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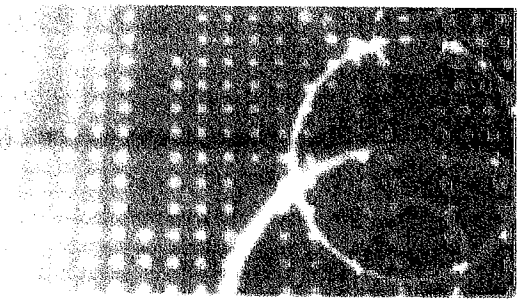

ASSESSMENT

King County District Court

Call Center Assessment / Recommendations

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Prepared By
Mike Hoagland
Call Center Consultant

Christopher L. Johnson
Director BPM/PMO

Contact Information:
P: 425.952.2574
F: 425.451.2728
CLJohnson@SolutionsIQ.com

www.SolutionsIQ.com

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Project Roster:

KCDC Working Team:

Donna Brunner, Director of Budget and New Development
Paul Byrum, Project Manager
Jane Fisher, Call Center Manager
Debbie Gladstone, Telecommunications Specialist
Cathy Grindle, Director of Court Technology
David Jones, Database Administrator
Gretchen Prindle, Telecommunications Specialist

KCDC Oversight Committee:

Tricia Crozier, Chief Administrative Officer
Judge Barbara Linde, Chief Presiding Judge

Background

King County District Court (KCDC) recognizes the need to upgrade its call center technology and improve operations in order to provide better service to King County Callers. In 2002, approximately 150 Clerks spent a portion of their workday answering incoming calls. During this time, the staff was reduced by 60 people, and incoming call volume became a challenge. As a result, in 2003 the Court replaced an old uniform call distribution (UCD) system with an automatic call distribution (ACD) system, and increased staff to 11 dedicated clerks in its call center to answer phones. Because of growing call volume, long wait times for Callers, staff shortages in the call center, and limitations with the current ACD system, 34% of the calls that come into the call center are not answered. The Court's current ACD is on the County's Centrex system, where the menu used is programmed on a CallXpress system from AVST Inc.

This study provides an evaluation of the existing systems and call center operations, and makes recommendations that will provide better service to King County Callers. As part of the evaluation, the study considers a number of different technology solutions; based on a variety of factors, *e.g.*, ease of use, project benefit, cost, etc. For example:

- Automatic call distribution (ACD) systems
- Reporting applications that provide summaries or dashboards, detailed reports, alerts from the data from an ACD system, and the ability to measure performance.
- Computer-Telephony-Integration (CTI)
- Speech recognition
- Foreign languages (*e.g,* Spanish). This would include speech recognition, as well as menus in a foreign language.
- Call recording
- Interactive voice response (IVR) system

Note: A glossary of terms is provided in Appendix C.

Executive Summary

The KCDC call center faces many challenges. Foremost among these challenges is the high Caller abandonment rate, *i.e.*, approximately one in three Callers "hang up" prior to receiving the information that they require. This issue, and others, caused King County Callers to express their frustration with the KCDC call center. As a result, this KCDC call center performance assessment program was initiated.

This assessment document provides a detailed analysis across a variety of call center metrics, and provides a basis for evaluating different call center enhancement options. The recommendations in this document will enable KCDC to improve the call abandonment problem, staff / management performance, public service, and operations reporting.

In order to evaluate the current state of the call center and create a set of recommendations, the engagement team:

- Analyzed existing KCDC documentation;
- Examined the current ACD configuration;
- Observed call center operations onsite;
- Considered potential solutions, *i.e.*, people, process, and technology;
- Identified and documented recommended solutions and approaches.

The recommendations are described in two categories. The first category contains recommendations where the intent is to provide immediate relief to the current situation, such as improving call center operations metrics and Caller satisfaction. The second category is focused on large-scale technology improvement initiatives that will make the KCDC call center a reflection of today's best call center practices. **While both sets of recommendations can be started concurrently, it is important that the operations recommendations be completed before implementation of the technology recommendations.**

The first recommendations are focused on providing immediate relief to King County Callers through improved call center operations:

- While the call center Clerks work to provide excellent customer service, the average handle time per call tends to be high. This should be mitigated through the creation of a training curriculum that will be used with new and existing staff to lower the "Average Handle Time" per call.
- Establish a set of metrics that will help to assess the efficiency of the call center staff as a team, and as individuals. These "dashboard reports" should provide information on a wide variety of metrics daily and monthly. This will allow KCDC call center management to quickly access how well they are serving their customers from both an IVR and ACD perspective.

- Update the current Auto Attendant menu so that the most sought after information is made available first, and the number of options is reduced in order to eliminate a Caller's confusion. These changes should result in more Callers being able to get the information they need without having to speak with a Clerk.

The second recommendation is to purchase a new Contact Center platform, which will give KCDC more flexibility in call routing and messaging, and also provide a better feature set which will increase customer satisfaction with the system, *e.g.,* music while on hold which indicates that the call is still in queue and hasn't simply been dropped. Through the purchase of a new Contact Center platform, maintenance of the system would also become easier for contact center administrative and technology staff as the software packages that are currently available are integrated "out of the box".

The two solutions fit within the current project budget.

Call Center Analysis

The effort to perform an analysis was focused on four major aspects of the call center: the Auto Attendant, Operations, Reporting, and Technology.

Auto Attendant

In reviewing the auto attendant several opportunities for potential improvement were observed:

1. "Self-help versus a Clerk": Currently, Callers are given the option of using the self-help menu versus sending them directly to the self-help menu first. The reason for this was stated to be customer complaints about the auto attendant menu. A potential solution to this problem would be to alter the order of options presented to Callers through the Auto Attendant. Figure 1 shows the auto attendant statistics for October and November of 2006, which reveals that the most popular options are 2, 5, and 1. If the options were re-arranged in descending order, 78.4% of calls could be correctly routed to provide Callers with the "right" information directly from the auto attendent's first three options. This simple solution would reduce direct calls to Clerks and also increase customer acceptance and satisfaction with the auto attendant.

Figure 1

Main Menu Stats	October	November	Total
Directions	1,473	1390	2,863
Fines, Collection and Fees Main	2,772	2619	5,391
Jail, Warrant or Suspend License Main	533	523	1,056
Civil, Small Claims, Domestic Violence, Anti-harassment or Name Change	379	355	734
Traffic Matters/Green Tickets Main	1,580	1623	3,203
Information on Criminal or Non traffic Main	192	197	389
Passport, Jury Duty and Weddings Main	435	431	866
Misc Main	41	61	102

2. "Press 1 to return to the main menu, or 2 to speak with a Clerk?": Figure 2, "Call Stats", shows that approximately 21% of Callers choose to use the self-help menu. According to the second half of Figure 2, "Self-help Stats", Callers who opt to use self-help seem to be getting what they need as it appears that 98% of calls are "handled". However, based on discussions with call center leadership and the Clerks, it would appear that this statistic is misleading. As the attendant does not provide Callers with an opportunity to speak with a Clerk after hearing information provided through the auto-attendant, it may be that Callers are simply hanging up and calling back. By making a change to the end of the auto-attendants process which provides the Caller with an opportunity to get more information or speak to a clerk, new metrics could be instituted that provide KCDC with a better view of customer satisfaction.

Figure 2

Call Stats	**October**		**November**	
Self-help Offered	36,443		35,814	
Transferred	28,088	77.10%	27,394	76.50%
Self-help	7,685	**21.10%**	7,643	**21.30%**
Website	670	1.80%	777	2.20%

Self-help Stats	**October**		**November**	
Offered	7685		7643	
Handled	7534	**98%**	7446	**97.4%**

3. "Too Many Options": Another auto attendant item reviewed was the number of options presented to Callers. At this time, a Caller must choose from nine options on the main menu. Studies have shown that people can only remember five options. Too many options can cause Callers to be confused and become frustrated. Additionally, when Callers are impatient, they tend to choose incorrect options, or worse, hang up and call back to speak directly with a Clerk who must now deal with a frustrated Caller. Figure 3 shows that the top 5 items Callers need information on are: directions to courthouses, how to pay fines, website information, green copy tickets, and how to get additional time to pay a fine. There are some items that are similar to each other like "mitigation" and "contested" that could be combined into one option. However, there are several options that do not get much use and should be deleted. Other ways to simplify the current menu and make it more user friendly might be to change the URL as it may be difficult for people to write it down correctly while they are listening, and it is our opinion that it is not very easy to remember. Also, Callers currently have to press an option to hear about the website. An alternative is to state a brief message "up front" about the website, so that more Callers become aware of it and can choose the website as a vehicle for basic information.

Figure 3

Auto Attendant Option	October	November	Total
Directions	1,473	1,390	2,863
Pay Fines	1,373	1,230	2,603
Website Info	670	777	1,447
Green Copy	718	683	1,401
Additional Time	633	644	1,277
Collections	508	436	944
Passports	405	389	794
Mitigation	298	362	660
Contested	272	332	604
Suspended License	292	297	589
Fee Schedule	211	233	444
Warrants	195	209	404
Information on Criminal or Non traffic Main	192	197	389
Small Claims	129	149	278
Suspension	138	91	229
Weddings	95	92	187
Probation	76	76	152
Misc. Main	41	61	102
Name Change	52	24	76
Anti-Harassment	38	28	66
Jail	46	17	63
Domestic Violence	30	29	59
Default Judgments	23	17	40
Civil Suit	15	24	39
Jury Duty	9	14	23
Writs of Garnishments	8	7	15
Civil Fee	3	3	6
Appeals	3	3	6

4. "Different Voices": The last item on the auto attendant is the messaging itself. During our testing of the auto attendant it is noticeable that at least 2 different voices were used during the recording of the attendant messages. Using different voices gives Callers the impression they are being transferred from system to system. This sometimes causes Callers to hang up or select the option to speak with a Clerk. When it comes to the auto attendant and ACD messaging, the same voice should be used throughout the Caller's interaction with the system.

Operations

In order to perform a thorough analysis of current operations, the engagement team reviewed existing documentation and performed an on-site analysis. The following observations were made:

1. "Average Handle Time" (AHT)": In reviewing historical call center reports, the average talk time was between two and three minutes. However, there was no mention of AHT. AHT is a measure of the total time it takes to handle a call which is not only "talk time" but subsequent activities associated with "wrapping up" a call, *e.g.,* updating Caller information. The first step was to look at the ACD reports and figure out what the approximate AHT was. Figure 4 shows the average AHT for eight Clerks. The AHT ranges from 3:45 minutes to as high as 6:00 minutes. The average AHT for the group was 4:19 minutes for that particular week. During the site visit, the AHT ranged from 1:48 minutes to as high as 6:04 minutes with an average somewhere around 3:45 minutes. During the monitoring process, it was observed that Clerks, who had an AHT of 2:00 minutes or below, took control of the call and very quickly provided the Caller with the information needed. As a result, Clerks who "took control" of the calls satisfied Callers' needs more quickly, resulting in the Clerks being able to handle a greater volume of calls. This is a great opportunity for immediate, low cost improvement.

Figure 4

Clerk	Talk+Wrap (seconds)	Total in (calls)	AHT
1	123,047	393	5:13
2	95,216	261	6:04
3	91,732	277	5:31
4	92,047	375	4:05
5	103,329	451	3:49
6	101,190	421	4:00
7	97,698	434	3:45
8	83,260	309	4:19
Total	**787,519**	**2921**	**4:19**

2. "Goals, Performance Management, and Training:" During the site visit it was discovered that the Clerks had a target of handling eighty calls a day. Listed below is an estimate on how this goal was determined. Also shown below is a suggested adjustment which would allow the KCDC call center to handle a greater number of Callers each day. The adjustment would require performance management and training for Clerks. The focus point of this model is Occupancy and the Average Handle Time (AHT) of calls. Occupancy is the amount of time spent by a Clerk during their working day speaking directly to Callers. Average Handle Time is the amount of time spent handling a Caller. Simply put, greater Occupancy and lower AHT means, "more time spent talking, to a greater number of Callers".

Factors:

ACD Login time:	7.5 hours (8:30 to 4:30, 30 min. lunch)
Breaks:	30 minutes
Misc. Time off the phones:	30 minutes
Actual Available time to take calls:	6.5 hours
AHT:	3 minutes:
Occupancy (Time Spent on call, talking to Callers):	60%

Calculations:

6.5 Hours at 60% Occupancy, with AHT of 3 minutes = 78 calls x (11) Clerks =

858 calls handled /day

Potential Adjustment:

If the Clerk's Occupancy can be raised, through training or other means of performance improvement, and the AHT is lowered it will make a significant difference in the number of calls that can be handled with the existing staff.

6.5 Hours at 70% Occupancy with AHT of 2 minutes = 136 calls x (11) Clerks =

1496 calls handled / day

Given the existing performance management program for the Clerks, it may be difficult to support whether or not the goals established for the Clerks are being met. The engagement team observed that there did not appear to be any real time "monitoring" of the Clerks, *e.g.*, ensuring they are on the phones answering calls when they are supposed to be, or verifying that they are following the break and lunch schedule. It is not clear if this is an issue. In most call centers if staff is not watched, they will tend to be less productive. It also appeared that ACD reporting was not reviewed on a daily basis to check on each Clerk's performance, nor did it appear that there was any type of Quality Assurance (QA) that supported performance

improvement initiatives for the Clerks. Quality Assurance programs are based on the idea of "continuous improvement". QA programs support management decisions by providing objective reports based on pre-defined metrics and a set of routine processes that measure organization effectiveness. This approach provides management with focused and objective information that supports decisions, such as additional resource requests, process changes, or individual performance improvement discussions. In this context, having a Quality Assurance program in place could help to identify those Clerks with high AHT. In turn, this will allow management to provide training to High AHT Clerks and Clerks that are not following procedures or best practices.

Finally, one minor observation was that when a Clerk transferred calls, no attempt was made to "hand off" the call. This does save time, but it causes Callers to have to repeat their reason for calling, their information, and is typically a major source of Caller frustration.

3. "Workforce Management:" A staffing forecast was run using a Workforce Management Model with the criteria shown below. The intent of this activity was to identify ideal staffing levels. Please note that this model is based on a goal of handling a call volume of 2,000 calls per day. Monday is typically the only day of the week with this level of call volume, so the numbers listed below may be high on average, but are sufficient to handle call volume "spikes". The Workforce Model extends the AHT model (Operations observation #2) by introducing an acceptable percentage level of call abandonment, which therefore dictates the total number of calls that need to be handled in a day in order to meet call volume targets. The model is also extended by introducing the Average Speed of Answer (ASA), which defines the amount of time that a Caller waits in Queue for a Clerk. Lower ASA typically reduces Caller abandonment rate as calls are serviced more quickly. A problem with this model is that the actual call abandonment is unknown, but is estimated to be 34% at a minimum. Therefore, in order to assess ideal headcounts, the team assumed an industry standard call abandonment rate of 5%. Based on the performance goals of the KCDC call center, the model below clearly suggests an increase in Clerk headcount. If nothing is done in terms of training (AHT remains at 5 minutes), process changes, or technology it will require staff to be tripled in order to meet a goal of 2000 goals at a 5% abandonment rate, with people waiting on the phone for an average of two minutes. If training is implemented to lower AHT, as suggested in Operations observation #2, it diminishes the headcount increase, but there will still be a requirement for a staff increase.

Calls per day:	2,000	
Average Speed of Answer (ASA):	30, 60 and 120 seconds	
Abandon rate:	5%	
AHT is 5 minutes		
ASA of 30 seconds:	Min of 33 Clerks	Max 38 Clerks
ASA of 60 seconds:	Min of 32 Clerks	Max 37 Clerks
ASA of 120 seconds:	Min of 32 Clerks	Max 37 Clerks
AHT reduced	3 minutes	
ASA of 30 seconds:	Min of 15 Clerks	Max 20 Clerks
ASA of 60 seconds:	Min of 13 Clerks	Max 18 Clerks
ASA of 120 seconds:	Min of 12 Clerks	Max 16 Clerks

4. "Callers Do Not Have Their Information": This issue affects the implementation of an effective IVR. Ticket and case numbers are alphanumeric and many common questions could be automated using an IVR. During side-by-side monitoring, the majority of the calls handled by the Clerks required them to locate the Caller's record. This was done with a Caller's ticket or case number, or first name and last name and date of birth. Approximately 70% did not have their case or ticket number, so the lookup was done via their first and last name. However, most Callers do not have their ticket/case number, so this potential solution is somewhat diminished. Supporting this assertion, the majority of the calls the Clerks handled during the site visit seemed to be centered on tickets and court appearances. Figure 5 shows the results of the Clerks keeping a tick sheet on the top eleven reasons why people call. Looking at these statistics as well as the stats for the auto attendant, it reinforces the recommendation to adjust the auto attendant's main menu to have options more focused on providing answers to the most commonly asked questions.

Figure 5 – "Tick Sheet" of Clerks recording the top eleven reasons why people call.

	Clerk Stats	
1	How to Respond to a Ticket	119
2	When is my Court Date	194
3	How to Continue a Court Date, Mostly Infractions	102
4	How to Take Care of FTAs Appearing on My Driving Record	66
5	Why did I Receive a Collection Notice	38
6	Has my Payment Been Received, if not When Will it be Processed	46
7	How do I Clear My Warrant	44
8	How do I File a Small Claim	33
9	Why did I Receive a Hearing Notice	4
10	Is Someone in Jail	14
11	Criminal Continuance	20

5. "The Lights are on, but we're not home": While this is a somewhat humorous observation title, it is not funny to those who are still in queue after the working hours of the call center. It was discovered that if a Caller enters the queue before close of business, they do not receive any indication if the center has closed and Clerks are no longer taking calls. In this situation, Callers may end up waiting for an extended period of time before hanging up. This scenario typically causes Callers a great deal of frustration. Ideally, if a Caller does enter the ACD queue prior to closing, they would be able to reach a Clerk. There are several options that could provide a better way to handle this situation, *e.g.*, using time based routing to move calls to an after hours message alerting people that the call center is closed, and keeping a Clerk engaged in the call center until the queue of Callers who contacted the call center prior to closing time is drained.

Reporting

Overall, even though metrics like AHT are not easily available, standard ACD reporting provides enough basic information. Metrics such as Calls Handled, Calls Abandoned, the Average Speed of Answer, and service level are tracked by the current ACD. Agent metrics such as calls handled, talk time, login time are also tracked. AHT calculations were done manually for this report, as it was unclear if there was a report that showed AHT. If this report does not currently exist, a customized report would be recommended.

Additional metrics and reporting requirements for the new call center system are described in Appendix B.

Technology

Currently the ACD setup is very basic. Calls come in on a few different DID numbers and are all routed to the auto attendant. Observations:

1. The ACD does not have features like Whispers Announcements or Intelligent Queuing. The Clerks would like to be able to see how many Callers are holding, and the context of the call. It was discovered that the current system is compatible with reader board companies like INOVA and Simon. These companies do provide applications that would allow the Clerks to see how many calls were on hold *e.g.,* Whispers could be used to make the interaction between Callers and Clerks more informed by informing the Clerks prior to the conversation the context of the conversation. Intelligent Queuing should focus on "what number" the Caller is in queue.

2. A new ACD would provide KCDC with more options; however KCDC is not currently using all of the options with the existing ACD. CTI (a screen pop of information on the Clerks computer) would make sense to have if the auto attendant was capturing data from the Caller, for example capturing ticket or case numbers from the Caller when they dial into the call center. Speech Recognition would enable KCC to have customers speak their ticket number, and from there the IVR could do a lookup, but this technology is very expensive. Voice Recognition software itself is relatively inexpensive, but the development and integration of varying grammars with an IVR is where the high cost comes in. The current IVR is compatible with Speech Recognition providers such as Nuance. When looking at new technology platforms, we believe that platforms which have ACD, IVR, Recording, Outbound, Chat, Email and CTI in one integrated package should be considered first.

3. "Am I still in Queue?" The biggest concern about the current ACD is that there is **no music on hold,** so Callers hear silence between delay announcements. Not hearing music gives the Caller the feeling that the call has been lost, so they hang up and call back. To help lower the amount of time Callers would hear silence, the queue announcement is played every 30 seconds. Callers do have a tendency to hang up if they hear "dead air"; this could be one of the reasons the abandon rate is so high. Hearing queue announcements every 30 seconds tends to raise frustration levels when having to wait for extended periods of time. The ideal situation would be to play one queue announcement after 30 seconds and then let the Caller hear music until they are answered. As long as Callers hear music, they know their call will eventually be answered.

Potential Solutions

The issues which must be addressed immediately are abandonment rates and Caller frustration. As call volumes continue to rise, Callers will increasingly take out their frustrations directly on the Clerks. In turn, Clerks feel stress and frustration that could lead to voluntary resignations and workforce performance management challenges.

The recommendations for potential solutions are in two categories. The first category contains recommendations where the intent is to provide immediate relief to the current situation, improving call center metrics, Caller satisfaction, and can be implemented at a low cost. The second category is focused on large-scale improvement initiatives that will make KCDC call center a reflection of today's best call center practices. Success with the first category of recommendations also positions the second category, more complex initiatives to have better adoption, customization, and support as they are launched, developed, and deployed. Both sets of recommendations can be started concurrently with the first category being completed prior to the implementation stage of the second category recommendations.

1. First category operations recommendations (not in order of priority or scheduling capability):
   - Staff Call Center Appropriately
   - Lower Average Handle Time (AHT)
   - Create Performance Management "Dashboards"
   - Revise the Auto Attendant Menu and Messaging
   - Modify the Auto Attendant to Allow Transfers
2. Second category technology recommendations:
   - Install a new IVR with Voice Recognition, and a new ACD

First Category Operations Recommendations:

- Deployment Cost is Low
- Speed of Implementation is Fast
- Clerk(s) Performance Increased
- Makes use of "New" (Unused) ACD/IVR Capabilities
- Introduces Dashboard Reports
- Establishes Strong Base for Growth

Increase Call Center Staffing and Lower Average Handle Time (AHT)

The main focus should be to try to lower the AHT for the entire group of Clerks, which would allow the current 11 Clerks to handle a higher percentage of the incoming calls. The staffing models shown in "Operations", observations 1, 2, and 3 suggest that with an Average Speed of Answer at 120 seconds, Average Handle Time of 3 minutes, and an abandon rate of 5% - a minimum of 12 to 16 Clerks would be needed. This represents an increase of 1 to 5 Clerks. In addition to hiring additional staff, achieving this goal would require KCDC to bring in a consultant to help train call center management and Clerks on techniques to improve AHT. Maintaining the AHT level would require someone to monitor the statistics on a daily basis and do Quality Monitoring sessions with the Clerks on at least a bi-weekly basis to give them additional coaching on ways to improve on their AHT (see "Operations" section 2, and "Reporting").

Create Performance Management "Dashboards

"Dashboard" reports should be created that allow KCDC Management to review the level of customer service they are providing and which report on areas that need improvement. In order for these reports to be created, the first step is to create a data import process of the IVR statistics. This process should place the data in a data staging area so that a report could easily be generated using an off the shelf report writer package. For example, the first report would reflect IVR statistics. It would show number of calls offered, handled, abandoned and transferred along with showing totals for each option. The second report would reflect Clerk metrics. Those metrics should be Login Time, Call Handled, Average Talk time, Average Handle Time, Outbound calls, Average Out time, Total Make Busy Time and Occupency. The last report would show Queue statistics. The report should show the following metrics: Average Staff, Calls Offered, Calls Handled, Average Speed of Answer, Abandoned Calls, Abandon Percentage, Service Level and Occupancy. These reports should show daily and month to date statistics. The daily ACD Clerk reports should be reviewed on a daily basis to ensure Clerks are meeting goals as well as providing "low stress" or "passive" monitoring of their activities throughout the day.

Revise the Auto Attendant Menu, Messaging, and Allow Transfers

This recommendation suggests making changes to the auto attendant menu (See "Auto-Attendant" Sections 1, 2, 3, 4) which would make the most sought after information available first. Once this is completed then all Callers should be routed toward the self-help menu. This should create an environment where higher percentages of Callers receive the information they need without having to

speak with a Clerk. This approach would require an ongoing task, as different information may be more sought after over time, and would require a change in the way the call center is managed to more of a metric driven "dashboard environment". In order to reduce Caller frustration if they do not feel they have received the information that they seek, provide them with the ability to transfer to a Clerk.

Concerns Regarding the Recommendations:

"Training for Clerks to assist them in their AHT": The Clerks in the call center perform well in spite of a lack of formal call center training. Specialized training in call handling techniques will help them lower AHT and improve client satisfaction. KCDC needs to be aware that substantial changes in a work environment will have an impact on the workforce. Management should be prepared with a strategy to mitigate potential impacts.

A second concern is that changes to the Auto Attendant menu typically cause complaints from callers but these complaints are usually short term.

Timeline for Recommended Solution (Duration = total effort, not schedule)

Task	Duration
Recommendation 1	
Lower AHT	**10 Days**
Hire Consultant	
Consultant Monitors calls	
Training Plan	**5 Days**
Initial Plan	
Ongoing Plan	
Training	**15 Days**
Management Training	
Clerk Coaching	
Follow up coaching	
Auto Attendant Changes	**13 Days**
Program Auto Attendant	
Record new scripting	
Test	
Reporting	**7 Days**
Report Design	
Report Development	

Cost of Recommended Solution
Consultant: $35,000
Auto Attendant Changes: $5,000
Reporting: $15,000
Project Total: $55,000

NOTE: Costs associated with Staff increases are not estimated.

Second Category Technology Recommendations

- **Music on Hold**
- **More Routing Options**
- **CTI, Call Recording, and IVR**
- **Enhanced ACD Reporting**
- **Ability to Handle other Call Center Tools such as Chat, Email, and Fax**
- **Voice Recognition***
- **Ergonomic Equipment for Clerks***

The second recommendation would be to purchase a new Contact Center platform. If additional funding can be made available, we would suggest the use of voice recognition software and ergonomic equipment that would enhance the Clerks job experience, improving performance and diminishing stress. Even though a new ACD will not impact the abandon rate or wait times, it will provide KCDC with more options around routing and call flow as well as features like CTI, Intelligent Queuing, and enhanced reporting. Bringing in a new IVR with a Voice Recognition product, will allow for the automation of more calls as well as the capture of key information that could be passed to the Clerk to support the reduction of AHT.

Currently there are products on the market that have all of these capabilities ACD, IVR, Outbound, Email, Chat, Call Recording (QA), and CTI in one integrated package. This would allow KCDC to introduce new or enhanced technologies that are already integrated, saving on many systems integrations costs. Our experience is that combining separate technologies, as opposed to purchasing a pre-integrated software suite, can often result in integration costs that cost more than the entire system.

Additionally, when the State brings in a new case management system, KCDC should ensure APIs are created on the Clerks desktop application so that data can be passed from the Contact Center platform directly to the desktop application. This will prevent the Clerk from having to copy and paste information from the basic screen pop into their application.

Here is a list of just a few companies that provide this type of product:

1. Aspect Software
2. I3
3. Cosmocom
4. Genesys
5. Avaya

As far as voice recognition, most vendors have to rely on a third party to provide this type of functionality with their IVR. The biggest name out there is Nuance. In the RFP, the Contact Center vendors will need

to be required to provide this functionality with their solution even if it means partnering. Appendix B has a list of requirements for this new system.

Impact of Recommended Solution:

Bringing in a new Contact Center platform always presents challenges and risks. Typically, the biggest risk an organization faces is switching its traffic over from the old system to the new system and discovering service affecting issues that did not appear during testing. The chances of this happening are slim but real. A detailed recovery plan would need to be created just in case a situation like that occurred. Another concern would be having the IVR integrate with the back end system. Knowing that there are plans to bring in a new system, KCDC would want to consider holding off integrating the IVR or else they could end up paying for development costs twice. Management and IT would need to make time to attend some offsite training courses. Offsite training is always preferable as there are fewer distractions. Onsite training is recommended for the Clerks. The other impact of bringing in a new system is support. The last impact could be to IT since the new Contact Center platforms are server based and for which KCDC would be responsible for the hardware, backups and the operating system on all servers.

Finally, it is important that KCDC executives and sponsors understand that the second category technology recommendations alone will not address the issues of the high abandon percentage or the long wait times. The first category operations recommendations must be implemented in parallel with the second category technology recommendations in order for the new call center system to be effective and successful - in terms of improving Caller satisfaction with the call center.

Timeline for Recommended Solution (duration in terms of actual work, not the reflective of KCDC calendar scheduling and process requirements):

Task	Description	Duration
RFP created	Create a formal RFP document which contains KCDC overview, scope/objectives, project time line, etc., and guidelines for response	14 Days
Vendor List created	Identify Vendors, establish contact/relationship	5 Days
RFP Sent out	Send RFP to Vendors who have indicated their desire to respond	1 Day
RFP Responses Received	If vendors ask questions, responses should be sent to all vendors	30 Days
RFP Reviewed and Scored	Each RFP should be reviewed by the RFP team and scored based on a set of metrics with weight given to the most desired feature and given an overall score	15 Days
Schedule Demonstrations	Contact the top 3 vendors and schedule onsite demonstrations based on hypothetical scenarios that the software would be expected to support.	21 Days

Vendor Notification	This decision should be based upon the RFP score and the onsite demonstrations	5 Days
PO Process	This will give KCDC 21 business days to get purchased orders created for the Contact Center vendor and any additional hardware that KCDC needs to procure	21 Days
Server Procurement	The Contact Center vendor will (typically) require KCDC to purchase their servers from companies like Dell or HP	21 Days
ACD Procurement	This is the amount of time the vendor will probably need to get the software shipped out and an installation date set	45 Days
ACD Installation	Average Installation time (based on like sized system installation experiences)	10 Days

Cost of Recommended Solution

Selected Product License Sizing

Supervisors:	2	Allows for 2 workstations to be setup to perform system administration tasks, real time monitoring, and reporting functions
Inbound Licenses:	20	Allows for 20 concurrent Clerks to be logged on to the system
T-1s (Inbound lines):	2	Two T-1s would allow for a maximum of 46 concurrent calls

ACD/IVR

Contact Center:	$150,000	Pricing includes all software and any vendor supplied hardware.
Professional Services:	$125,000	IVR ("touch tone") and CTI ("screen pop") programming, and reporting.
Training:	$20,000	Allows for 3 days of onsite agent training and 3 people to attend offsite system admin and supervisor training.
Annual Maintenance:	$30,000	Vendor support Monday through Friday, 8am to 5pm PDT onsite, and 24 hour telephone support.
Server Hardware:	$30,000	This covers hardware which is typically not supplied by the vendor.

Total: **$355,000**

(*) The following recommendations were considered, and are beneficial. For example, purchasing furniture that is ergonomically constructed to support Clerk's performing call center operations may improve Clerk job performance as well as making a positive impact on morale. Clerks in the call center sit at their desks for up to three hours at a time taking calls. In other locations Clerks are up and about in the course of completing their daily tasks. Therefore, having ergonomically correct furniture and equipment in the call center may be an important consideration for KCDC. However, Voice Recognition and Ergonomics were not considered to be critical to the successful improvement of the KCDC call center operation. As such, they are listed as long term recommendations, but not considered to be within the budget estimation for the KCDC call center upgrade during 2007.

Voice Recognition

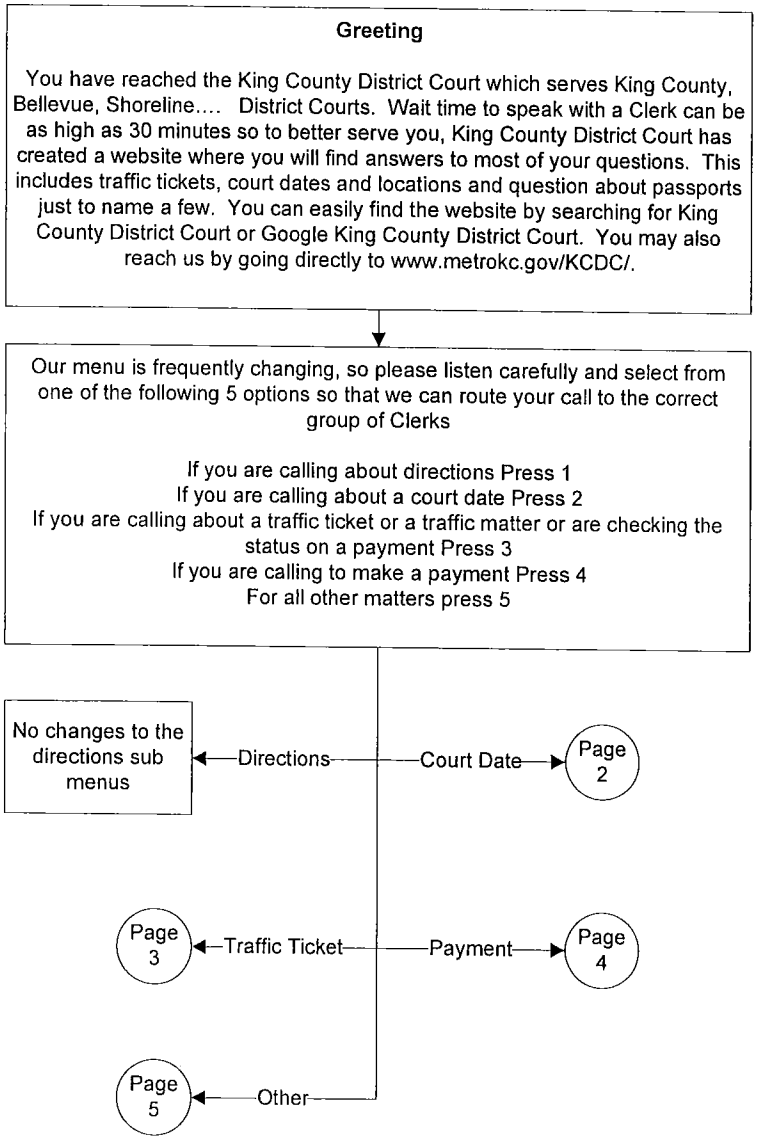
Voice Recognition Software:	$48,000
Voice Recognition Setup:	$200,000 and up

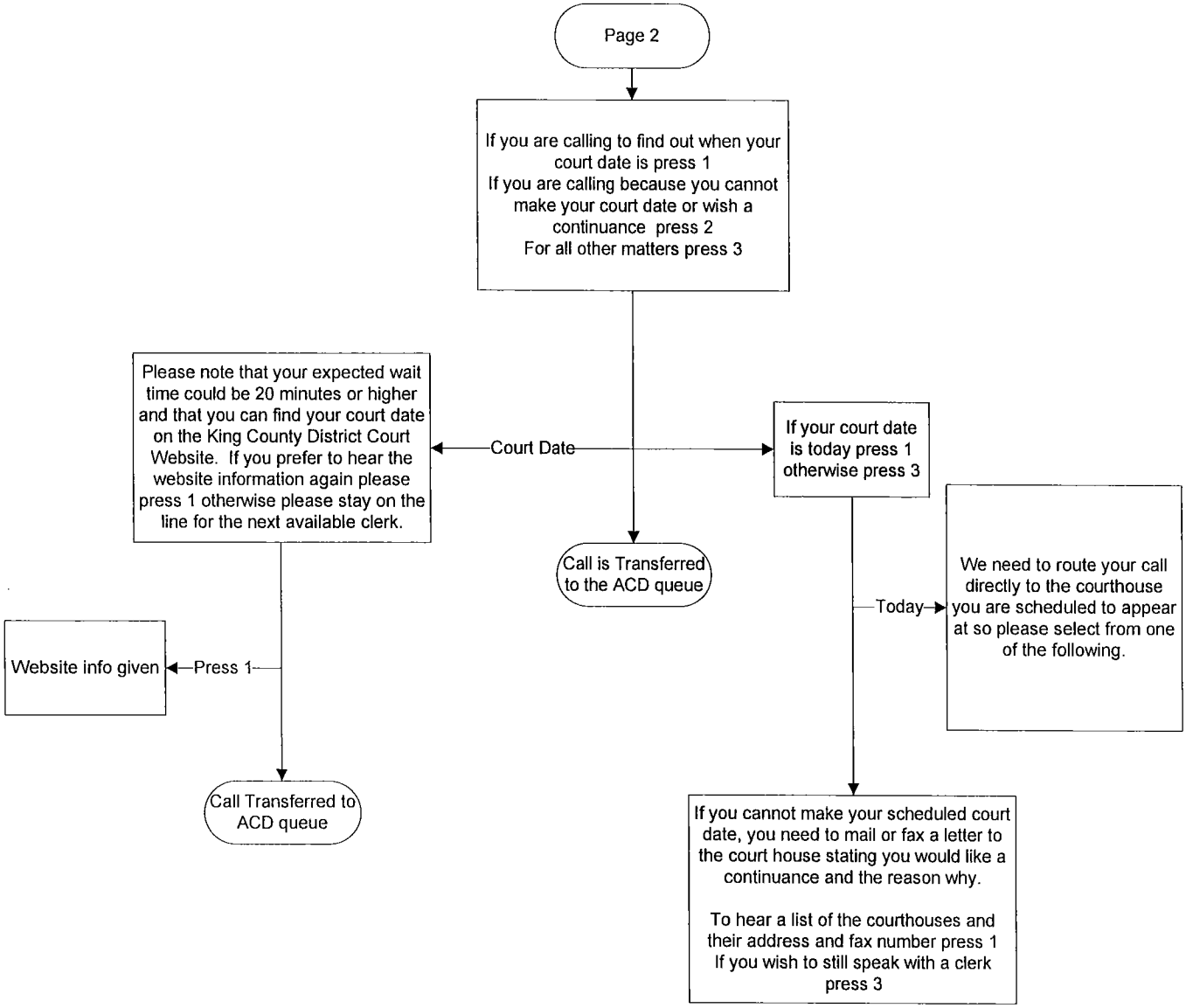
Ergonomics

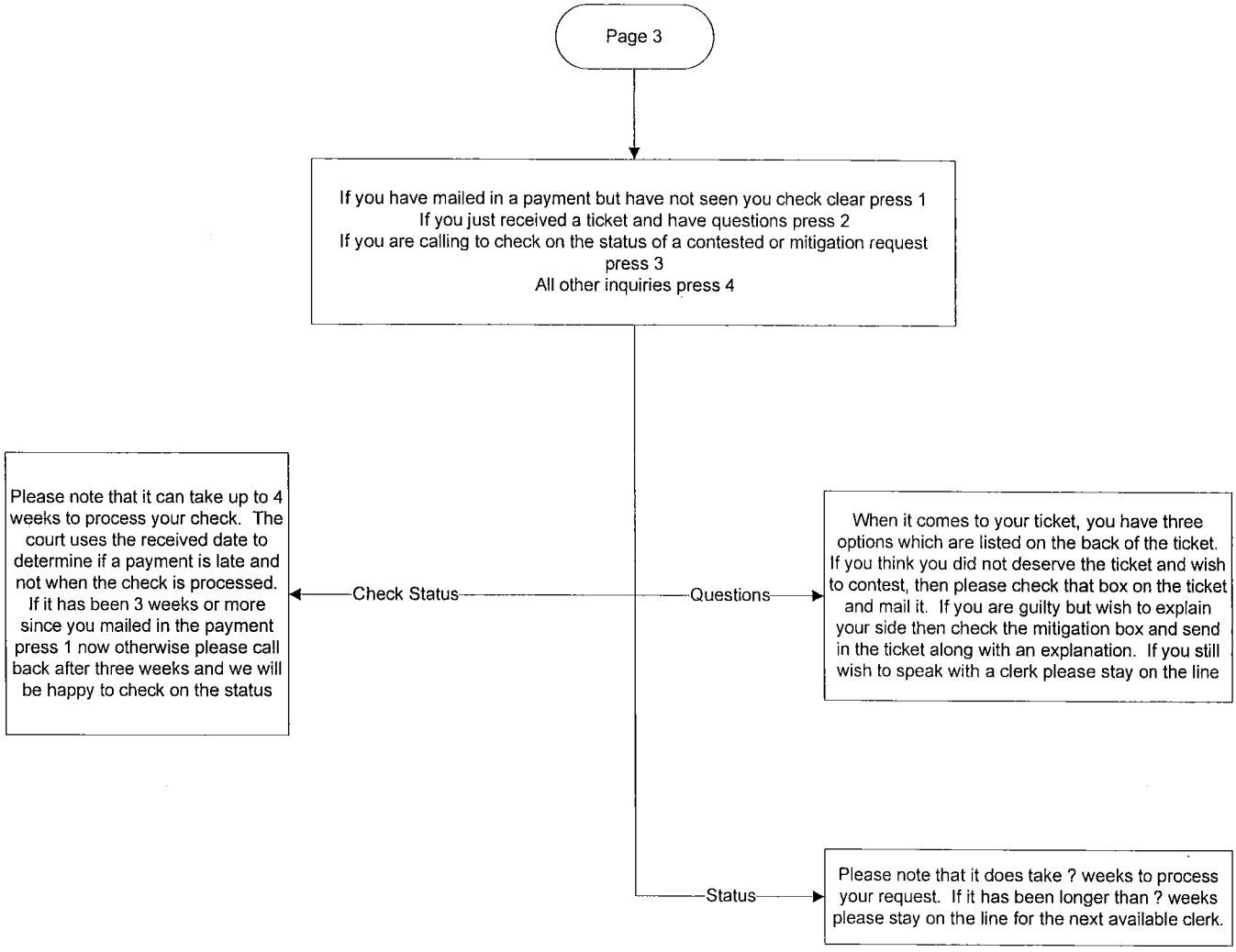
2 Flat Screeen Computer Monitors:	$1000 and up
New / Improved headsets:	$350 and up
Ergonomic Furniture:	Varies widely based on equipment selected

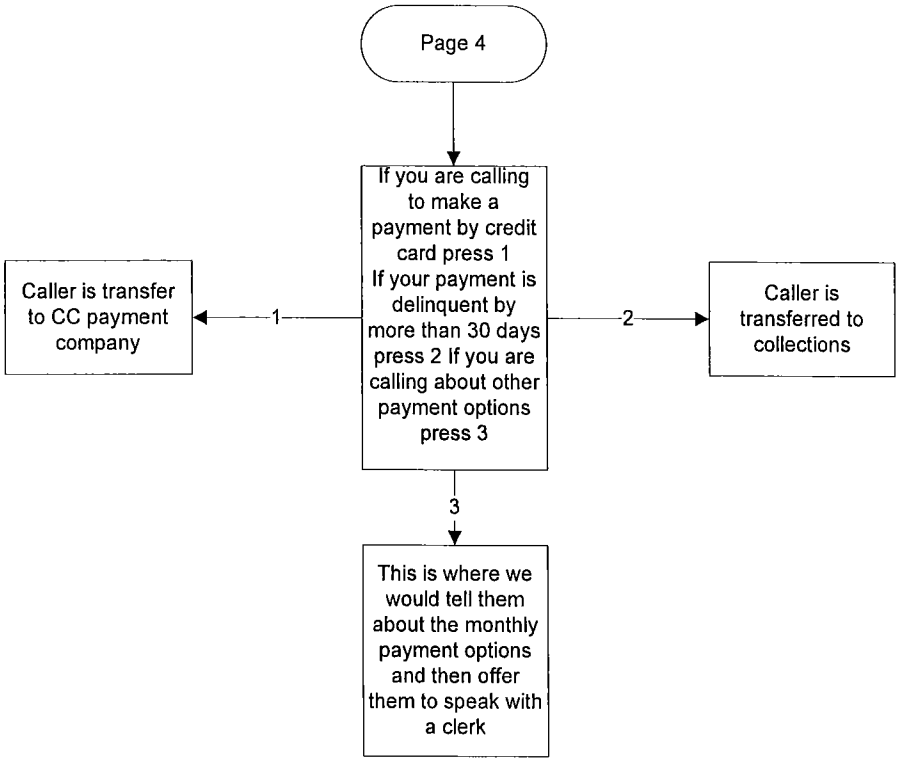
Appendices

Appendix A




Page 2
If you are calling to find out when your court date is press 1
If you are calling because you cannot make your court date or wish a continuance press 2
For all other matters press 3
Please note that your expected wait time could be 20 minutes or higher and that you can find your court date on the King County District Court Website. If you prefer to hear the website information again please press 1 otherwise please stay on the line for the next available clerk.
Court Date
If your court date is today press 1 otherwise press 3
Call is Transferred to the ACD queue
Website info given
Press 1
Call Transferred to ACD queue
Today
We need to route your call directly to the courthouse you are scheduled to appear at so please select from one of the following.
If you cannot make your scheduled court date, you need to mail or fax a letter to the court house stating you would like a continuance and the reason why.
To hear a list of the courthouses and their address and fax number press 1
If you wish to still speak with a clerk press 3


Page 3
If you have mailed in a payment but have not seen you check clear press 1
If you just received a ticket and have questions press 2
If you are calling to check on the status of a contested or mitigation request press 3
All other inquiries press 4
Please note that it can take up to 4 weeks to process your check. The court uses the received date to determine if a payment is late and not when the check is processed. If it has been 3 weeks or more since you mailed in the payment press 1 now otherwise please call back after three weeks and we will be happy to check on the status
Check Status
Questions
When it comes to your ticket, you have three options which are listed on the back of the ticket. If you think you did not deserve the ticket and wish to contest, then please check that box on the ticket and mail it. If you are guilty but wish to explain your side then check the mitigation box and send in the ticket along with an explanation. If you still wish to speak with a clerk please stay on the line
Status
Please note that it does take ? weeks to process your request. If it has been longer than ? weeks please stay on the line for the next available clerk.


Page 4
If you are calling to make a payment by credit card press 1 If your payment is delinquent by more than 30 days press 2 If you are calling about other payment options press 3
1
Caller is transfer to CC payment company
2
Caller is transferred to collections
3
This is where we would tell them about the monthly payment options and then offer them to speak with a clerk

Appendix B

Contact Center platform requirements

1. The system needs to be able to identify to the DID number dialed by the Caller for the Clerk, even if the Caller is routed to the IVR first.

2. The system needs to be able to limit the number of calls in queue.

3. The system must allow Callers in queue or on hold to hear music while they wait.

4. The system must provide the ability to do conditional routing.

5. The system must provide the ability to play delay announcements.

6. The system must allow the user to be able to determine when and which delay announcements are heard.

7. The system must provide the ability to let Callers know what the expected wait time is, or what place in line they are. Also, if a Caller elects to hang up after hearing the message, this abandoned call must not count as a call abandoned for the main queue.

8. The system must allow for skills based routing and system group based routing.

9. The system must allow for time of day routing.

10. If Callers are in queue when the KCDC call center closes, they need to hear a message stating the center has now closed. The system needs to provide this ability or recommend another method for end of day Caller handling.

11. The system must allow management to monitor by extension and queue.

12. The system must allow for remote monitoring.

13. The system must have the capability to have Clerks located at remote locations or work from home.

14. The system must allow for the following metrics to be viewed real-time: Calls offered, Calls Abandoned, ASA, Calls in Queue, Long Call Holding, Service Level, Number of Clerks logged in, and Clerks on Calls.

15. The system must allow management to be able to view a real time display that shows all the Clerks that are logged in by name, their current ACD status and what their statistics are for the current day.

16. The system must have the capability to have Clerks input "Not Ready" reason codes.

17. The system must have the capability to have Clerks enter in call disposition codes.

18. The system must allow for three digits or less speed dials.

19. The system must be able to provide the ability to allow Clerks to see how many calls are holding and the longest wait time or interface with a 3rd party provider that can provide this functionality.

20. The system must be able to provide simple screen pop up messages and information to the Clerk's desktop.

21. The system must have the ability to pass data to the Clerk's desktop application.

22. The system must be able to pass information entered into the IVR out to the Clerk's desktop. This needs to be flexible so that the user can easily change what data is passed from the IVR to the agent desktop.

23. The system must allow the user to set service level on a per queue basis.

24. The IVR portion of the system must be able to access the following databases, SQL, DB2/2 and Oracle.

25. The IVR must be able to access 3270/5250 screens to grab customer information.

26. The IVR must provide voice recognition/text to speech abilities or integrate with a 3rd party. KCDC may need the IVR to capture tickets numbers which are alpha numeric.

27. The IVR transaction must be able to be recorded.

28. The IVR must be able to execute database queries and stored procedures.

29. The IVR must be able to execute DLL/EXE files.

30. It would be nice if the system allowed Callers to use the IVR for self-help but not lose their place in queue.

31. The IVR must be user friendly enough to allow technical people who are not programmers to make changes or even develop applications.

32. The system must allow for reports to be scheduled every 30 minutes and daily and allow options when it comes to selecting the destination. The destination being a network printer, network drive/folder or emailed.

33. The system must allow for report customization.

34. The system reporting data must be accessible via ODBC.

35. The system must allow for Clerk's conversations to be recorded. This could be done via a schedule or a record now option.

36. The system must allow Clerks to push a button and have their conversation recorded.

37. The system must be able to report on the following: Average Staffed, Calls offered, Calls Abandon, ASA, Service Level, average delay in queue and occupancy. This needs to be able to be done on a daily, weekly and monthly basis.

38. The system must be able to report on the following Clerk metrics: Login Time, Calls handled, Average Talk Time, Average Handle Time, Number of Out calls, Not Ready time and Occupancy. This needs to able to be done on a daily, weekly and monthly basis.

39. The system should allow for thresholds to be set up on Real Time Displays so when thresholds are not being met, the displays changes color allowing management to easily see when the queues are building up.

40. The system must be able to report showing each time a Clerk went into Not Ready, the duration of each time and the reason that was selected.

41. The system must be able to report on disposition codes entered by the Clerks.

42. The system must provide a way to report on how many times each incoming DID were dialed.

Appendix C

Glossary of Terms

Abandonment Rate: the percentage of Callers, who have been routed to an ACD queue, and are not answered by a Clerk, *i.e.*, the Caller "hangs up".

Auto Attendant: A software program that provides a computer driven menu which allows Callers to navigate to the appropriate Clerk queue in a call center

Automatic Call Distribution (ACD): an ACD determines the reason why a Caller has contacted the call center, as opposed to a specific person, and then routes the inbound calls to a queue serviced by a group or an individual.

Average Handle Time (AHT): is a combination of "talk time" and "wrap time", where the sum of this time represents the total measure of time spent per Caller transaction.

Average Speed of Answer (ASA): the average amount of time it takes for an inbound Caller once entered into an ACD queue, to reach a Clerk.

Call Recording: the ability to record actual conversations between Clerks and Callers. These recordings are typically used for "Quality Assurance" continuous improvement programs.

Conditional Routing: allows call center programmers to make changes to the way a call is handle based on pre-defined criteria.

Computer Telephony Integration (CTI): is software that provides a means to capture information from an IVR or ACD, and then "pop up" a screen on a Clerk's desktop. The information can also be transferred into other programs that the Clerk uses to support the Caller's needs.

Delay Announcements: Messages that are played when wait queues reach a pre-defined state, or if a Caller has been on hold for a pre-specified amount of time.

Direct Inward Dial (DID): a 10 digit local number that is assigned to a specific extension, allowing Callers to (potentially) bypass an ACD or IVR and be routed into a specific queue, person, or fax machine.

Interactive (or Intelligent) Voice Response (IVR): a computer program that interacts directly with the Caller to help the Caller navigate to the right Clerk based on their need. It is an automated, menu driven, "touch tone" system, that can also be used to provide self-service information.

Occupancy: The percentage of time that a Clerk spends talking to someone on the phone versus their workday, *e.g.*, a combined total of 4 hours talking directly to Callers against an eight hour workday is 50% occupancy.

Skills Based Routing: Call types that are assigned to an individual Clerk based on the Clerk's skill. The ACD then routes calls of this nature to the next available Clerk with this skill.

System Group Based Routing: Activities that are assigned to a group of Clerks, which they have the ability to handle. The ACD then routes calls of this nature to the next available Clerk with this skill in the group.

Time of Day Routing: Based on the time of day, calls may be routed to different queue. In the case of KCDC, calls which occur after 4:30 may be routed to a queue which announces that the call center is no longer taking calls.

Universal Resource Locator (URL): in the context of this document, a website address.