the City's environment for delivering customer service to its residents: interactions, processes, and technologies employed. It also identified the City's overall readiness to implement a 311-CRM system.

This final report, *City of Madison Phase 2 – Envision Report/Roadmap*, presents alternative "future state" scenarios that examine the people, process, technology, and budgetary considerations of implementing such a system, should the City decide to do so.

The City created a 311-CRM project team composed of a project steering committee, project sponsor, project manager, subject matter experts, and ICMA consultants. The roles and responsibilities of the team are described in the Phase 0 report listed above.

As with our combined efforts during Phase 0 and Phase 1, the City's 311-CRM project team has continued to work closely with ICMA in the performance of Phase 2.

I. OVERVIEW

The City of Madison, Wisconsin, is studying a series of initiatives designed to transform the way the City conducts its business and provides services to residents. The City's 311-Customer Relationship Management (CRM) Feasibility Study is a key initiative the City has identified as critical for meeting the goals of the City's leadership, including the Mayor and Alders on the City's Common Council.

This report is divided into the following sections:

- City services impacted by a 311-CRM system
- Current infrastructure available to support a 311-CRM system
- Gaps of current service delivery with leading practices from a 311-CRM perspective
- Organizational perspective from a system (technical) perspective
- Enterprise-wide 311-CRM system versus agency-based system
- Physical 311 contact office for walk-in interactions versus a virtual office
- Opportunities for partnerships
- Feasibility of the 311 being City-wide and identifying the costs
- Staffing needs for a 311-CRM service
- City of Madison 311-CRM Strategic Plan and Roadmap

II. GAP ANALYSIS AND RECOMMENDATIONS

City Services Impacted by a 311-CRM System

All local government agencies and departments will be represented in a 311-CRM system's knowledgebase though not always in the same format for every department. A public works department will likely have more requests for services that can be integrated into a work order management system. An elections office will receive simple online forms for sending out requested material. Many departments may simply provide information for basic questions, for example, the hours the library is open. At a minimum though, the new system should capture the data needed to supply and update answers to the department's most Frequently Asked Questions (FAQs).

ICMA conducted the first national survey on local government custer service systems and found the departments most likely to be integrated first into a 311-CRM system are:

- Public works (95 percent)
- Code enforcement (88 percent)
- City/County management administration (84 percent)
- Parks and recreation (81 percent).

Based on results from ICMA's face-to-face interviews with 26 executive, management and front line personnel, the City of Madison appears to have four departments that offer a good fit for an initial 311-CRM system implementation:

- Streets and Recyling
- Transportation
- Engineering
- Building Inspection

A synopsis of their reponses follows.

Streets and Recycling. Department representatives interviewed see a need for a 311-CRM system. Currently data isn't being collected on a City-wide basis. As a result, the department is bombarded with contacts from the public that must be manually funneled, tracked, and recorded for public consumption. While wealthier residents of the City are strong representatives for their neighborhoods, lower-income residents tend not to advocate for themselves. As a result, people tend to work around the current systems in place, which makes it even more difficult to fully understand what is happening in the City with regard to public services. Department representatives see a strong need to standardize procedures and provide greater consistency in reporting. Government leaders want prompt and correct answers to their questions. The department also wants timely and accurate information for working with elected officials as well residents.

Transportation. Transportation is comprised of three divisions – Traffic Engineering, Parking Utility, and Metro Transit. Traffic Engineering receives many service requests from the public such as:

- Bike lanes
- Pedestrian traffic issues
- Late buses
- On-street parking
- Multiple street permits.

City staff often have to say “no” to requests from residents, which can lead to public trolling on social media. The City’s urban streets program takes a significant number of these types of requests on resident contacts. For example, the agency receives approximately 20-30 calls a week about cars going too fast on a particular street. The vast majority of those contacts -- 80-90 percent -- call with reasonable requests and treat staff with respect.

Businesses respond in a manner similar to residents. Madison business owners want easy access to available parking for their customers. Those individuals who call, generally want action taken immediately. These types of contacts tend to be location-oriented, with the issue being hotter in certain neighborhoods than others.

Those interviewed indicated that public education on City’s processes and how they work would be of tremendous benefit. Some City processes involve simple fixes. Others, however, require a study to be completed, which requires working through the City’s budgeting schedule. For example, the construction of speed bumps costs $300,000. Currently, there are seven sites in the City that need speed bumps, but the City only has funds available for four. As a result, the City must take time out to evaluate all locations before proposing and budgeting for new speed bumps.

A 311-CRM system would enable the City to better connect with residents through multiple communication channels, gather better data, and make more informed decisions. Many of these results could be achieved with virtually no new additional staff.

Engineering. When Madison residents have been bounced around too much trying to get an answer to their questions, it’s safe to assume that there is some level of dissatisfaction with their local government. Madison has about 30 business units (aka departments) and many different ways of doing things. Individuals interviewed noted that there is a strong need for the City to standardize processes. Residents need to have multiple avenues for connecting with the City that arrive at the same endpoint. Among other requirements, a 311-CRM system must be able to address the many different languages and abilities City residents have. There needs to be equity among City neighborhoods.

The City provides important services to residents. Standard service levels are needed to let residents know that action has been taken and allow them to track their request and whatever else they are allowed to do. They want an answer. A 311-CRM system could provide value for working with residents, but there is also a possibility such a system could become another mid-level bureaucracy that doesn’t fulfill its promises.

Building Inspection. Department personnel like the idea of having one central number – 311 – so that residents don’t have to be transferred when calling in requests. A central number would be especially beneficial for City residents. Interviewees noted that having one central number to call would be less intimidating, make City services more accessible, and require less work on the part of residents to find answers to questions. They saw time savings from such a system as beneficial to both residents and City personnel.

Other benefits mentioned included:

- Fewer angry residents due to misdirected calls
- Reduced workload for City leaders
- Serve as an equalizer in service delivery among City neighborhoods.

When asked about the advantages of a centralized system versus a distributed model, one interviewee didn’t see the purpose of a distributed system since it wouldn’t decrease the overall workload. The centralized system would provide the City with a missing feedback loop that isn’t currently available.

ICMA Observations. *Face-to-face interviews conducted with City personnel were mostly positive in nature and indicate there is important support and buy-in for the project. There were, however, some concerns expressed about implementing a new system. Should the City of Madison decide to implement a*

centralized 311-CRM system, it would be beneficial for a Project Implementation Team to discuss these concerns to insure buy-in from all City personnel.

Current Infrastructure Available to Support a 311-CRM System

In 2019, the City of Madison implemented an asset management system for tracking maintenance conducted on public infrastructure. Cityworks allows the City to track when and where maintenance has been conducted on the City's infrastructure. From feedback received, the implementation phase has resulted in much better processes.

Licensing and permitting support for the City comes from Accela, but the solution was described as a challenge to work with due to cumbersome business processes. Staff have recommended reevaluating business processes to try and make them more lean and user-friendly.

Both software solutions have CRM modules that could provide a platform for a 311-CRM system. Many 311 cities have used these solutions and other similar platforms as the core of their systems. Others have used them as initial starter applications and eventually replaced them with more robust CRM systems that provided a broader range of capabilities. However, both platforms have recently announced enhancements to their systems designed to address prior shortcomings.

Accela and Cityworks are both fully-integrated with GIS technology, which any good 311/CRM system should have as part of their product. The vast majority of local government service requests are tied to locations within a community, e.g, "Which intersection has a street sign damaged?". "Which address has a tree limb down?" The City of Madison has a strong GIS program that enables spatial data analysis of what is happening in neighborhoods and what services are in greatest demand across the City.

A 311-CRM system can also contribute to maintaining the corporate knowledge for the City. Madison, like many other local governments, needs to capture existing corporate and institutional knowledge before it disappears over the next five to ten years as current staff begin to retire. The creation of a knowledgebase for a 311-CRM system would enable the City to document Standard and Emergency Operation Protocols for multiple purposes.

ICMA Observations. *The City of Madison has several resources – Cityworks and Accela to name two – that could be explored as a starting point for a 311-CRM system. A Project Implementation Team would need to explore which resources for a 311-CRM system would best serve the needs of Madison residents and employees.*

Gaps in Current Service Delivery with Leading Practices from a 311-CRM Perspective

Several interviewees noted that the City has a very complex organizational structure that makes it difficult for residents to determine which agency or department they need to contact with requests for information or services.

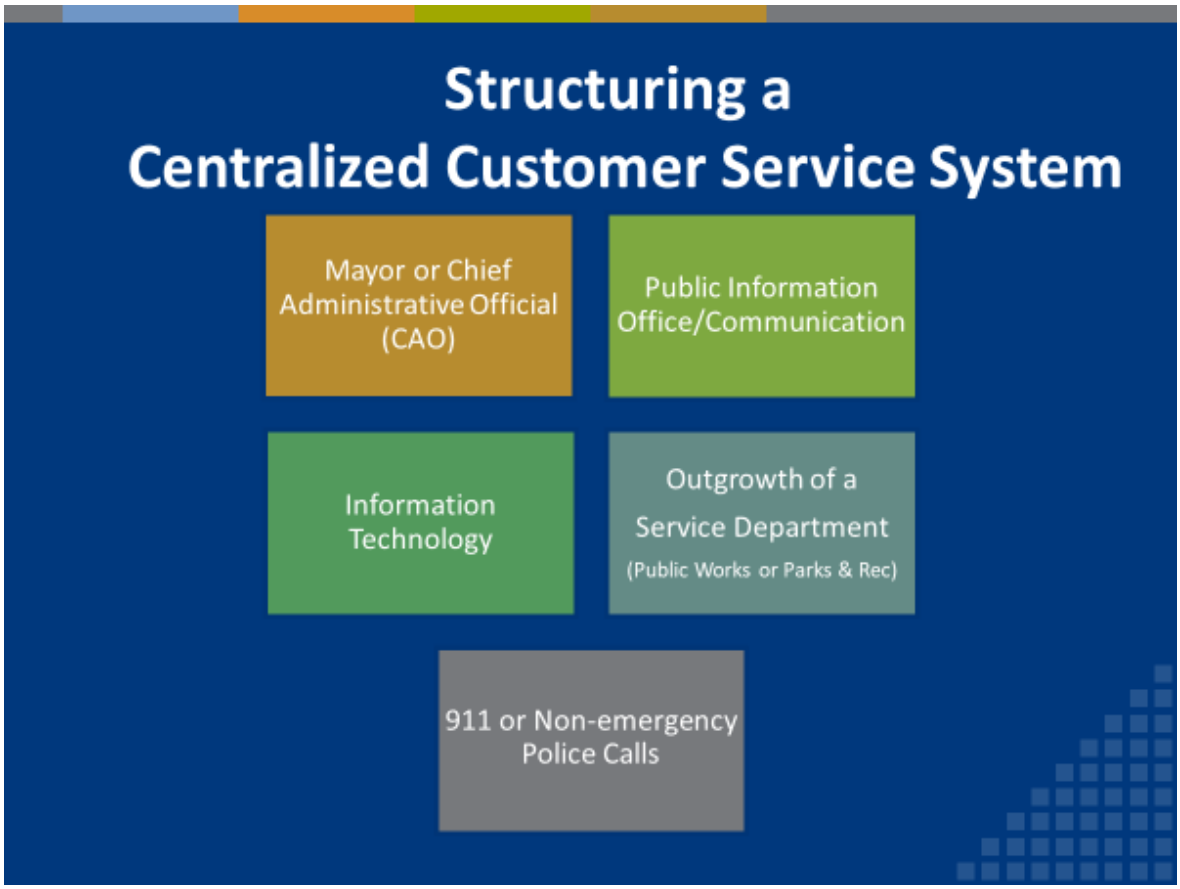
With the City's population growing nearly 11 percent from 2010 to 2018, Madison has become one of the fastest-growing municipalities in the State of Wisconsin. The World Population Review projects that Madison will have a population of 270,000 by 2030. Accompanying this tremendous population growth is an increased demand for public services. The City is considering how best to deliver services in an efficient and effective manner for a diverse community that desires one centralized input for service delivery.

ICMA Observations. *The City would be well-served in creating a City-wide workgroup to review common processes and procedures to determine where new efficiencies could be realized, as well as current bottlenecks and challenges to address before establishing a knowledgebase for a 311-CRM system.*

Organizational Placement from a Governmental Reporting Relationship Perspective

There are multiple organization models for establishing a 311-CRM system as noted in Figure 1. In the United States, the majority of 311-CRM systems are located within the Mayor or City Manager's office. Some are located within an Outreach or Public Information Team. Others are located within a local government's information technology (IT) department. Still others reside in the 911 call center.

FIGURE 1: POTENTIAL ORGANIZATIONAL PLACEMENTS FOR A 311-CRM SYSTEM



One of the most critical factors in the success of implementing a 311-CRM system, however, is the acceptance as an enterprise-wide system with benefits for **all departments and agencies**. The wealth of new data for better understanding residents' wants and needs for City services, as well as measuring performance, is only part of the story. 311-CRM systems have become innovation hubs for local governments, aiding with disaster response and recovery efforts, supporting community and economic development efforts, and budgeting for improved resource allocation.

ICMA Observations. *The organizational structure for a 311-CRM system in Madison would need to be fully explored by a Project Implementation Team. Finding the right home within the City's organizational structure is crucial for the long-term success of the new program. Executive support for a 311-CRM system is particularly important, not only during the implementation period, but also on a long-term basis.*

Enterprise-wide 311-CRM System Versus Agency-based System

When 311-CRM systems first appeared on the national scene, many local governments – San Antonio and CharMeck to name two – opted to build a homegrown CRM system. Others, such as Philadelphia, purchased systems that were designed for private sector purposes. While these systems enabled the local governments to get a 311-CRM system up and running, they ultimately were replaced with off-the-shelf packages designed for public sector purposes.

ICMA Observations. *As a technology hub City with a tech-savvy population base, the implementation of an enterprise-wide off-the shelf system, which would serve all agencies and departments, would offer new and improved opportunities to share data internally. This approach aligns with the City's Performance Excellence program.*

311-CRM Contact Center Versus a Virtual Office

During on-site interviews, ICMA spoke with several department representatives about their views of using a centralized Contact Center versus a distributed or Virtual Office. Of the twenty-six City personnel we interviewed, approximately two-thirds indicated that they preferred a centralized system, with the remainder of those interviewed wanting to work with a distributed or virtual office.

The difference between a centralized system and a distributed system is namely that in a centralized system, all resident contacts are made through a central location, whereas with a distributed system, contacts from residents run through individual departments. All resident contacts are inputted into a central CRM/knowledgebase, but there is no one "front door" that all residents can use to submit Service Requests.

Generally speaking, distributed or virtual systems work best in smaller communities where the volume of contacts received from residents are minimal. A centralized system provides more standard protocols and procedures. They also are subject to greater transparency since staff members work in the Contact Center full time and aren't interrupted with other work responsibilities that their department requires.

ICMA Observations. *Given the current volume of contacts from residents in the City of Madison, the significant diversity of the City's population, and Madison's reputation as a tech-savvy community, a 311-CRM system that provides a centralized system with a singular entry (primarily 311) would have a greater likelihood of success in responding to the needs of the City and its residents.*

Opportunities for Partners

The City of Madison is located within Dane County in Wisconsin. Among possible partners in the development of a Madison 311-CRM system are Dane County 911 Dispatch and United Way of Dane County 211 system. The focus of these three organizations are greatly different. 911 calls require quickness and some medical knowledge to handle incoming emergency calls. 211 calls often go longer as call agents explore social service issues and problems. Such calls require patience and additional time to ensure the needs of clients are met. The length of 311 calls resides somewhere in between 911 and 211 calls with City residents demanding quality customer services[1].

ICMA Observations. *Based on interviews and correspondence with executives in Dane County and United Way, there are opportunities for cross-training and other collaboration among these three services. On the collaboration front, outreach and marketing about the available services provided by the organizations would be a particularly good fit. Such an effort would respond to residents' needs for knowledge of where they should go to request which services.*

Feasibility of 311 Being County-Wide

The City is not ruling out the possibility of establishing a "multi-jurisdictional" Contact Center with a 311-CRM system at its core. In such a scenario, the City of Madison would work with other cities, towns, and Dane County to develop a 311-CRM system that would serve the needs of multiple jurisdictions.

Dane County is home to eight cities, 20 villages, and 28 towns and residents don't always know where are all of the jurisdictional lines are located . For residents living in these communities or in the unincorporated parts of Dane County, a 311-CRM system could be adopted. Among other multiple-jurisdictional system in the United States are Miami-Dade 311 in Florida, the City and County of Denver, the City and County of San Francisco in California, CharMeck 311 in North Carolina, and Baldwin County in Alabama. In most of these examples, two local governments or more work together to build a system that can share costs.

A centralized 311-CRM Contact Center would be positioned as "customer service utility" available to City of Madison Departments, elected officials, and other municipal jurisdictions. The City of Madison could in future phases offer a choice of different levels of services to other municipalities, depending on each one's level of desire for engagement with the Contact Center.

The City could decide in a future phase to add some or all of these agencies into its domain using a "fee for service" model. This model provides the City a new revenue stream leveraging the 311 Contact Center. There are successful examples of cities that have implemented the model, such as Miami-Dade, Florida, and Charlotte-Mecklenburg, North Carolina.

The agreement upon a governance structure for a multi-jurisdictional system should be explored early on in the development of a 311-CRM system. Agreeing upon how a new system would function, how standards and policies would be developed, or what jurisdictions would pay for such a system are critical issues to work out early on in the implementation process. Given the success of past collaborative regional governance efforts, it would serve the City of Madison to explore this idea with other local government representatives from around the region.

***ICMA Observations**. The City of Madison and Dane County have a history of working on regional collaborations, for example, establishing a shared regional Public Safety Communication program. This relationship would be useful should the two jurisdictions decide to pursue a joint 311-CRM system. However, ICMA would advise a Project Implementation Team explore this idea in-depth before making a decision. Working with multiple jurisdictions requires additional communication and negotiation that a single jurisdiction system would not require for implementation.*

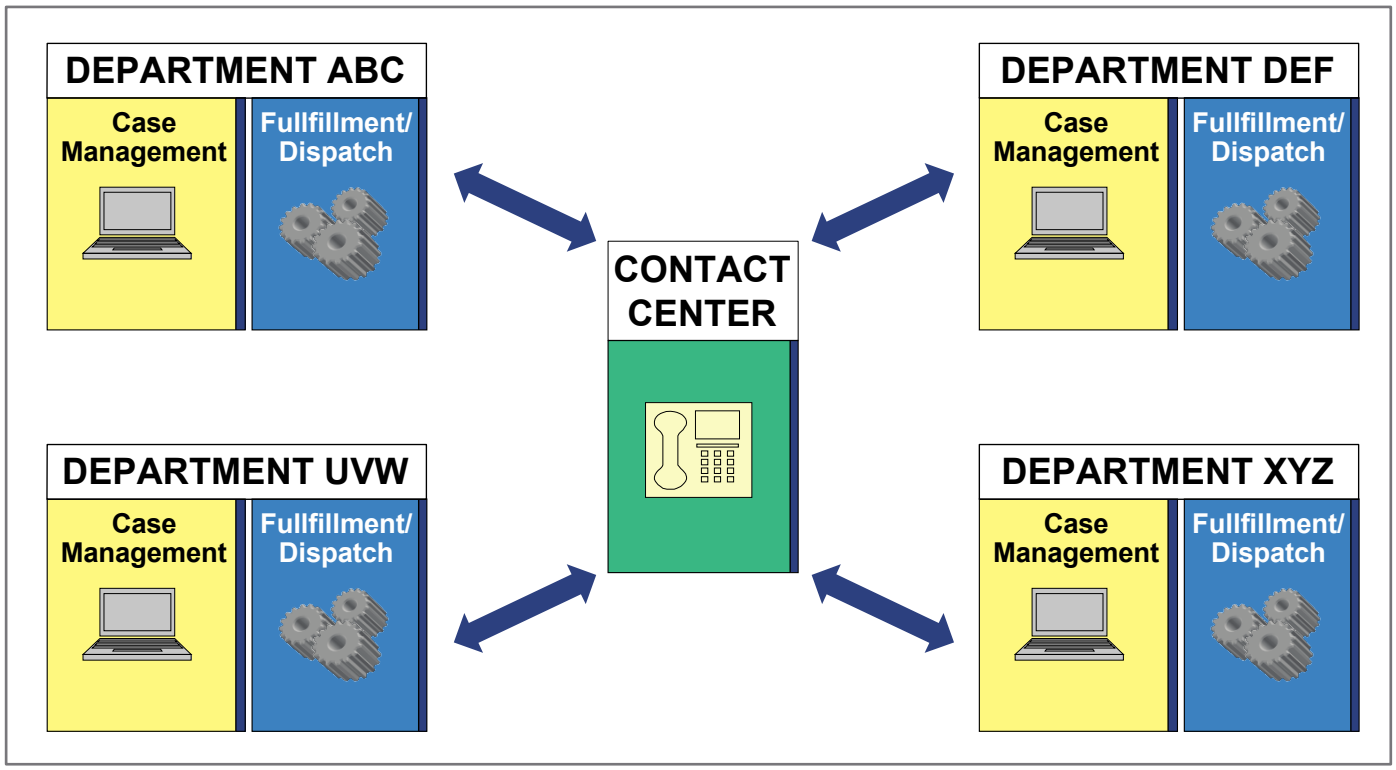
311 Contact Center Process Model

The resident facing processes for most agencies in the City can be described as having three major components:

- Intake
- Case Management
- Fulfillment (or Dispatch).

The **Intake** component is focused on receiving and recording the resident's call and triaging the disposition of contacts. **Case Management** is concerned with establishing and maintaining a history relative to the concern, and **Fulfillment** is aimed at resolving the issue.

FIGURE 2: CONSOLIDATED CUSTOMER SERVICE PROCESS MODEL



The objective of a consolidated customer service process (see Figure 2) is to combine the **Intake** components of multiple departments into a single Contact Center that would be responsible for receiving, recording, and responding to the resident's concern to the extent possible. This would enable a number of efficiencies, including:

- Using a common CRM for intake to record, track, and report on resident contacts of all types.
- In the case of actual calls, the ability to leverage fewer resources in addressing calls coming into the City that are either General Information or Directory Assistance calls.

The **Case Management** and **Fulfillment** components would essentially remain the domain of the individual departments.

In this model, resident contacts into the City would be received via any channel (self-service portal, smart phone app, social media, email, postal mail, phone, fax, etc.) as input into a CRM system. In the case of telephone calls, the phones would ring at a single number, the Contact Center's number, which is usually 311.

Resident contacts are triaged into one of the four basic "contact types." This triage process is described below and shown in Figures 3 and 4, and the processes for each contact type are described and shown in Figures 5 through 8:

- Figure 3 – Contact Center Triage shows the process by which the Contact Center receives a resident's contact (e.g. call, web self-service, etc.) and determines how it should be resolved.
- Figure 4 – Non-Call Channel Process describes how Walk In, Self-Service/ Web Portal, and other contacts are handled.

The remaining figures describe the interaction between the resident, the 311 Contact Center, and the end user departments for each of the four contact types:

- Figure 5 – Frequently Asked Question (FAQ-General Information) Process Flow
- Figure 6 – Referral Process Flow
- Figure 7 – Compliment/Complaint Process Flows
- Figure 8 – Service Request Process Flow.

311 Contact Center Triage

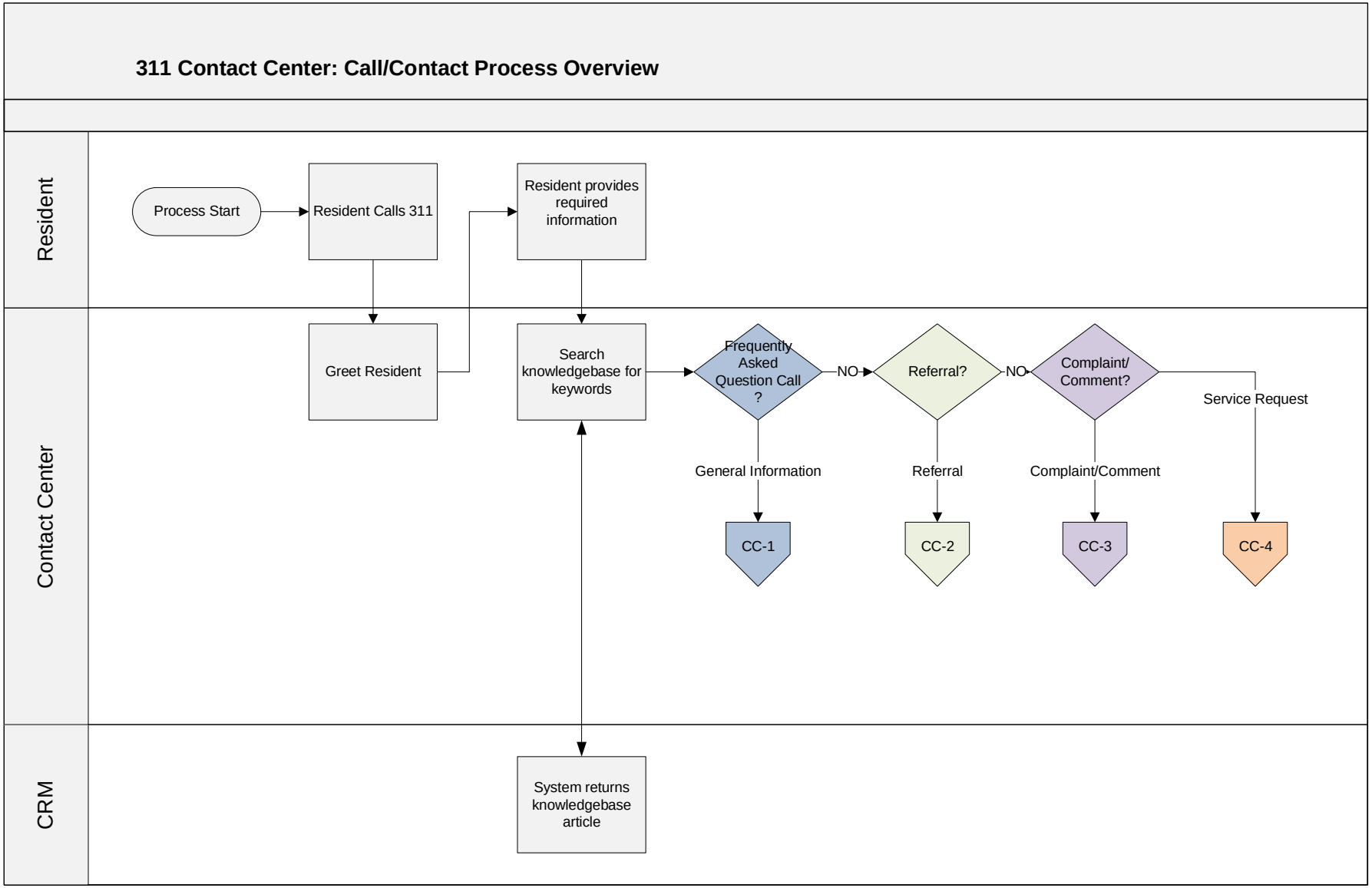
The overall process flow for triaging contacts is depicted in Figure 3. For the purposes of simplicity, the process of handling a call is illustrated first, however, the triage process is similar for other channels.

On receiving a resident call, a customer service agent will search the knowledgebase to retrieve the appropriate information and "next steps" based on the information the resident provides. These steps are based on the type of call, e.g. provide the information, transfer the call to the appropriate party, or create a service request.

In all cases, the system will record the contact for analysis and reporting purposes. In addition, the resident will be provided a tracking number to follow up on the contact either online or via phone.

FIGURE 3: 311 CONTACT CENTER TRIAGE

CC-0 CONTACT CENTER OVERVIEW

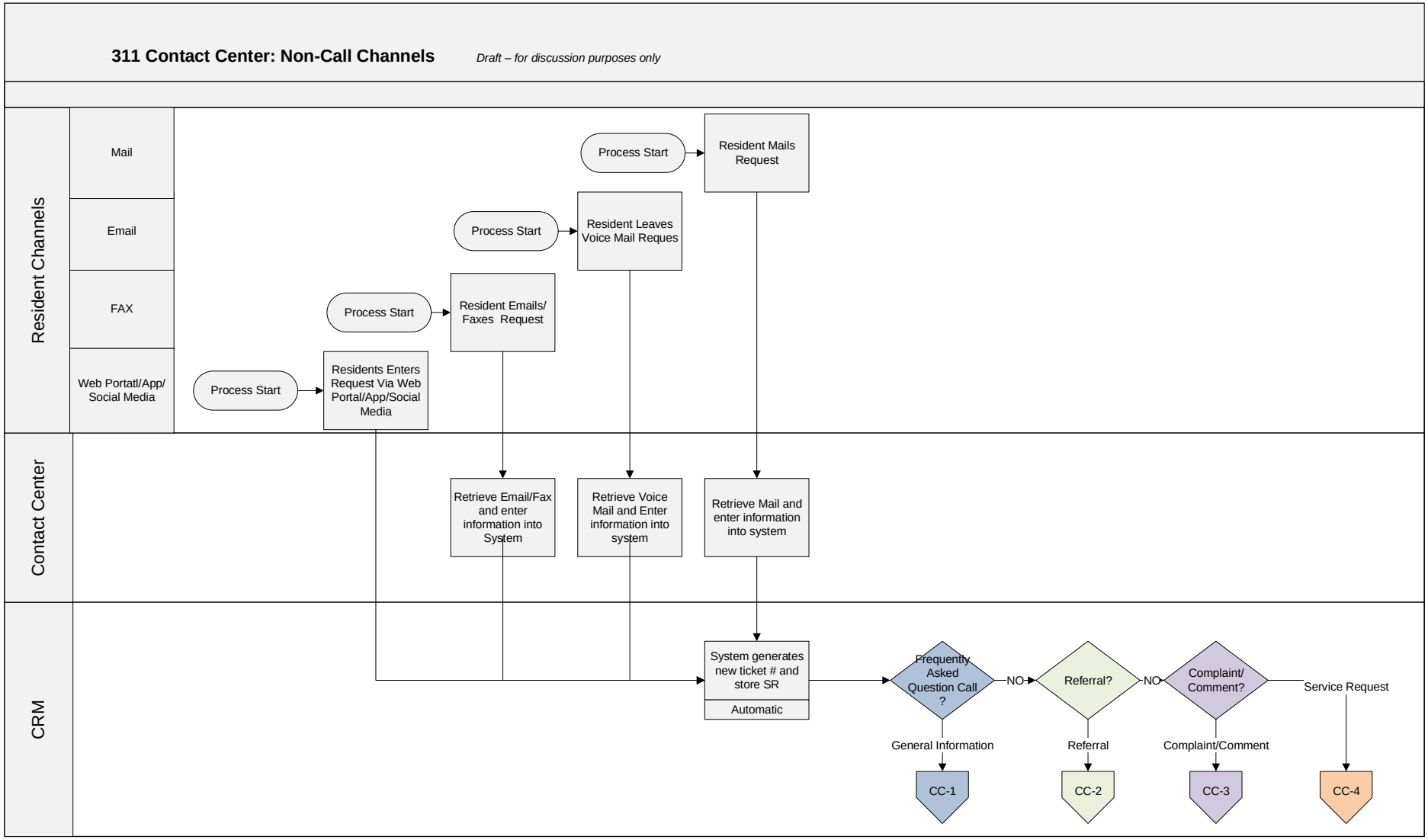


Non-Call Channel Processes

Figure 4 below illustrates the capability of the Contact Center to handle resident requests for service from all channels. Resident requests for service received via a City of Madison mobile app, consolidated self-service web portal, social media, or other digital means could be designed to be automatically processed into the 311-CRM system as if entered directly by an agent. Digital channels will provide the resident the option to speak to a live agent for complex requests.

For Walk-Ins to the Contact Center, the agent will triage and enter the resident's request into the system and provide response in the standard fashion. Similarly, requests for service received by email, mail, or fax will be manually triaged and entered into the system.

FIGURE 4: NON-CALL CHANNELS



CC-0 NON-CALL CHANNELS

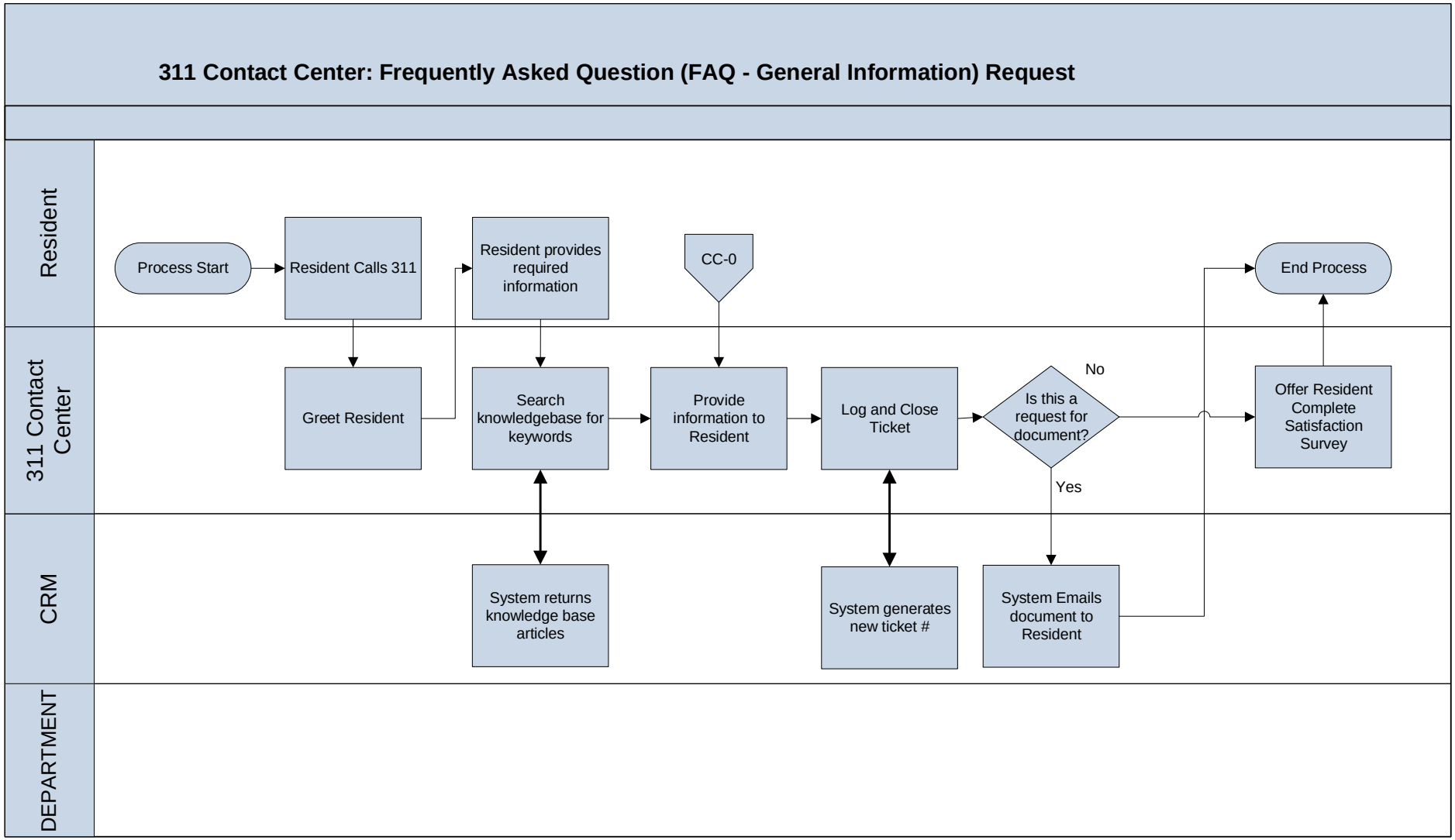
Frequently Asked Questions (FAQ-General Information) Process Flows

As shown in Figure 5 below, requests for General Information are completely handled by the Contact Center. The Contact Center will

- Access the knowledgebase to determine the correct answer
- Provide the answer to the resident
- Offer to provide additional assistance to the resident
- Offer to have the resident complete a satisfaction survey
- Wrap up the contact.

If during the contact it is determined that additional services are required, the Call Triage Process is restarted.

FIGURE 5: FREQUENTLY ASKED QUESTIONS (FAQ-GENERAL INFORMATION)



CC-1 FREQUENTLY ASKED QUESTION REQUEST

Referral Process Flows

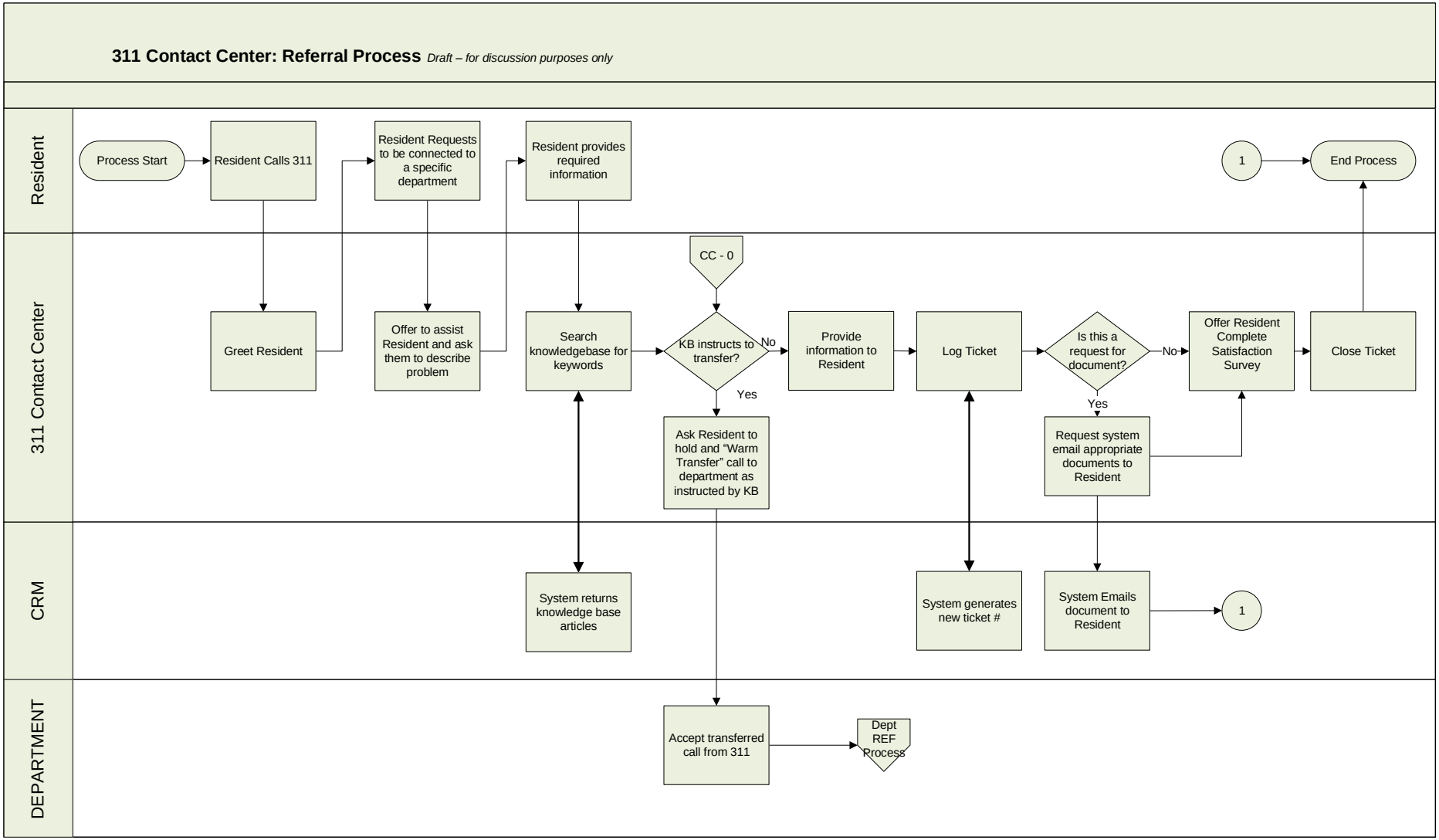
While the objective of the Contact Center is to provide Single Contact Resolution, there will be instances when it is necessary to refer to a department subject matter expert or another jurisdiction. Figure 6 illustrates the Referral process where the Contact Center will:

- Access the knowledgebase to determine whether and where the contact should be referred
- Provide the answer to the resident as instructed by the knowledgebase script (article)
- Offer to provide additional assistance to the resident
- Offer to have the resident complete a satisfaction survey
- If instructed by the knowledgebase script, transfer the contact
- End the call.

The above process implies that the agent's objective during such calls will be to convert the call into either a Frequently Asked Question (FAQ) or a Service Request (SR) in order to minimize call transfers out of the service center.

If during the contact it is determined that additional services are required, the Call Triage Process is restarted.

FIGURE 6: REFERRALS



CC-2 REFERRAL REQUEST

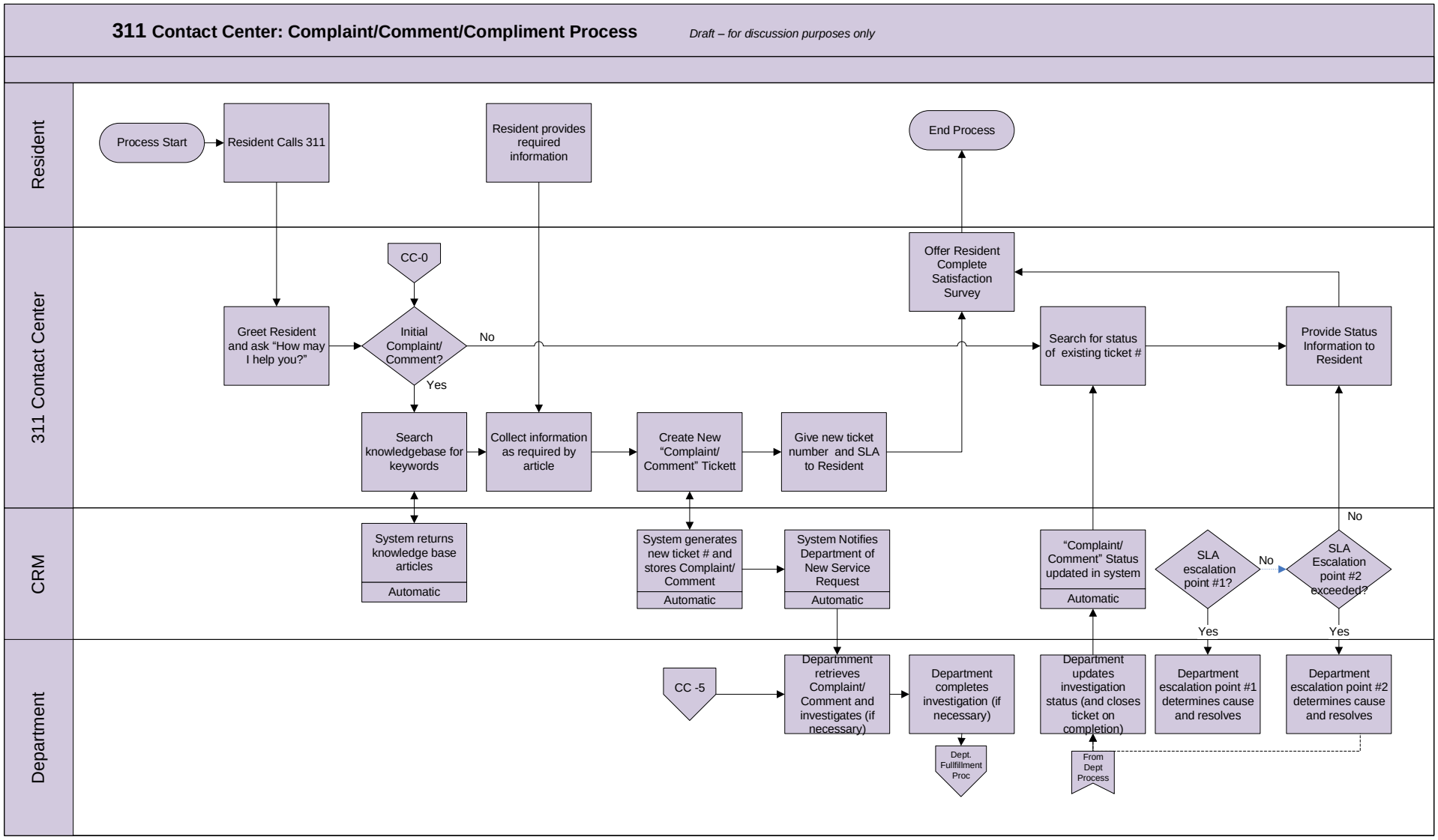
Compliment/Complaint Process Flows

Compliments and Complaints Requests are a subset of Service Requests. The difference is that they do not result in a work order being generated. Instead, they are passed to the end user department for disposition. Figure 7 describes the Compliment/Complaint Process.

- Access the knowledgebase to determine the “Probing Questions” required by the department
- Capture and document the resident’s responses and provide the estimated completion time – Service Level Agreement (SLA) -- as instructed by the knowledgebase article
- Offer to provide additional assistance to the resident
- Offer to have the resident complete a satisfaction survey
- If instructed by the knowledgebase article, transfer the call
- End the call.

If during the call it is determined that additional services are required, the Call Triage Process is restarted.

FIGURE 7: COMPLIMENT/COMPLAINT



CC-3 COMPLIMENT/COMPLAINT

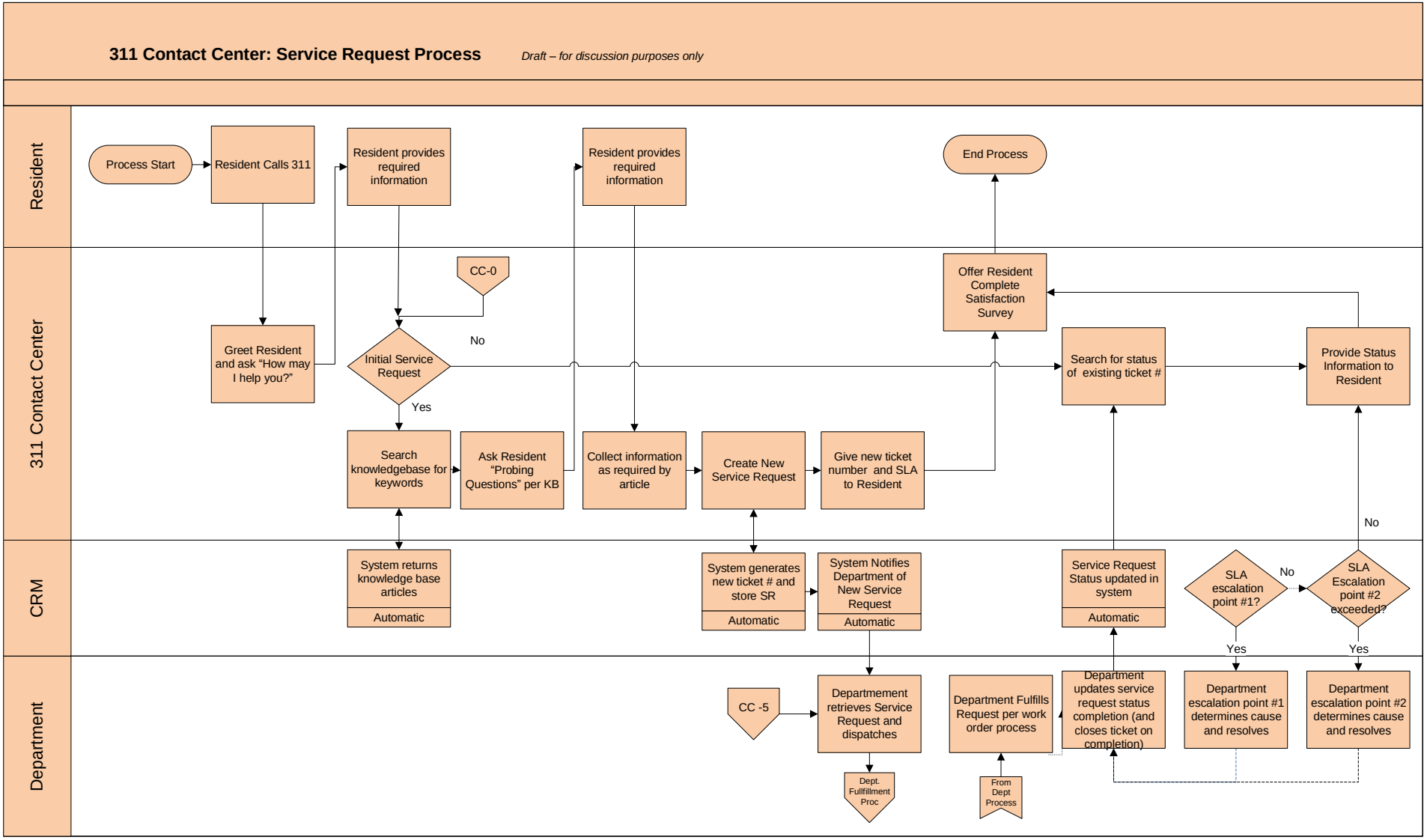
Service Request (SR) Fulfillment Process Flows

Service Requests typically result in one or more work orders in one of the City's work order systems. As illustrated in Figure 8, this model assumes that regardless of the end user department's work order system, all Service Request Fulfillment calls follow the same basic process flow. The Contact Center will:

- Access the knowledgebase to determine the "Probing Questions" required by the Department
- Capture and document the resident's responses and provide the estimated completion time–the Service Level Agreement (SLA)–as instructed by the knowledgebase article
- Offer to provide additional assistance to the resident
- Offer to have the resident complete a satisfaction survey
- If instructed by the knowledgebase article, transfer the call
- End the call.

If during the call it is determined that additional services are required, the Call Triage Process is restarted.

FIGURE 8: SERVICE REQUEST



CC-4 SERVICE REQUEST

City of Madison Contact Volume Estimates

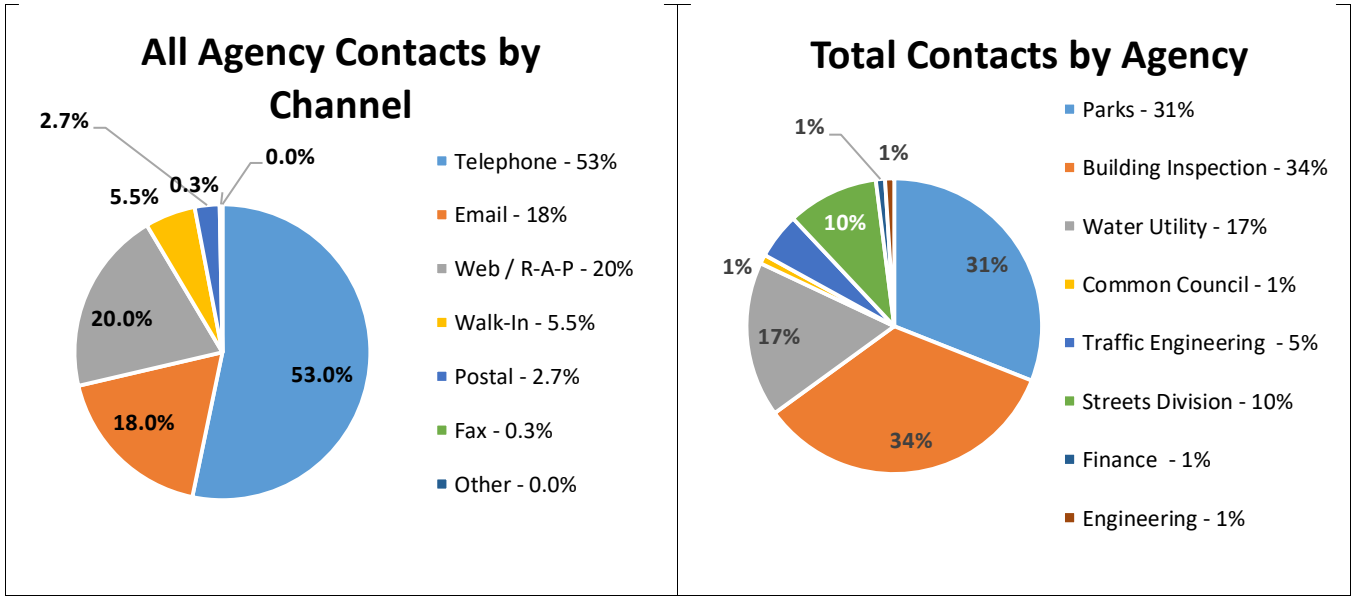
During the Phase 1 Discovery/Assessment of the project, the Project Team identified the following customer service contact volumes as reported by departments:

TABLE 1: ANNUAL CALL VOLUME ESTIMATES

Agency	Telephone	Email	Web / R-A-P	Walk-In	Postal	Fax	Other	Total
Information Technology	495	1,870	35	0	0	0	0	2,400
Parks	32,800	25,499	2,523	12,401	6,000	0	0	79,223
Building Inspection	44,770	835	39,500	300	160	0	0	85,565
Madison Water Utility	34,150	6,512	104	800	250	500	0	42,316
Common Council	950	110	0	35	5	0	0	1,100
Traffic Engineering Division	1,486	5,779	3,297	320	331	171	5	11,389
Streets Division	17,380	3,673	4,274	125	25	0	0	25,477
Finance Summarized	1,605	630	0	0	0	0	0	2,235
Engineering	1,075	0	1,572	0	0	0	0	2,647
Totals	134,711	44,908	51,305	13,981	6,771	671	5	252,352

One of the primary objectives for having a 311 Contact Center is that it would serve as a “One Call To City Hall” resource for residents. It has been our experience that these contact volumes can be indicative of potential knowledgebase or Referral calls that can be expected at a Contact Center.

FIGURES 9A AND 9B : CONTACT VOLUME ESTIMATES BY CHANNEL AND BY DEPARTMENT



The Phase 1 report also noted that in the 311-CRM Contact Center industry, there is a generally accepted rule of thumb for estimating potential City-wide contacts with residents: Total annual contact ***call volume*** can be expected to range 1 to 1.5 times the City’s total population. Accordingly, with an estimated 2018

population of just over 258,000, the City of Madison can anticipate an aggregate call volume of 387,000 annually.

This report uses industry accepted standards as the basis of calculations. We believe that considering the study focused on key core departments, some of which did not report contact volume data, the **387,0000 calls** estimate is reasonably within range and serves as the basis of estimates. In other words, non-call channels would increase the total contact volume but would not impact resource estimates as dramatically as increases or decreases in call volume.

The 311 Contact Center process model described above has specific implications on the calls that will be handled directly by the 311 agents as opposed to calls that must be handled by departments. The process addresses these implications inherently through how the Contact Center handles each of the call types: General Information, Referrals, and Service Requests.

The industry standard metric for call processing assumes that 80 percent of all calls will be answered in 20 seconds, assuming a call length of less than 240 seconds (4 minutes). These are considered “Tier 1 Calls” in that they do not require significant research or referral beyond the Contact Center.

Calls that require extensive research or detailed subject matter expertise or research that may cause the call to extend beyond 240 seconds are considered “Tier 2 Calls” that must be transferred to the appropriate Department SME.

It should be clearly understood that the Contact Center will answer every call received, the difference is in how the call is handled:

TABLE 2: CALL “TIER” CRITERIA

Call Type	Tier 1 Criteria	Tier 2 Criteria
General Information	• Respond to call in < 240 seconds • Agent able to retrieve answer from knowledgebase/CRM or other system and provide answer	• Information is not available to the agent or additional research is required • Agent should treat as a Service Request (for call back)
Referral	• Respond to call in < 240 seconds • Agent able to retrieve answer from knowledgebase and is instructed to transfer the call	• Agent instructed by knowledgebase to transfer call • Creation of Service Request is insufficient
Service Request	• Respond to call in <240 seconds • Agent able to retrieve article/script from knowledgebase/CRM and create service request	• Information is not available to the agent or additional Research is required • Agent should treat as a Service Request (for call back)
Compliment/Complaint	Respond to call in <240 seconds Agent able to retrieve article/script from knowledgebase/CRM and create service request	• Information is not available to the agent or additional Research is required • Agent should treat as a Service Request (for call back)

For Referrals, the system should be designed such that the Contact Center agent must first attempt to either respond with the answer (e.g.,. treat the call as a General Information call), or create a Service Request. If the call absolutely requires a referral, a knowledgebase article or CRM script should be created specifically instructing the agent when and where to transfer the call.

Examples of Tier 1 Calls include:

- Request for information on Filing Insurance Certificate with the Department of Finance – Contact Center Agent could provide general information on how to apply over the phone, point the caller to a web link, or email an information packet to the caller.
- Complaint regarding fallen tree in a City park. The Contact Center agent would take the incident information and create a Service Request that is forwarded to the Parks Department.

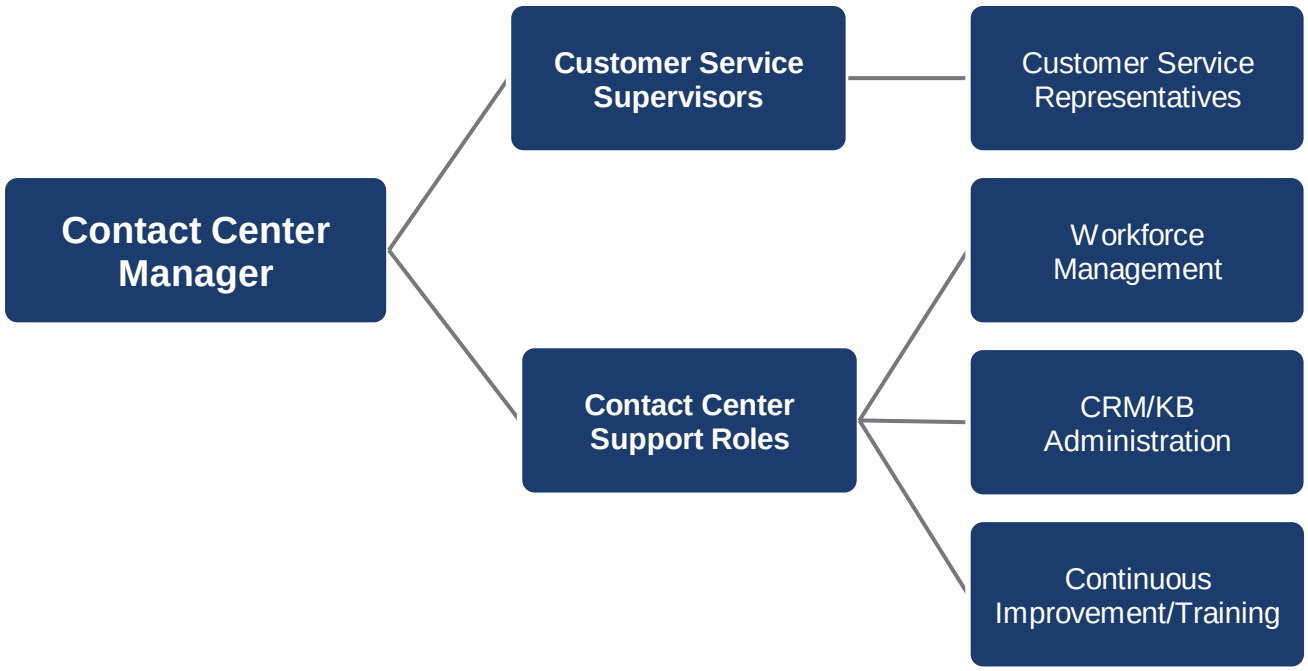
Examples of Tier 2 Calls include:

- Request for Status of a Claim filed with the Finance Department. The Contact Center agent could be instructed to either transfer the call to the Finance Department or create a "call back" Service Request that the Finance Department will respond later.
- Request to Reserve a Parks Department facility. The Contact Center agent could be instructed to either transfer the call to the Parks Department or create a "call back" Service Request. In a more advanced instance, the Agent could be given access to the department's facility reservation system to make the reservation on the department's behalf.

City of Madison Customer Service Organization Model

The consolidated model of the Contact Center structure is derived from industry best practices. This model views the organization as not simply a "Contact Center," but an integral component of the City's efforts to address resident requests for services in a holistic manner through a true "learning organization." The model is designed to continuously improve through adaptation.

FIGURE 10: CITY OF MADISON 311 CONTACT CENTER ORGANIZATION MODEL



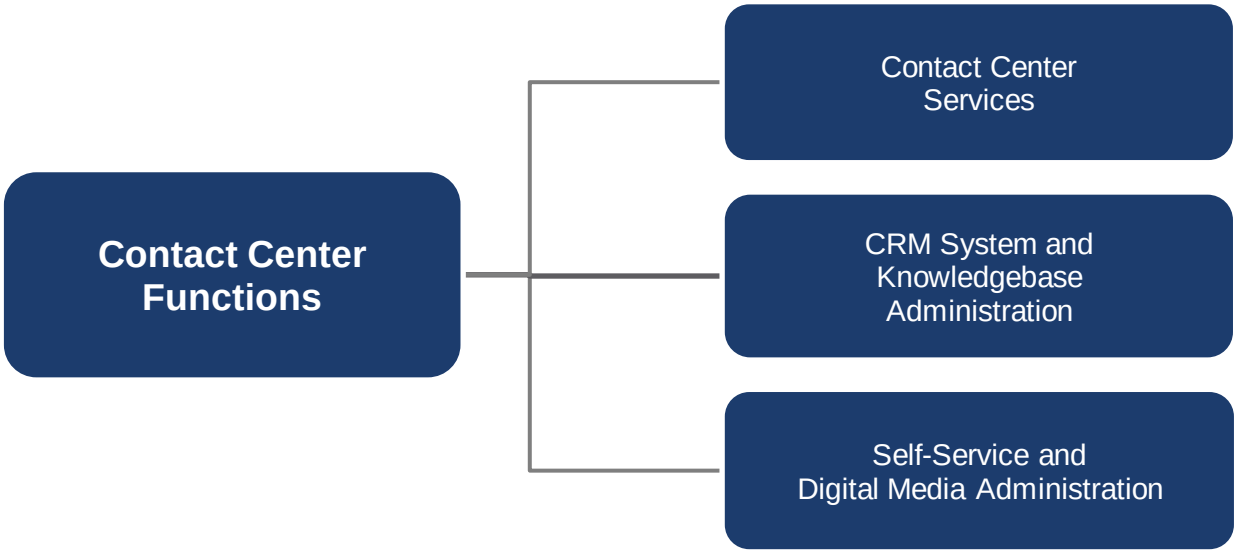
The most successful 311 organizations are those reporting to a high-level executive within the City, typically the City Manager, City Administrator, or a Chief Operations Officer. This positions the 311 organization as a customer service utility, roughly analogous to the Information Technology Department as a City's information utility. It also provides the organization the necessary visibility and authority to address cross departmental barriers in meeting its mission.

The 311 Contact Center organization should be led by a 311 Contact Center Manager who will be responsible for the day-to-day performance of the 311 services organization. In meeting these responsibilities, the manager will:

- Monitor the quality of all customer service representatives to provide recommendations for improvement.
- Analyze the overall performance of the 311 organization and provide opportunities for continuous improvement.

The 311 Contact Center Manager is also responsible for setting the strategic direction of the organization and has overall responsibility and authority for the three major functions of the organization:

FIGURE 11: 311 CONTACT CENTER FUNCTIONS



The **311 Contact Center** function is the core of the 311 Model responsible for directly interacting with the City's residents, receiving resident requests for services, and addressing them to resolution. As identified in Figure 11, in addition to the Contact Center Manager, the Contact Center Services function includes the following roles:

- **Customer Service Supervisors.** Experienced Customer Service professionals charged with coaching and counseling their team members and ensuring the quality of the performance of the Contact Center.
- **Customer Service Representatives.** Agents responsible for interacting with the resident via all channels to address and resolve issues.

- **Continuous Improvement/Workforce Analyst** function is a "nontechnical" role responsible for:
    - Working with the Contact Center Manager and Supervisors to maintain an effective, balanced schedule to ensure effective coverage on all shifts.
    - Capturing and reporting standard Contact Center and Agent Performance metrics to the Manager and Supervisors.
- **The Continuous Improvement/Trainer function is responsible for:**
    - Working with the Manager, Supervisor, Workforce Analyst and CRM/Knowledgebase functions to develop and implement effective soft skill and hard skill curriculums for Contact Center staff and staff in departments.
    - Identifying areas of potential improvement and developing approaches to addressing them.

Figure 11 expands on the Contact Center Services function with the addition of two important support roles to the organization:

The **CRM System/Knowledgebase Administration** function is a nontechnical role responsible for:

- Configuration and maintenance of the CRM system, knowledgebase, and the Contact Center web portal.
- Analyzing 311 data, generating data sets and reports for departments and executive leadership.
- Maintaining day-to-day operational contact with the "internal customers," the departments served by the 311 organization, in order to enhance service delivery, maintain essential communication regarding key programs and activities Citywide, and improve overall performance of the 311 organization.

The **Self-Service Administration** role is responsible for:

- Ensuring the content in the 311 knowledgebase is kept current.
- Ensuring that process and workflows between the Contact Center and departments are operating properly.

Customer Service Representative Competency, Knowledge, and Skill Requirements

The City's 311 Customer Service Representatives will be required to possess the following capabilities:

- Learn and use multiple enterprise applications while communicating with residents over the phone.
- Understand and navigate the City's business operations.
- Understand and differentiate the role of city, county, and state services.
- Operate efficiently and effectively in a high volume Contact Center.

We have also reviewed a number of basic skill set requirements published by various 311 Contact Centers across the country. In our opinion, the criteria developed by the City and County of Denver, Colorado, is representative of the skillsets desirable in a 311 agent. Although this is not intended to be a comprehensive specification of job classification requirements, we do believe it to be a valuable guide.

COMPETENCIES, KNOWLEDGE, & SKILLS:

Customer Service - Works and communicates with residents to exceed their expectations and is committed to providing quality service.

Integrity/Honesty - Displays high standards of ethical conduct; understands the impact of violating these standards on an organization, self, and others; chooses an ethical course of action; and is trustworthy.

Conscientious - Displays a high level of effort and commitment toward performing work and demonstrates responsible behavior.

Interpersonal Skills - Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern, and politeness to others and relates well to different people from varied backgrounds and different situations.

Reading - Learns from written material by determining the main idea or essential message and recognizes correct grammar, punctuation, and spelling.

Arithmetic/Mathematical Reasoning - Performs computations such as addition, subtraction, multiplication, and division correctly using whole numbers, fractions, decimals, percentages, and formulas.

Listening - Receives, attends to, interprets, and responds to verbal messages and other cues, such as body language, in ways that are appropriate to listeners and situations.

Writing - Uses correct grammar, punctuation, and spelling to communicate thoughts, ideas, information, and messages in writing.

Flexibility - Adapts quickly to changes.

Speaking - Uses correct grammar to organize and communicate ideas in words that are appropriate to listeners and situations and uses appropriate body language.

Memory - Recalls information that has been presented previously.

Reasoning - Discovers or selects rules, principles, or relationships between facts and other information.

Customer Service - Works and communicates with clients and residents to satisfy their expectations and is committed to quality services.

Self-Management - Sets well-defined and realistic personal goals, monitors progress and is motivated to achieve, manages own time, and deals with stress effectively.

Technical Competence - Knowledge of the specialized/technical area. Refers to specialized knowledge that is acquired through formal education or extensive on-the-job experience.

Decision Making - Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.

Source: City and County of Denver, CO – Career Service Authority

311 Contact Center Hours of Operation

Contact Centers in cities of similar population to the City of Madison typically operate between 8 to 12 hours per day for five days per week. Some operate on Saturdays for 4 to 8 hours, but fewer communities are doing so as the industry moves to digital channels. For the purposes of our base model, we have assumed the City would initially establish the Contact Center's hours of operation at 8 hours, Monday – Friday. This would provide the City with the ability to meet current and projected demand, (as discussed below) for the near future, while retaining the flexibility to modify hours and days as actual experience dictates.

Future Consideration: Consolidation of Walk-Up Operations

As noted, approximately fourteen thousand resident contacts with the City are made by individuals who physically walk up to City offices to request services (e.g., Parks, Water Utility, etc.). Many 311 cities have created Walk Up service desks in conjunction with their Contact Centers. We believe the City will benefit greatly by exploring consolidating the portion of these walk-up transactions (e.g., general inquiries, account look ups, possibly some payments) that can be handled by a consolidated Contact Center with access to the 311-CRM system in the future.

311 Contact Center Staffing Model

The Contact Center Staffing Model is based primarily on an expected call volume to be handled by a City of Madison Contact Center. The purpose of the model is to estimate customer service representative and supervisor staffing requirements to specifically handle call volumes. Other staff such as CRM Administrator, Knowledgebase, and Content administrators are not included.

Long-established Contact Centers (e.g., New York, Chicago) are creating target goals of transitioning at least 25 percent of their current call volume to digital channels. More recently implemented Contact Centers seek to implement a higher ratio of resident digital self-service as compared to agent-handled calls, up to 50 percent.

The team has prepared two Contact Center Staffing Model Scenarios for comparative purposes**. Scenario 1 – "Call Centric" Customer Service Model** shows staffing requirements if the City were to staff to handle the current estimated contact volumes**. Scenario 2 – "Digital Augmented" Customer Service Model** shows staffing requirements if the City were to actively convert 50 percent of calls to digital self-service (e.g., smartphone app, web portal, IVR and/or social media) and 50 percent operator-handled calls. Note: Scenario 2 will require increased IT staffing to support a digital augmented service model.

Several assumptions, in addition to call volume, were considered in constructing both models to predict staffing:

- **Service Level.** The industry best practice is to answer 80 percent of calls presented within 20 seconds.
- **Average Call Handle Time.** While call length can range from as little as 1 minute to up to 5 minutes or more, the 311 industry standard is average is 4 minutes (240 seconds).
- **Number of Shifts.** In an eight-hour per day/5-day per week 311 Contact Center operation, there are two or more shifts of agents responding to calls. This is primarily due to an agent day usually consisting of two 15-minute breaks and a one-hour lunch break, leaving six and a half hours of actual time covering the phones. Most 311 organizations stagger these breaks into "shifts." These shifts are designed to provide overlap during shift changes. Typically, early morning shifts and late afternoon/early evening shifts run with fewer agents, when call volumes are low. Overlap between the multiple shifts occurs during the busiest parts of a work day, generally midday, to ensure that that call wait times are steadily maintained throughout the day.

Using the volume calculations and sizing assumptions described above, the team utilized an **Erlang Contact Center Staffing Model** to estimate the number of Call Takers that would be required in the 311-CRM system.

- The Erlang distribution is a continuous probability distribution developed by A. K. Erlang to examine the number of telephone calls that might be made at the same time to the operators of a Contact Center. Erlang-C calculators are widely used throughout the world to estimate traffic for Contact Centers, help desks, checkout queues, and other processes where residents may have a wait time.
- An online version of the Erlang Contact Center Staffing Model can be found at www.Erlang.com (http://www.erlang.com/calculator/call/).
- The charts used in this analysis were developed using Call Center Helper Erlang Calculator, which can be found at www.CallCenterHelper.com (https://www.callcentrehelper.com)

SCENARIO 1 – "CALL CENTRIC" CUSTOMER SERVICE MODEL[i2]

Assumptions:	
Contact Center Hours of Operation:	8 hrs./day, 5 days/wk.
Annual Call Volume:	387,000
Business Days/Yr. (9 City Holidays)	251
Calls/Day	1,542

The project team used a Bell curve distribution to simulate calls received throughout a given day to derive the distribution the Contact Center could receive throughout its eight-hour operation day.

311 Contact Centers have several options for staffing to address peak volumes:

- **Staff To Minimum.** Staffing to Minimum expected call volumes is typically utilized in Contact Centers where there are long periods of relatively low, steady call volumes, with varying levels of peak period spikes. The advantage of this mode of staffing is that it allows the highest utilization of staff. However, during peak periods, there may be long waits by residents.
- **Staff To Peak.** Staffing to Peak expected of call volumes, recognizes that there will be peaks and troughs over any given time period but provides the advantage of "Staffing to Peak" that the Contact Center will always be ready to handle the maximum expected volume of calls. The disadvantages are that peak staffing would require more agents than the other modes and does not optimize agent usage during the non-peak hour shifts.
- **Staff To Average.** Staffing to Average facilitates agent optimization by smoothing the peaks and troughs that occur during the day. It requires fewer agents than peak staffing, while avoiding the long wait times using minimum staffing. The disadvantage of staffing to average is that during peak periods, residents will experience longer wait times than during non-peak hours.

Basic Staffing Model

The Figure 12A illustrates the Bell curve that will be used throughout the staffing section. Relying on the Scenario 1 Assumptions listed above, it distributes the total calls for the day, with few calls at the start, rapidly rising to a peak at noon, and then dramatically falling off in the late afternoon. The rationale for this Bell curve is as follows:

- As residents arrive at work, they will encounter experiences or make observations that will result in a call to the Contact Center. Some will make contact as soon as they reach work, school, or another destination.
- Most will contact the City when they have the opportunity, with the majority reaching out over their lunch hour.
- As the work day continues, those who, for whatever reason (e.g., resident was busy, contact center was busy), were not able to reach the Contact Center, will continue to attempt to do so.

FIGURE 12A: AGENTS REQUIRED PER HOUR FOR CALLS OVER THE DAY

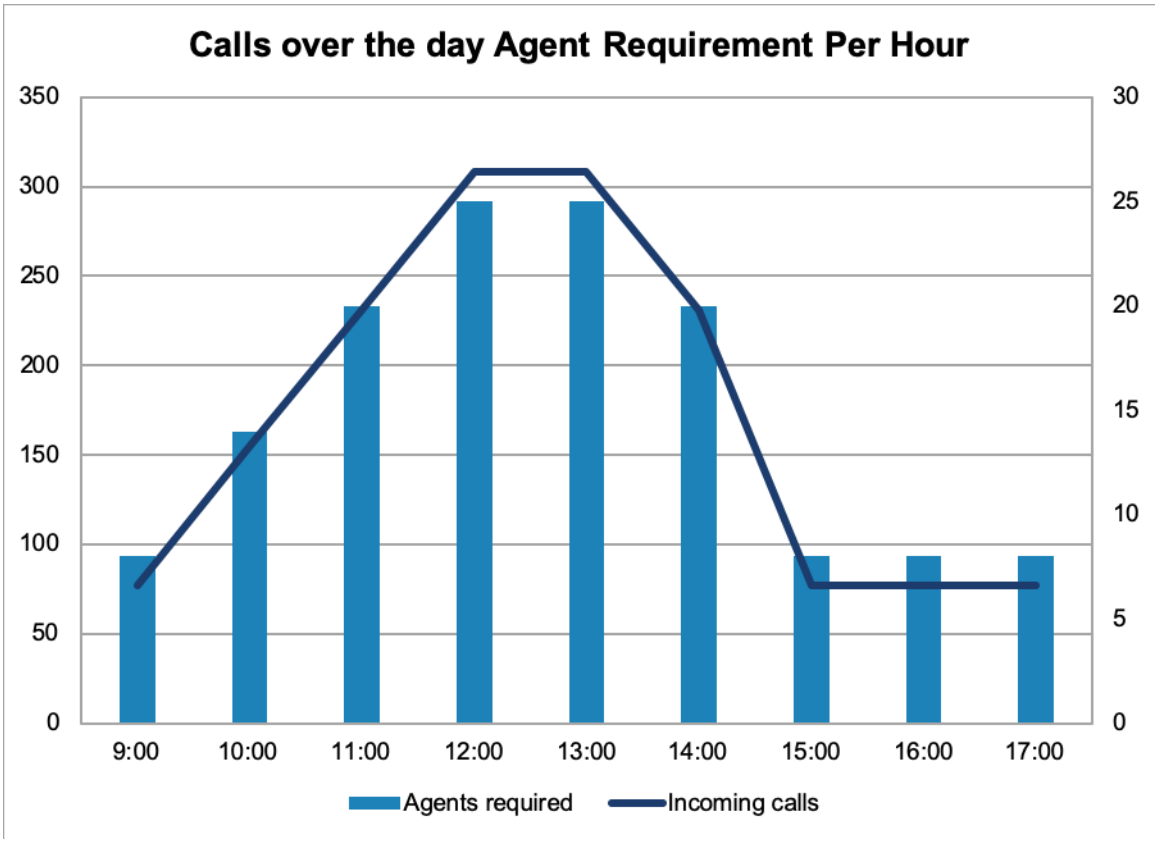
Standard time	Desired Call Distrib %
9:00 AM	5%
10:00 AM	10%
11:00 AM	15%
12:00 PM	20%
1:00 PM	20%
2:00 PM	15%
3:00 PM	5%
4:00 PM	5%
5:00 PM	5%

Time slot beginning (enter start time in top cell)	Incoming calls	Agents required
9:00	77	**8**
10:00	154	**14**
11:00	231	**20**
12:00	308	**25**
13:00	308	**25**
14:00	231	**20**
15:00	77	**8**
16:00	77	**8**
17:00	77	**8**

The Figure 12B illustrates, given assumptions for the **Desired Call Distribution** percentages, the predicted volume per hour of **Incoming Resident Calls** to the Contact Center. **Agents Required** for each hour is then calculated using Erlang-C algorithms.

The resulting Bell curve is charted below as Agents Required Per Hour for Calls Over The Day. Note that around 12:00 noon, the model anticipate 306 incoming calls requiring 25 agents in order to meet the industry standard of answering 80 percent of calls within 20 seconds.

FIGURE 12B: AGENTS REQUIRED PER HOUR FOR CALLS OVER THE DAY[i3][i4]

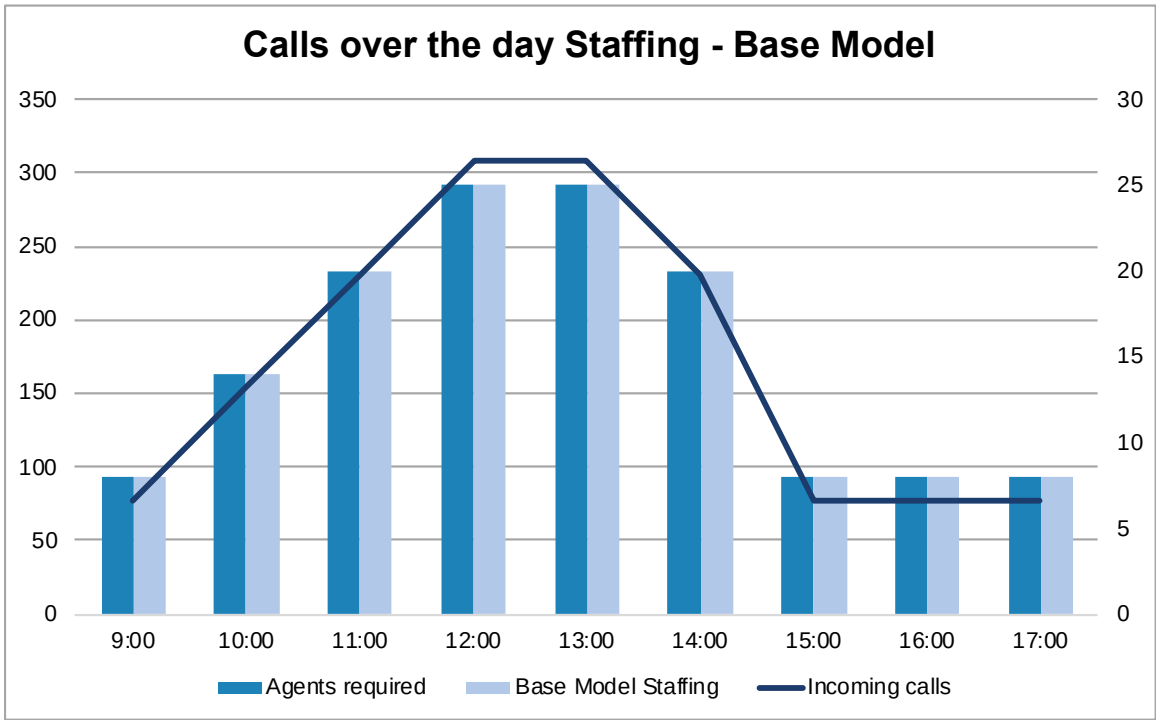


As can be seen below, in the basic model, given that the exact number of Agents Required per hour will be available, the goal of answering 80 percent of calls (Predicted Service Level) within 20 seconds will be exceeded by between 3 percent and 6 percent.

FIGURE 13A: BASE MODEL CALLS OVER THE DAY STAFFING[i5]

Time slot beginning (enter start time in top cell)	Incoming calls	Staff to average		Agents required	Agent Surplus/ Shortfall	Predicted Service Level	Probability Call Waits
9:00	77	17		8	8.5	100%	0%
10:00	154	17		14	2.5	96%	7%
11:00	231	17		20	-3.5	21%	83%
12:00	308	17		25	-8.5	0%	100%
13:00	308	17		25	-8.5	0%	100%
14:00	231	17		20	-3.5	21%	83%
15:00	77	17		8	8.5	100%	0%
16:00	77	17		8	8.5	100%	0%
17:00	77	17		8	8.5	100%	0%

FIGURE 13B: BASE MODEL CALLS OVER THE DAY STAFFING



A Base Model of Staffing for the Bell curve for a City of Madison Contact Center illustrates the ideal of having the exact number of agents available to respond to incoming calls. The remainder of this section discusses the “real world” approaches Contact Centers take to meet staffing changes.

Staff to Minimum Model

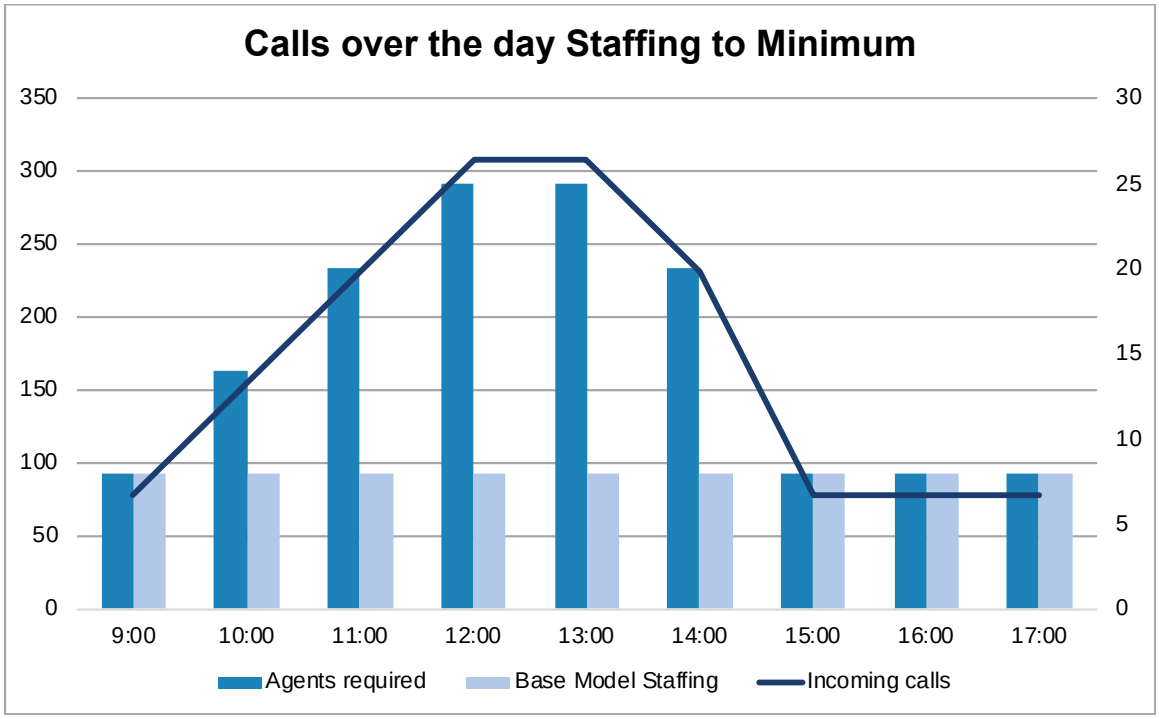
The task of predicting call volume and arrival rates is difficult for most call centers, and especially startups. For this reason, many startups initially chose the "Staff To Minimum" approach, with the anticipation of ramping up as actual experience dictates. Per the "Basic Staffing Model," the minimum number of agents would be 8 per hour.

FIGURE 14A: STAFFING TO MINIMUM[i6]

Time slot beginning (enter start time in top cell)	Incoming calls	Base Model Staffing		Agents required	Agent Surplus/ Shortfall	Predicted Service Level	Probability Call Waits
9:00	77	8		8	0	85%	19%
10:00	154	8		14	-6	0%	100%
11:00	231	8		20	-12	0%	100%
12:00	308	8		25	-17	0%	100%
13:00	308	8		25	-17	0%	100%
14:00	231	8		20	-12	0%	100%
15:00	77	8		8	0	85%	19%
16:00	77	8		8	0	85%	19%
17:00	77	8		8	0	85%	19%

Assuming the same anticipated volume of incoming calls per hour and the same calculated agents required to answer 80 percent of those calls within 20 seconds, the predicted service level would initially exceed target at 86 percent but then drop dramatically, to no calls being answered within the 20 second service level.

FIGURE 14B: STAFFING TO MINIMUM



Staff To Maximum Model

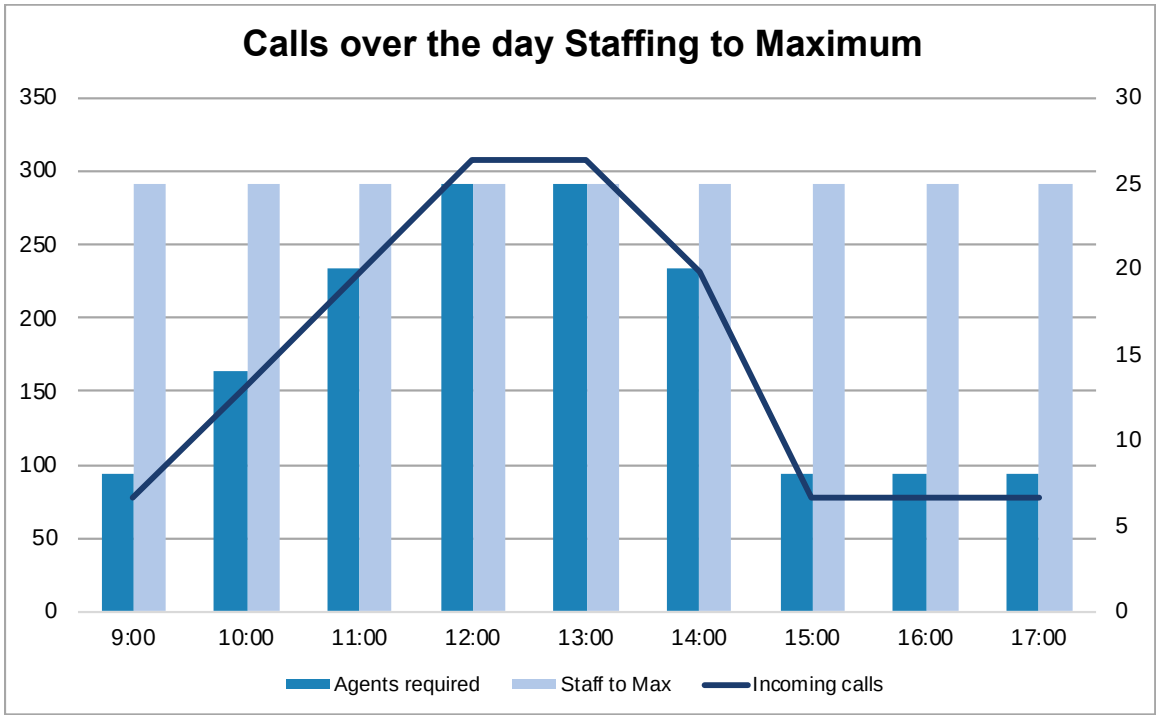
The Staff to Maximum model would be designed to allow a contact center to ensure it always had the capacity to meet its response metrics. Applying the base Incoming Calls volume per hour, the maximum staff available of 25 agents throughout the day, and the number of Agents Required to respond to the incoming calls the model shows that the predicted service level would always be exceeded. In fact the predicted lows the service level would fall to would be 83 percent of calls answered within 20 seconds.

FIGURE 15A: CALLS OVER THE DAY STAFFING TO MAXIMUM

Time slot beginning (enter start time in top cell)	Incoming calls	Staff to Max		Agents required	Agent Surplus/ Shortfall	Predicted Service Level	Probability Call Waits
9:00	77	25		8	17	100%	0%
10:00	154	25		14	11	100%	0%
11:00	231	25		20	5	99%	2%
12:00	308	25		25	0	82%	26%
13:00	308	25		25	0	82%	26%
14:00	231	25		20	5	99%	2%
15:00	77	25		8	17	100%	0%
16:00	77	25		8	17	100%	0%
17:00	77	25		8	17	100%	0%

The Bell curve highlights the fact that at Staff to Maximum, the 311 Contact Center would be overstaffed throughout a significant portion of the day. Agent utilization would be highly un-optimized.

FIGURE 15B: CALLS OVER THE DAY STAFFING TO MAXIMUM



Staff to Average

Typically, cities use the Staff to Average model in order to maximize the efficiency of the 311 Contact Center operation and increase utilization of agents. They augment staffing during peak calendar periods and emergencies with external pools as necessary.

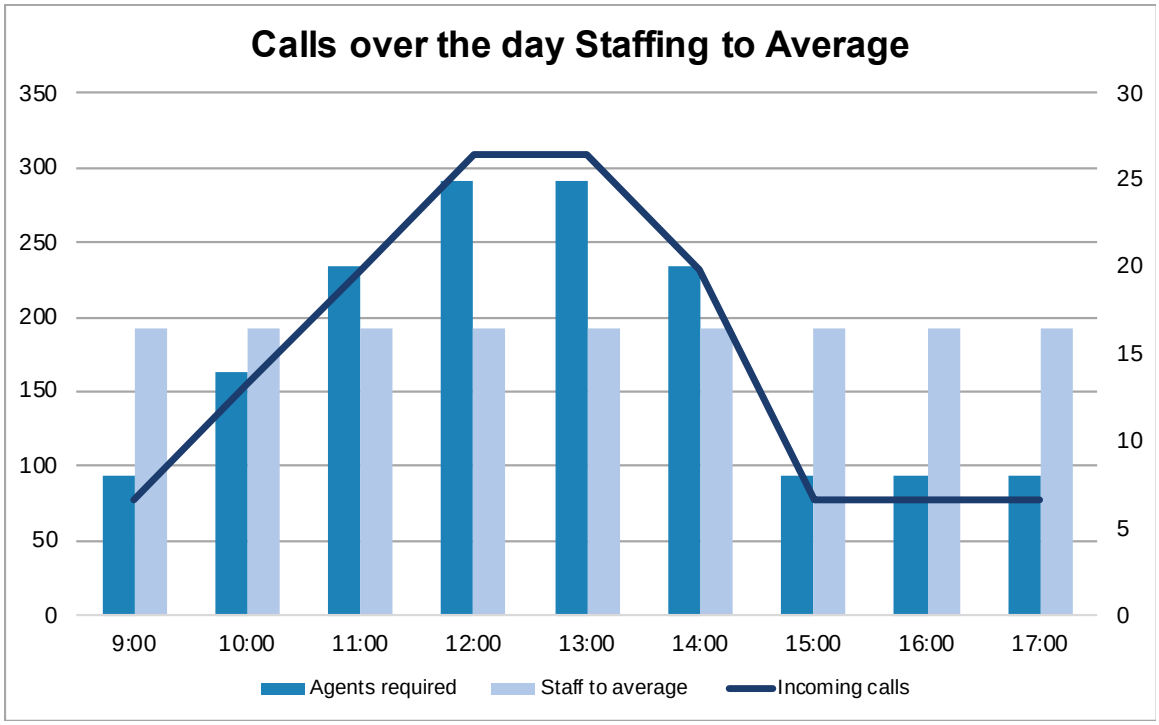
Applying the base Incoming Calls volume per hour, the average (calculated as the range between low and high) staffing available of 17 agents throughout the day, and the number of Agents Required to respond to the incoming calls, the model illustrates that the predicted service level would fluctuate throughout the day with softness in capacity during the peak hours.

FIGURE 16A: CALLS OVER THE DAY STAFFING TO AVERAGE

Time slot beginning (enter start time in top cell)	Incoming calls	Staff to average		Agents required	Agent Surplus/ Shortfall	Predicted Service Level	Probability Call Waits
9:00	77	17		8	8.5	100%	0%
10:00	154	17		14	2.5	96%	7%
11:00	231	17		20	-3.5	21%	83%
12:00	308	17		25	-8.5	0%	100%
13:00	308	17		25	-8.5	0%	100%
14:00	231	17		20	-3.5	21%	83%
15:00	77	17		8	8.5	100%	0%
16:00	77	17		8	8.5	100%	0%
17:00	77	17		8	8.5	100%	0%

The Bell curve illustrates the agent short fall during the peak hours. Many Contact Centers address this by staggering the start and stop times of some agents to address the peak softness through implementing flexible shifts.

FIGURE 16B: CALLS OVER THE DAY STAFFING TO AVERAGE



Staff To Average Estimated Contact Center FTEs

Industry data (MetricNet's benchmarking database) shows that the average ratio of agents to supervisors is 8.5, but ranges widely, from a high of 21 agents per supervisor to a low of just 1.8 agents per supervisor. (**https://www.metricnet.com/agent-to-supervisor-ratio/**)

Using the Staff to Average Model would require two supervisors to cover the 17 agents. Adding the other roles previously outlined would result in the key contact center staffing (excluding administrative support) as follows:

TABLE 3: NUMBER OF STAFF BY FUNCTION

Role	Count
Manager	1
Supervisor	2
Agent	17
Trainer	1
Scheduler/Workforce Analyst	1
Knowledgebase Analyst	1
Total	**23**

Shrinkage

Shrinkage represents the amount of agent time unavailable due to both foreseen circumstances (e.g., planned vacations, lunch, and personal breaks), and unforeseen circumstances (e.g. illness, absence, and other scheduled time off). Contact Centers typically estimate shrinkage at between 20% and 35%. The tables below utilize 35% to illustrate the impact of shrinkage on the number of additional contact center staff required under the various staffing models.

Projected Staffing Growth

Per the United States Census Bureau, the City of Madison has experienced growth of between 0.6 % and 1.5% annually over the past years.

TABLE 4: CITY OF MADISON POPULATION GROWTH

City of Madison Population Growth Per U.S. Census		
Year	**Population**	**% Change**
2014	245,884	--
2015	248,269	1.1%
2016	252,102	1.5%
2017	255,214	1.2%
2018	258,054	1.1%
2019	259,680	0.6%

The table 5 staffing model applies 1.1% growth year to year to project contact center volumes over 4 years to estimate annual volume and agent growth projections.

TABLE 5: STAFFING REQUIREMENTS OVER FOUR YEARS

Staffing Consideration	Start Up Year 1	Year 2	Year 3	Year 4
Est. Growth:	0.0%	1.1%	1.1%	1.1%
Est. Daily Volume:	1,542	1,559	1,576	1,593
Staff to Minimum	8	8	8	8
Staff to Minimum with High Shrinkage	13	13	13	13
Staff to Peak	25	25	26	26
Staff to Peak with High Shrinkage	41	41	41	42
Staff to Average	17	17	17	17
Staff to Average with High Shrinkage	27	27	27	28
Annual Call Volume	387,000	391,257	395,561	399,912

Scenario 2 – "Digital Augmented" Customer Service Model

This scenario assumes the City of Madison would choose to implement a digitally enhanced 311 Contact Center designed with the goal to convert 50 percent or more of its potential voice call contacts into digital contacts. This could be achieved in the following manner:

- A City of Madison App, purchased as an integral component of the 311-CRM system, would be initially deployed. The App would serve as the initial front door to municipal services, and would interact with the 311-CRM system.
- Similarly, a City of Madison web/portal purchased as an integral component of the 311-CRM system would be initially deployed. The City's Report-A-Problem and various departmental contact portals would be integrated to create service requests into the 311-CRM system.

These two technologies would be promoted to gain constituent acceptance as the primary, best, and most efficient means of requesting and receiving services.

- The roll out of a streamlined City of Madison Contact Center would follow, fronted by a modern sophisticated natural language Interactive Voice Response (IVR) system that would intercept remaining calls.

When properly configured, these technologies have achieved significant conversion of volumes of calls to digital means in existing 311 municipalities.

The Project Team used the same basic Bell curve structure for this scenario, and estimated 50 percent of the volume of calls (193,500).

SCENARIO 2 ASSUMPTIONS

Assumptions:	
311 Contact Center Hours of Operation	8 hrs./day, 5 days/wk.
Annual Call Volume	193,500
Business Days/Yr. (9 holidays)	251
Calls/Day	770

The project team also used a Bell curve distribution to simulate calls received on a typical day to derive the distribution of the 765 volume of calls the Contact Center could receive throughout its 8-hour operation day.

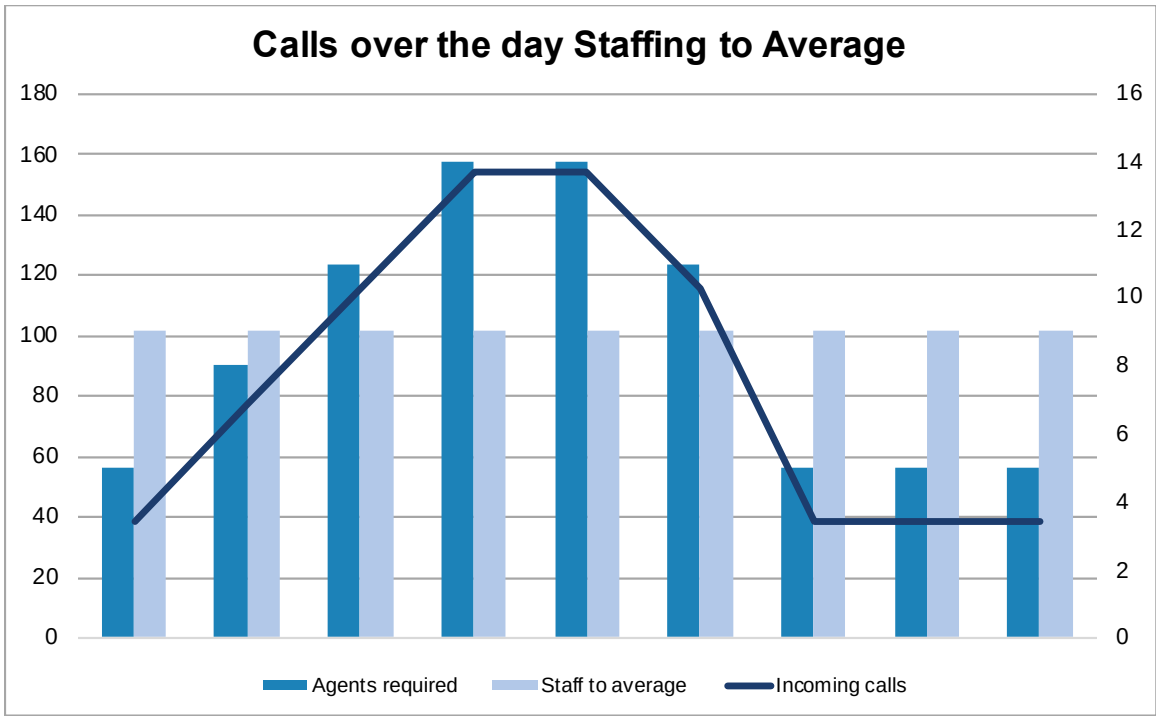
Again, the model assumes an attempt to staff to near peak expectation of call volumes, recognizing that there will be peaks and troughs over any given time period.

Figure 17A below shows the total number of call takers required on the phones, per shift, when staffing to average when 50 percent of the 311 Contact Center call volume has been transformed to digital channels.

FIGURE 17A: CALLS OVER THE DAY STAFFING TO AVERAGE

Time slot beginning (enter start time in top cell)	Incoming calls	Staff to average		Agents required	Agent Surplus/ Shortfall	Predicted Service Level	Probability Call Waits
9:00	39	9		5	4	100%	0%
10:00	77	9		8	1	93%	9%
11:00	116	9		11	-2	48%	57%
12:00	154	9		14	-5	0%	100%
13:00	154	9		14	-5	0%	100%
14:00	116	9		11	-2	48%	57%
15:00	39	9		5	4	100%	0%
16:00	39	9		5	4	100%	0%
17:00	39	9		5	4	100%	0%

FIGURE 17B: CALLS OVER THE DAY STAFFING TO AVERAGE



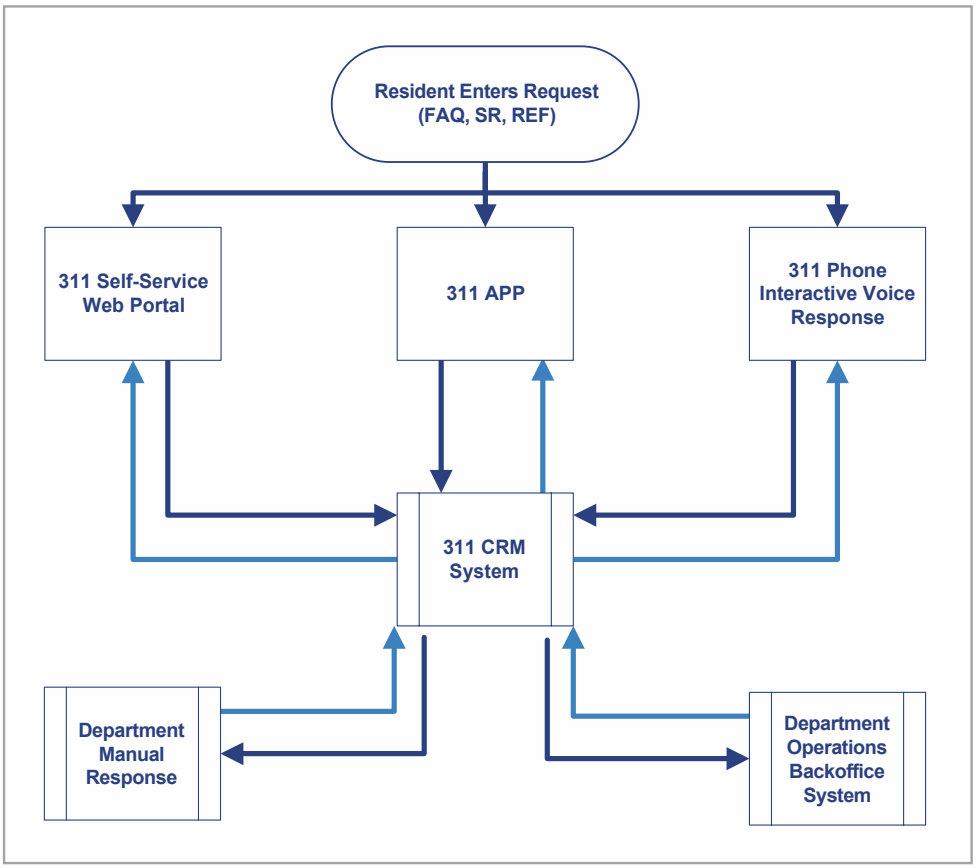
It should be noted that while under this model, the number of Contact Center Agent staffing is reduced, additional staff would be required to address the web self-service and social media component. The number and types of additional staff are dependent on the degree to which the City decides to employ social platforms (e.g., Facebook, Twitter, Instagram, YouTube), customized 311 Apps, Social Media integration, web chat, etc., to address resident requests for service.

Technology Model

In order to support the City of Madison as envisioned, the City will need to acquire a robust 311- CRM system that can interact with many different venues of contact: text, web chat, IVR, Social Media, email, abd mobile app. The selected technology should seamlessly support, at minimum, the following:

- Intake, service request creation, and tracking.
- Workflow and call scripts.
- 311 resident web portal.
- Mobile device access.
- Interactive mapping.
- Integration capabilities with the City's enterprise business systems.
- Social platforms
- Reporting and dashboards.

FIGURE 18: CITY OF MADISON CRM INTEGRATION WITH WORK ORDER SYSTEMS



CRM Software Solution Requirements

This section of the report describes the Contact Center functional and technical solutions and requirements.

The 311 Contact Center components, as illustrated below, address the resident contact channels, call management within the 311 Contact Center, integration with departments and the City of Madison enterprise-level assets such as department legacy systems, the web portal, and a GIS solution. The high-level discussion presented in this section provides a framework for the overall 311-Contact-Center-based solution.

The solution feature components discussed below include:

- Call Management
- Customer Contact and Resolution
- Contact Center Operations Management
- Integration
- Multi-Channel Request Handling.

CITY OF MADISON 311 CONTACT CENTER TECHNOLOGY SOLUTION COMPONENTS	
SOLUTION COMPONENT	**SUB-COMPONENTS**
Call Management The Call Management component focuses on the routing of calls to the Contact Center. **It includes Call Distribution and Interactive Voice Response (IVR) services.** Call management addresses: • Outbound call routing cost strategies • Call forwarding • Conference calling • Call accounting • Available options for the call • Call control and performance tools.	***Call Distribution*** The Call Distribution is concerned with managing call flow processes, including: • Control of the call from arrival at the Contact Center • Call queue management and providing information on queue length • Call routing based on predetermined criteria, e.g., agent availability or skill sets • Call metric data accumulation (e.g. volume, duration, and agent activity status) • Tracking and reporting call details by call type • Facilitating warm transfers and routing call details with the transfer. ***Interactive Voice Response (IVR)*** IVR system provides resident "self-service" capability via the phone, including: • Allow self-service selection of options (e.g. leave voice mail, receive call back, request information via fax) • Play pre-recorded announcements • Serve as an overflow mechanism during peak call periods.
Customer Contact and Resolution Customer Contact Resolution addresses the handling of the call by the Contact Center. It incorporates the processes necessary to receive the call, research the solution, and provide the service. The components include: • **Knowledge Base** • **Account History and Maintenance** • **Service Request Generation and Management** • **Workflow** • **Customer Feedback** • **Imaging** • **Fulfillment** • **Follow-up.**	***Knowledgebase*** The Knowledgebase serves as the agent's primary source of information regarding the City's processes, policy, and procedures. The Contact Center requires capabilities to: • Create, update, approve, archive knowledgebase entries ("Articles") • Create call scripts based on call types to guide agents in dispensing and collecting appropriate information • Guide agents through complex decision processes when determining how to triage calls • Return probing questions to collect needed information for recommending a response. ***Account History and Maintenance*** The Account History and Maintenance provides the ability to capture and maintain information regarding callers and issues they call about. This function includes the ability to: • Create, update, approve caller profile information (e.g., name and address data) for resident contacts • Validate location data against the City's GIS system • Maintain contact history

CITY OF MADISON 311 CONTACT CENTER TECHNOLOGY SOLUTION COMPONENTS	
SOLUTION COMPONENT	**SUB-COMPONENTS**
	• Combine multiple requests regarding individual incidents • Identify "frequent callers." ***Service Request Generation and Management*** Service Request Generation and Management provide the ability to create and track Service Requests from the initial resident call to final fulfillment by the department. This includes: • Multi-channel receipt of requests for service • Creation of new service requests with automated "Service Request ID," and providing to the resident with Service Request ID, Service Level Agreement, etc., as prompted by the CRM. • Obtaining comprehensive information required to fulfill the service requests via script prompts and "probing questions" • Routing Service Request data to the appropriate department • Obtaining status and history of existing service requests (e.g. prior notes and status changes noted by other agents or the department). ***Workflow and Business Process Rules*** Workflow and Business Process Rules provide the ability to automate business processes within the CRM system and between the CRM and department systems. These include: • Triage priority callers (e.g., Mayor, Alders, frequent callers, etc.), and call types (e.g., special events) • Call Escalation procedures • Call Referral routing • Service Level Agreement management. ***Customer Feedback*** Customer Feedback is concerned with obtaining information regarding resident satisfaction with performance. This may include: • Short- and/or long-form resident surveys regarding Contact Center, City, or other performance targets • Surveys may be provided by IVR at end of call or via other channels • Special questionnaires requested by an individual department • Analysis and segmentation of responses via predefined geographic and demographic criteria. ***Imaging*** Imaging relates to the capability for the Contact Center to both receive and send documents of various forms. This may require the ability to interface with imaging and document management systems. Received images may also include descriptive pictures related to the incident being reported. ***Fulfillment*** Contact Centers provide cities the ability to send forms and literature to residents from a centralized resource, usually as a result of a department's campaign. This capability includes: • Linking to existing PDF or imaged documents and emailing to constituent or • Creation of a service request to the department responsible for the campaign. ***Follow-up Communications*** Follow-up communications primarily refers to the acknowledgement of a request for service, notification of the status of an existing service request, or contact related to a request for call back.

CITY OF MADISON 311 CONTACT CENTER TECHNOLOGY SOLUTION COMPONENTS	
SOLUTION COMPONENT	**SUB-COMPONENTS**
Contact Center Operations Management Contact Center Operations Management is concerned with providing the tools and processes to allow the Contact Center to operate efficiently. These include: • **Quality Monitoring** • **Workforce Management** • **Analysis and Reporting.**	***Quality Monitoring*** Quality Monitoring focuses on the "continuous improvement" of the Contact Center by enhancing agent performance and productivity, including: • Call monitoring and recording to provide guidance in areas of improvement • Monitor agent CRM and other systems navigation, and providing recommendations for more efficient access. ***Workforce Management*** Often Contact Center's staffing requirements are affected by seasonal, peak period, peak time of day, and new program concerns. Workforce Management is often used to provide adequate resources for these periods. This includes: • Workforce scheduling • Workforce forecasting. ***Analysis and Reporting*** This component provides the ability to conduct data mining activities on the CRM system database to provide data on resident requests for service, including: • Most frequent requests for service • Open requests by type, department, etc. • Call trends by location, demographic, other • Input to Citi stat type systems. • Caller related information, such as frequent callers, aggregate caller profiles, resident trends, etc.
Integration The integration component focuses on providing automated or manual interaction between the Contact Center and department systems. These include: • Accela • Cityworks • Legistar. Individual spreadsheet driven or Access database processes will not be integrated.	***Potential Departments with Back Office Operations Integration With 311*** For the City of Madison, Wisconsin, these departments could become the core group that would have their service requests generated by the Contact Center: • Building Inspection • Engineering • Mayor's Office • Metro Transit • Parks • Police Non-Emergency • Streets and Recycling • Traffic Engineering • Water Utility. During subsequent phases, remaining departments would be deployed. ***Departmental Systems*** During the initial phase, most departments will continue to use their existing work order systems. For the core departments, the 311-CRM system will be configured to synchronize 311-CRM Service Request and data with the City's selected enterprise systems such as Accela and Cityworks. In some cases, 311 Customer Service Representatives may be given access to these systems to meet resident requests ***City of Madison – Enterprise Capability -GIS*** The Contact Center CRM application will need the ability to access the City's GIS system to address resident concerns, such as providing directions to department offices, locating services in the caller's proximity, etc. ***City of Madison – City Enterprise Capability – Electronic Payment*** The City currently provides many electronic payment capabilities. The Contact Center agents will be able to leverage https://www.Cityofmadison.com/epayment/ to direct residents to these electronic payment sites. They may also need to provide physical location information for points of payment.

CITY OF MADISON 311 CONTACT CENTER TECHNOLOGY SOLUTION COMPONENTS	
SOLUTION COMPONENT	**SUB-COMPONENTS**
Multi-Channel Request Handling The 311 Contact Center will be required to accept requests for service from a number of sources including: • Email • Mobile App and Web self-service • Social Media.	***E-mail Management*** 311 Contact Center agents will require the ability to manage contacts via email in order to respond by emailing the appropriate knowledgebase response to a General Information request or create a Service Request and provide an automated acknowledgement to the resident. ***Mobile App and Web Self-Service*** The City currently has a number of internet-based self-service sites. Where feasible, these will be integrated into the 311 CRM web portal and mobile app. ***Social Media*** The City of Madison has its own social media presence, as do various City departments. The 311 Contact Center will need to coordinate with City departments on messaging.

Facility Model (Note that was created pre-COVID-19)

Although a facility planning analysis was not included in our scope of work, we offer the following insights gained from other Contact Centers. Based on our model's call volume and staffing assumptions, the facility calculations for accommodating the staff are shown below:

Planning assumptions for the above numbers include:

- 50 square feet per Customer Service Agent workstation
- 90 Square feet per Manager/Supervisor Workstation
- 30 percent additional square feet per work station for circulation, ADA and other requirements
- 20 percent additional space for support functions.

TALBE 6: FACILITY SPACE REQUIREMENT ASSUMPTIONS*

Facility Space Requirement Assumptions*	
Square Feet Per Agent	**50**
Square Feet Per Supervison	**90**
Additional Percentage (Circulation, ADA Requirements, etc).	**30%**
Additional Support (Admin, etc.)	**20%**

Using the results of the initial staffing model, the impacts of the various staffing modes on space requirements are identified as:

TABLE 7: IMPACT OF STAFFING MODES ON SPACE REQUIREMENTS

Staffing Mode	Est. # Agents	Est # Mgr + Supv + Analysts	Est Space (Sq f=Ft)	Support Space	Tot Est Sq Ft
Staff To Minimum Space Requirements	**8**	**5**	850	425	**1,275**
Staff To Peak Space Requirements	**25**	**7**	1898	949	**2,847**
Staff To Average Space Requirements	**17**	**6**	1374	687	**2,061**

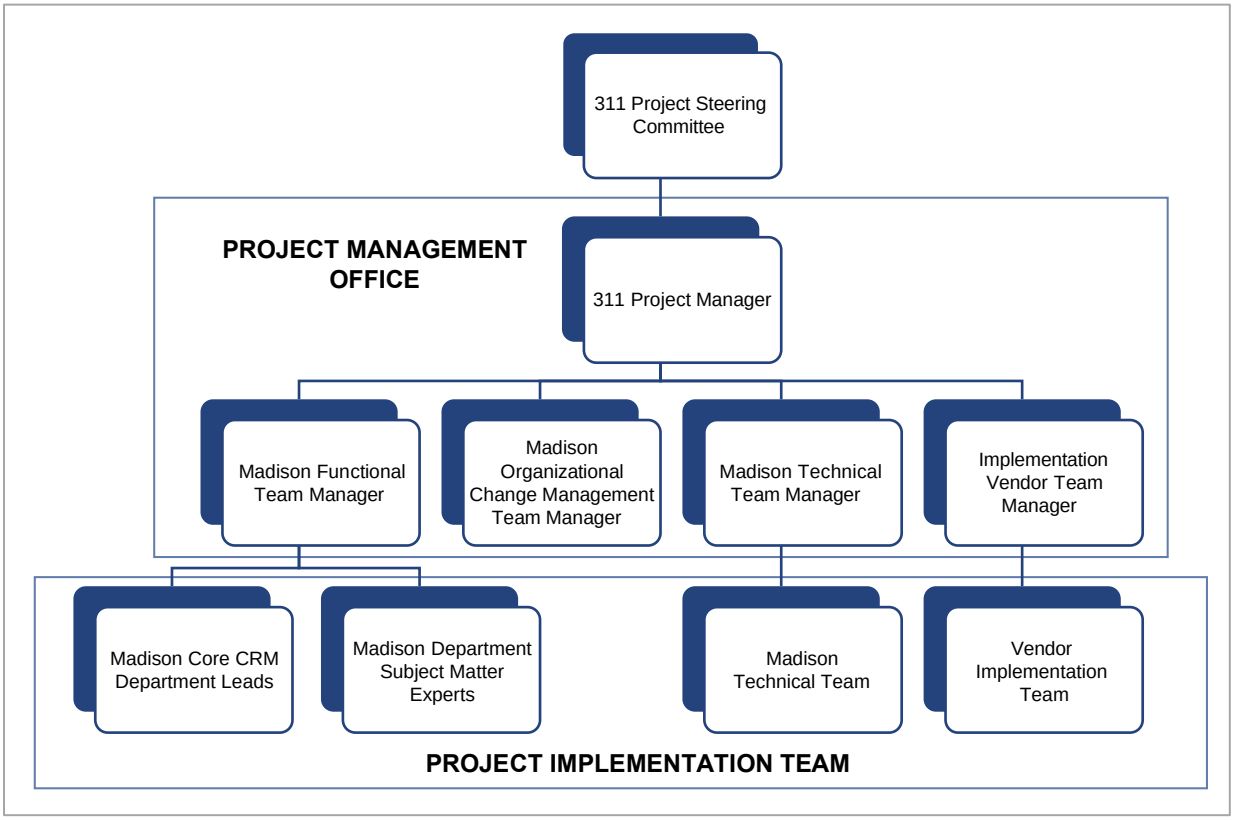
Other facility considerations not included in the above assumptions, are:

- Lunch and/or “break room” – 311 Contact Centers have utilized everything from converted office to full staff lunch room dependent on the availability of space.
- Locker/storage space – Similarly, 311 Contact Centers have employed a variety of solutions for file cabinets, coat storage, etc.
- 311 Contact Center metric display devices such as reader boards, Contact Center digital signage, Contact Center dashboards, and agent desktops.

III. Implementation Project Roadmap

Project Implementation Team Model

FIGURE 19: MADISON 311-CRM PROJECT IMPLEMENTATION STRUCTURE



Experience has shown that the 311 Implementation Project Organization Structure (see Figure 19) is a key indicator for the success or failure of any 311 Contact Center project. Among the top risk factors for these projects are the lack of appropriate structure and communication channels, the failure to place the project at the highest level of visibility within the City’s organization, the lack of executive sponsorship with authority to make decisions across organizational boundaries, and the failure to commission a top implementation team that is commanded by a strong experienced leader and staffed by the best functional and technical resources available.

The Project Implementation Model was developed based on best practices of successful 311 implementations in other cities. The model's components include:

Project Steering Committee. The role of the Project Steering Committee is to facilitate strategic planning, implementation coordination and buy-in, and ensure a seamless transition from Day One implementation to ongoing operations. The steering committee's primary roles include overseeing the activities of the Program Management Office, resolving interdepartmental impasses regarding overall project direction, resource allocation, maintaining stakeholder support, and ensuring participation at the department level. The steering committee will also provide a forum to discuss and resolve issues, especially with departments whose call-taking activities are proposed for consolidation into the integrated Contact Center.

Project Management Office (PMO). The primary responsibility of the PMO will be to manage the project's implementation across departments, and cross-jurisdictionally as entities are considered for participation in the project. The PMO will provide overall project management, including managing the project schedule, maintaining the project budget, addressing regulatory issues, conducting required procurements, and directing knowledge base development, training, and technical implementation tasks. The PMO includes:

- The **Project Manager** will have overall responsibility for the business operations, processes, and direction of the project. This role will direct the activities of the other participants.
- The **Functional Manager** will be responsible for coordinating with the City's business team members to ensure the core departments and departmental subject matter experts are recruited and aligned.
- The **Technical Manager** will be responsible for the architectural aspects of the project related to the system, and will also function as a technical advisor to the Functional Manager.
- The **Organizational Change Management Manager** is a role critical to the eventual success of the 311 initiative as a whole. This individual will be responsible for developing the organizational change program that will insure adoption of the 311 system within departments. This will include assessing the change readiness of the organization and developing appropriate communications, training, and departmental support strategies to ensure success of the implementation.
- The **Implementation Vendor Team Manager** is responsible for the delivery of systems, processes, and documentation according to contract. This role is also responsible for the performance of vendor personnel and coordination with the City.

Project Implementation Team. The Project Implementation Team will be responsible for the construction, testing, documenting, training, and deployment activities necessary to get the 311 Contact Center fully functional. For the City of Madison, the Project Implementation Team should include departmental subject matter experts, Information Technology support, City end-user groups, technical solution vendors, and 311 subject matter expert consultants. The team is composed of four key support groups:

- **The Madison Technical Team** will work closely with the Vendor Implementation Team to ensure the implemented system meets the technical requirements of the City. The Technical Team will also be required to develop processes and procedures to ensure the ongoing operation of the system once fully implemented.
- The **Vendor Implementation Team** is led by the vendor selected by the City. This team will work collaboratively to develop and validate the City's requirements, design and implement the system, and develop processes in support of the system. The Vendor Implementation Team is also responsible for testing the system, training City staff in its use, developing documentation, and confirming successful operation of the system.
- The **Madison CRM Core Team** is comprised of selected representatives from the City, including the Functional and Technical Project Managers. This team works with Department representatives to provide the resources needed for design, development, and testing of the

system. Core Team members will also have responsibility for ensuring appropriate City staff are trained in system operation.

- **Department Subject Matter Experts (SMEs)** contribute expertise and knowledge on the City's processes and protocols. This information ensures that requests from residents are processed correctly and updated as needed.

Recommended Project Implementation Approach

ICMA recommends undertaking a phased implementation approach to establish a 311-CRM system.

Phase 1 deployment will provide the following digital capabilities on Day 1:

- Deploy the City of Madison Self-Service Portal and App
  - Respond to General Information requests (Frequently Asked Questions) for all departments
  - Respond to Referral requests (Directory Assistance) for all departments
  - Create Service Request calls for "Core" departments.

Phase 2 deployment will include:

- Open the Contact Center in support of the Phase 1 digital deployment
  - Respond to General Information calls (Frequently Asked Questions) for all departments
  - Respond to Referral calls (Directory Assistance) for all departments
  - Create Service Request calls for core departments.

Subsequent deployment phases will add the creation of Service Request calls for remaining departments.

The designation as core departments has critical implications for each of these departments:

- They will be the first to have Service Request type contacts handled by a 311 Contact Center
- Their designated customer service phone numbers will be routed directly to 311 and will no longer ring in their departments
- The majority of their "call intake" functions may be processed by 311 customer service representatives rather than department staff
- In most cases, the Service Request created by 311 customer service agents will now become their initial contact with the resident
- In some cases, the department will create Service Requests in the 311 system
- The department will assign an estimated completion time or SLA to Service Requests, which will be used by the 311-CRM system to track and report status of the request.

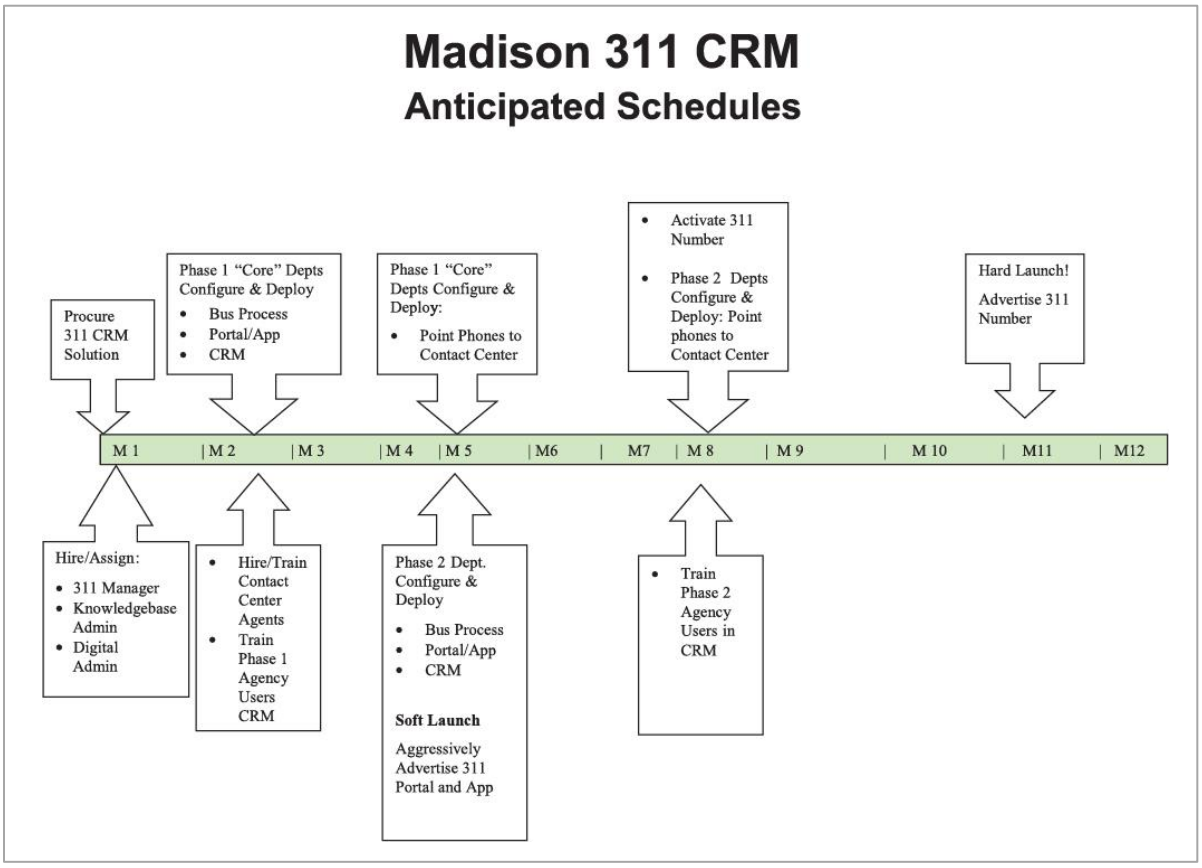
To ensure the successful deployment of 311 in their organizations, these departments must:

- Identify key staff who will participate in the 311 customer service business process analysis and design sessions. These staff will be responsible for understanding the resultant processes, creating SLAs, and signing off on them.
- Identify the customer service phone numbers that will be routed to 311
- Ensure their staff are trained in the 311 Service Request process, including retrieving and updating (or closing existing requests), entering new requests, and dispatching requests appropriately.

Typically, 311 Contact Centers delay activation and publication of the 311 phone number until they are ready to make a hard launch and begin actual operations using the new system. Some even activate the 311 number but delay publication of the number for a period of time after hard launch. This allows the City to control the volume of calls coming into the Contact Center as it continues to integrate the new business processes into its day-to-day operations.

Prospective Implementation Timeline

This timeline is invoked after business analysis, requirements gathering, process changes, personnel changes, change management, budgeting, RFP issuance, vendor selection, and contract negotiations take place. These prior steps will likely take 18 to 24 months.



The Project Implementation Team believes that a Madison 311-CRM system could potentially be rolled out within an 11-month timeline with the following major milestones:

- **Month 1**
  - Finalize the solution procurement and contract with the selected vendor
  - The vendor begins the business process flow and configuration of the CRM/Knowledgebase, App and portal, along with interfaces to the work order systems of the "Core" agencies
  - Hire or assign an experienced Contact Center Manager (preferably with 311 deployment experience)
  - Also hire or assign the Knowledgebase Administrator and the Web Portal/ App/ Digital Content Administrator.

- **Month 2 – 4**
  - Vendor continues and tests configurations of Core Agency portal, app, etc.
  - Vendor begins business process flow and configuration of the IVR and telephony functions
  - Hire and train City of Madison Contact Center Supervisors and Agents
  - Train Phase 1 Departments in use of CRM system.
- **Month 5**
  - Vendor continues the Phase 1 business process flow and configuration of the IVR and call functions
  - Vendor begins configuration and deployment of “Phase 2” departments web self-service and app capabilities.
  - City “Soft Launch” – begin aggressively advertising City of Madison APP and “Self-Service” capabilities.
- **Months 6 – 7** – Continue Soft Launch and fine-tuning.
- **Months 8 – 9**
  - Activate and test the “311” number (Soft Launch)
  - Configure and deploy Phase 2 business process flow for IVR and call functions
  - Train Phase 2 Agency users on City of Madison CRM system and knowledgebase.
- **Months 10 – 12 - Hard Launch!**
  - Announce 311 number as supplement to 311 App and Self-Service Portal
  - Begin to plan to add Neighboring Municipalities to City of Madison.

IV. Project Cost Estimates

CRM Software

The Project Team solicited cost information from several municipalities comparable to City of Madison, Wisconsin. Five of the cities that recently procured CRM systems provided the following information:

TABLE 8: 311 CITIES WITH POPULATIONS SIMILAR TO MADISON

City	State	2018 Population	Over/Under Madison, WI	CRM System	Implementation Costs	Annual Operational Costs	Staffing
Pittsburgh	Pennsylvania	301,048	42,994	Qscend	$162,600 **(1)**	$53,000 renewal	7 FTEs, 2 PTEs
Toledo	Ohio	274,975	16,921	CityWorks	Folded into the Utilities budget	$1 million	11 FTEs
Madison	Wisconsin	258,054	0				
Knoxville	Tennessee	187,500	(70,554)	Verint	$500,000	$500,000	
Newport News	Virginia	178,626	(79,428)	Motorola – on premise **(2)**	$600,000	$92,280	11 FTEs
Newport News	Virginia	178, 626	(79,428)	Motorola-Cloud	$49,950	$132,600	11 FTEs
Provo	Utah	116,702	(141,352)	Verint	$20,000 **(3)**	$35,000	15 FTEs

(1) Over a three-year time period.
(2) Switch from on premise solution to a cloud-based system.
(3) Pilot project to develop new modules.

While final pricing is determined by the vendor, based on our experience, the project team believes the City will find a CRM system that meets its needs for somewhere in the $250,000 to $1,000,000 million total software and first-year integration costs. However, in our experience, the City can expect to receive solicitations ranging between $140,000 to $3 million, and more. Careful examination of the solutions' capabilities is advised.

TABLE 8: PERSONNEL COSTS BY ROLE

Contact Center Role	Low	High	Average	Benefits (25%)	Total Average
Manager	$75,000	$92,000	$83,500	$20,875	$104,375
Supervisor	$72,000	$90,000	$81,000	$20,250	$101,250
Agent	$55,000	$64,000	$59,500	$14,875	$74,375
Trainer	$59,000	$70,000	$64,500	$16,125	$80,625
Analyst / Support	$59,000	$70,000	$64,500	$16,125	$80,625

TABLE 9: ANNUAL PERSONNEL COSTS BY ROLE WITH SHRINKAGE

Annualized costs based on number of people needed in each role, with shrinkage factored in:

		Minimal Staffing		Peak Staffing		Average Staffing	
Contact Center Role	Ave. Sal.+Ben.	Count	Ave. Sal.+Ben.	Count	Ave. Sal.+Ben.	Count	Ave. Sal.+Ben.
Manager	$104,375	1	$104,375	1	$104,375	1	$104,375
Supervisor	$101,250	1	$101,250	4	$405,000	3	$303,750
Agent	$74,375	10	$743,750	30	$2,231,250	20	$1,487,500
Trainer	$80,625	1	$80,625	2	$161,250	1	$80,625
Analyst / Support	$80,625	1	$80,625	2	$161,250	2	$161,250
Total		**14**	**$1,110,625**	**39**	**$3,063,125**	**27**	**$2,137,500**

TABLE 10: TOTAL ESTIMATED ANNUAL COSTS

Description	Estimated Annual Cost
Personnel – based on average staffing	$2,137,500
Additional office costs (phones, printers, supplies, training, etc.)	$50,000
Facilities (2,500 square feet @ $12.00)	$30,000
Annual software licensing and maintenance costs	$300,000
Annualized cost of hardware (computers, phones, switches, monitors, etc.)	$100,000
Total	**$2,617,500**

V. Best Practices Analysis

Contact Center Implementation Best Practices

Risk Management

Anticipating risk is key to the successful implementation of 311 Contact Center Implementations. In our practice working with other 311 cities, we have identified several areas of risk that have impacted either the implementation project itself or the eventual performance of the 311 Contact Center.

TABLE 11: AREAS OF RISK AND MITIGATION APPROACHES

AREA OF RISK	IMPACT	MITIGATION APPROACH
Funding Support	• Inadequate funding could result in diminished implementation, or derailment of City of Madison implementation efforts	• Communication Plan • Data driven investment case • Active engagement of executive leadership and internal audit
Effective Governance and Visibility	• 311 projects require strong effective leadership and high prioritization across the City to be successful.	• Maintain high level of executive engagement throughout • Establish steering committee to rapidly resolve cross-boundary issues.
Change Management	• 311 systems often implemented as part of ERP - amount and constancy of change tends to exhaust end user participants.	• Implement Citywide Change Management strategy • Develop Change Management Team.
Lack of Engagement/Resistance to Change	• Reluctance to provide timely, adequate information could result in incomplete analysis • Slow adoption by departments resulting in poor service delivery and negative constituent perception of City of Madison	• Communication Plan • HR leadership and engagement • Change Management
Data Integrity/Data Availability	• Lack of data/inaccurate date could result in flawed analysis and recommendations.	• Data Collection • Identification of critical integration points
Leadership Support	• Lack of top down leadership resulting in departments underestimating the City's importance of and commitment to City of Madison	• Communication • CIO leadership and engagement

Manageable Scope	• "Big bang" deployments to all departments at once have high rates of failure.	• Utilize a phased deployment strategy • Employ initial "proof of concept" approach.
Scope Creep	• Tendency to add additional areas of investigation may result in "analysis paralysis" and cost overruns.	• City Project Manager Leadership and engagement.
Performance Management	• 311's request tracking highlights department performance against service levels • 311 seen as failure if departments do not resolve issues.	• Implement Citywide Performance Management program • Development Service Levels for each department's work flow.
Customer Service Culture	• 311's tend to be the vanguard for propagating good "customer service values" in a City • Many 311's tradeoff value of customer service experience vs. knowledge of City.	• Propagate Customer Service standards throughout all departments • Recruit experienced customer service staff at all levels of the 311 organization.

Contact Center Performance Best Practices

Performance Measurement and Reporting

Performance Measurement and Reporting is focused on improving the quality of individual call takers' performance in the Contact Center. Call takers are measured on adherence to schedule (how much time during the shift they are available for taking calls) and a Quality Assurance Score (QAS). The QAS is derived from reports of individual call-taker performance, including:

- Average handle time
- Average talk time
- Scheduled adherence
- Average wrap-up time
- Number of calls taken
- Consistency in the response to calls.

Quality Assurance and Monitoring

Quality Assurance and Monitoring focuses on individual call taker quality from two perspectives: call interaction and resident satisfaction. The call taker's Supervisor assesses performance through a periodic performance evaluation and side by side observation of live calls.

- Call opening – Greeting
- Interaction – Listening, probing questions, resident does not have to repeat himself/herself
- Customer care – Resident treatment, call handling, positive image of 311 Contact Center
- Call control – Focus on resident's problem, transfer, hold, escalation, do not let the resident ramble
- Accuracy – Information delivery, service request accuracy, and system usage
- Call closing – Ending the call.

Continuous Improvement and Training

Continuous Improvement builds on performance measurement, quality assurance, and monitoring to extend professionalism and customer service orientation through all aspects of the Contact Center. It is the role of the Contact Center trainer, working with supervisors and management to continuously assess the training requirements of the organization and develop creative means to address them.

The importance of training to continuous improvement cannot be understated. Retention of customer service employees is an industry-wide problem in Contact Centers and turnover rates of 50 percent or higher in the first 5 years are not uncommon. Employers rely on implementing training and part of comprehensive retention programs to combat the problem.

The Contact Center will incorporate training for both internal operations and department customers.

An internal operation training is focused on improving the performance of Contact Center staff and includes:

- Technical training –use of the telephone system; CRM application skills; and knowledgebase search and retrieval strategies

- 311 Contact Center operations training – Contact Center mission, policies, and procedures; City organization and officials; City department programs and service; City geography; 911 operations overview; etc.
- Customer Service Training – customer service basics; delivering world-class customer service; handling difficult callers; handling emergencies; end-user department specific training on its programs
- Employee Policies – performance measures and evaluation programs; workplace policies; stress management; etc.

End-user department training is focused on enhancing the interaction between the department and the Contact Center and includes:

- Technical training on use of the telephone system, CRM application, and knowledgebase specific to the end-user departmental role and responsibilities;
- Understanding the role of the 311 Contact Center and the business processes related to specific interaction with the end-user department.

Change Management

The objective of Change Management is to facilitate end-user and resident adoption of the 311 Contact Center. Typically, this will require significant shift in existing policies, procedures, practices, and organizational culture. A comprehensive change management program focuses on:

- Internal communications – communicating the need for change throughout the organization and maintaining constant awareness of the scope and impact of change on individuals and departments. This incorporates newsletters, periodic updates via "town hall" meetings, inclusion of department contacts in the planning process, etc. It is important to communicate not only "how" the 311 will operate, but to also address the "What's in it for me" concerns.

- External communications – communicating the activities and benefits of a 311 Contact Center to the City's residents via town hall meetings, public media and public service announcements, marketing campaigns, etc.

- Training and providing information are the primary mechanisms for enabling change management in an organization, whether delivered in the class room or online. Collaboration with end-user departments throughout the implementation also proves to be effective in fostering change.

311 Contact Center Interaction Best Practices

This section discusses best practices concerning coordination and interaction between Contact Centers and other entities.

Interaction with 911

Contact Centers were initially developed to reduce the volume of nonemergency calls to the 911 emergency numbers. As they have become more widely accepted and used, Contact Centers have evolved a distinctly customer service orientation. However, they still have significant interactions with and impact on public safety. Specifically, the Dane County Public Safety Communications Center (PSCC) reported receiving 40 parking related and 10 animal related non-emergency calls per day that properly should be received by the City of Madison.

As an example of this interaction, the Contact Center can expect to field calls that should be handled by 911. These usually occur for several reasons:

- The caller may prefer the relative anonymity a call to 311 provides as compared to 911.
- The caller may not fully realize the emergency nature of the call. For example, the caller may observe a potentially dangerous live electrical wire within reach and therefore calls 311.
- The caller may have gotten busy signals calling 911 and decided that 311 was more expedient.

Most Contact Centers handle this interaction in a combination of ways. First, an automated message is used to advise callers that "if this is an emergency, hang up and dial 911." Second, a protocol is established between 311 and 911 for handling calls transferred from one to another. This may involve creating a "hot button" on the call taker's phones to provide automatic transfer to 911. On the 911 phone, these transfers show the 311 number instead of the original caller's number. In such an instance, protocol requires the 311 call taker makes a "warm" or live transfer. In such a case, the call taker remains on the phone with the caller until transfer can be made to a 911 operator, thus being able to provide the caller ID information if necessary.

Another example of the interaction between 311 and 911 that the Contact Center can expect is more closely related to the original purpose of 311, reduction of call volume to 911. Typically an average of 50 percent of the calls to the Police nonemergency number can be classified as 311 type nonemergency calls (e.g., noise complaints, graffiti, animal control, etc.).

A final example of the interaction between 311 and 911 is in the handling of Homeland Security events. These range from planned events such as parades, to emergency events like hurricanes or catastrophes. 311 Contact Centers have come to play a major role in such events and have designated roles in the activation of the Emergency Operations Center (EOC), with an assigned representative from 311 at the EOC who coordinates with the Contact Center. In these cases, 311 can:

- Alleviate the volume of 911 nonemergency calls
- Provide alternate public safety response to assist 1st responders
- Enhance disaster preparedness
- Centralize information for real-time access
- Handle requests for nonemergency services
- Preconfigure procedures for 2nd responders
- Facilitate multidepartment and multijurisdictional resource coordination and communications
- Control rumors.

During the 2007 Minneapolis Bridge collapse, the 311 Contact Center mobilized to instantly create knowledgebase articles and service requests to address the disaster, including:

- Information Requests
  - General public information regarding the bridge collapse
  - Road closure information
  - Alternate route information
  - Information regarding public viewing of site
  - Red Cross referrals
  - Where and how to make charitable contributions.

- Service Requests
  - Media requests
  - Eye witness reports
  - Request for missing person and victim information
  - Request for vehicle and personal property information
  - Tracking and reporting offers for donated services
  - Tracking and reporting services for fees
  - Recording and tracking of condolences
  - Recording and tracking of public opinions
  - Traffic control complaints.

Interaction with 211

211 is an Information and Referral (IR) number established by the Federal Communications Commission in 2000 to provide the public an easy-to-remember number to access social services. While it is similar to 311 on the surface, there are some distinct differences:

- 211 handles a distinct subset of issues handled by 311, focusing mainly on family, health care, housing, and job-related concerns of the caller
- 211 is typically operated by a nonprofit at the City or state level (e.g., United Way)
- 211 may refer callers directly to local government agencies, such as a City's Department of Health and Human Services
- 211 call takers receive significant training in counseling skills, crisis intervention, and social service providers.

While most Contact Centers do not have direct interaction with 211 information and referral centers, many are beginning to see the need to establish protocols for working together. When the project team met with the Madison 211- United Way of Dane County, they expressed interest in working with a Madison Contact Center to facilitate provision of services to residents.

Interaction with Performance Management ("CitiStat" type) Programs

Many Contact Centers have begun to recognize that while the Contact Center can create and track service requests, they do not have the ability (or authority) to hold departments accountable for accurately completing the work and closing service requests. A recurring theme emerges in discussions with other Contact Centers: the key to a successful Contact Center operation is simple – service must be provided by the field. The most consistent complaint 311 customer service agents hear is "311 doesn't work!" The resident's perception is that they call repeatedly regarding the same issue (pothole, tree, noise) and nothing has been done about it.

These cities emphasized the need for strong linkage between their Performance Management projects and the Contact Center to help establish the criteria for following up, verifying the status of work, and closing service requests. Cities such as Baltimore, Chicago, New York, and others make reporting 311 data an integral component of their CitiStat programs.

Once the Contact Center is deployed, a City should require departments to incorporate 311 reporting data into their monthly reporting. The reporting should identify, at a minimum, the Top 10 311 calls Received, Top 10 311 Service Requests, and Aged Open Service Requests for each Department and the City as a whole.

Incorporating this reporting into the City's performance management process would provide the departmental accountability necessary to the perception of the Contact Center as a successful undertaking by the City.

Appendix

A. List of Study Interviewees

FIGURE 20: CITY OF MADISON – 311-CRM FEASIBILITY STUDY INTERVIEWS

Cary Perzan	Building Inspection	Administrative Clerk
Gabby Arteaga	Building Inspection	Supervisor
George Hank	Building Inspection	Director
Kyle Bunnow	Building Inspection	Supervisor
Karen Kapusta-Pofahl	Council Office	Staff
Kwasi Obeng	Council Office	Chief of Staff
Christy Bachmann	Engineering	Principal Engineer
Heidi Fleegel	Engineering	Administrative Clerk
Kathy Cryan	Engineering	Deputy Division Manager
Marsha Hacker	Engineering	Administrative Clerk
Rob Phillips	Engineering	Director - City Engineer
Stephen King	Engineering	Facilities Maintenance
Kara Kratowicz	Finance	Performance Excellence, Data Management
Eric Olson	Information Technology	Web Team, GIS,
Aaron Cohen	Information Technology	Cityworks and GIS
Riki Sjachrani	Information Technology	Accela, MUNIS
Sarah Edgerton	Information Technology	IT Director
Mick Rusch	Metro Transit	Marketing and Customer Services Manager
Craig Klinke	Parks	Forestry
Eric Knepp,	Parks	Superintendent
Lisa Laschinger	Parks	Asst. Superintendent
Joanne Austin	Parks	Administrative Clerk Manager
Charlie Romines	Streets and Recycling	Director
Tom Lynch	Transportation	Director
Karin Daane	Water Utility	Front Line
Marie Van Aartsen	Water Utility	Customer Service Supervisor
Pete Braselton	Water Utility	GIS Manager