


# Memorandum



**Date:** June 12, 2017

**To:** Alex Munoz, Director  
Animal Services Department

**From:** Jennifer Moon, Director   
Office of Management and Budget

**Subject:** Animal Services Department Staffing Analysis and Business Process Review

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At your request, the Office of Management and Budget's (OMB) Management Planning & Performance Analysis Division (MPPA) conducted a staffing analysis and business process review of the Animal Services Department (ASD) Kennel Operations and Veterinary Clinic divisions. The attached report summarizes our findings and recommendations.

I would like to thank your staff for their cooperation throughout this project. Please feel free to contact me if you wish to discuss these findings or recommendations further.

Attachment

c: Alina T. Hudak, Deputy Mayor

**MIAMI-DADE COUNTY  
OFFICE OF MANAGEMENT AND BUDGET**

**ANIMAL SERVICES DEPARTMENT STAFFING ANALYSIS AND BUSINESS PROCESS REVIEW**

Executive Summary

The Office of Management and Budget (OMB) conducted a staffing analysis and business process review of the Animal Services Department (ASD) Kennel Operations and Veterinary Clinic divisions. A key component of this analysis was a review of staffing levels for two classifications: Animal Care Specialist and Veterinary Technician. Together, these positions accounted for 73% of the overtime worked by ASD employees between August and November 2016. In 2017, OMB approved the addition of 22 Animal Care Specialist full time positions and six Veterinary Technician full time positions in order to improve services and reduce overtime and the use of contractual temporary employees.

OMB's key recommendations include:

- Monitor the impact of the additional Animal Care Specialist positions on kennel operations, particularly at the beginning and end of the day, as well as any impacts on animal health, safety, and/or customer satisfaction over the coming year before determining whether additional resources are required. Should additional resources be needed, create part time positions to fill the gaps in the morning and late in the day. Staggering employee break schedules may also provide greater coverage throughout the day.
- Work with the Human Resources Department to revisit the minimum qualifications for the Animal Care Specialist position and potentially eliminate the requirement for six months of animal care experience. As an alternative, establish an animal care certification that employees would be required to achieve within a certain time frame. Additionally, increasing the number of lead workers could help in training of newly hired Animal Care Specialists and possibly improve staff retention.
- Monitor the impact of the additional Veterinary Technician positions on clinic operations and animal health over the coming year before determining whether additional resources are required.
- Develop and track performance measures related to animal health, and report average length of stay and shelter cat and dog population on the departmental scorecard. Additionally, consider developing measures to track shelter safety and customer satisfaction.

Additional recommendations include:

- Treat the daily sanitizing of cat kennels and colony rooms as a lower priority, particularly on days with staffing shortages.
- Give a high priority to the laundry coordinator post on short staffed days, and consider the feasibility of outsourcing the laundry function.
- Reassign Animal Care Specialists to other tasks only during midday, when the morning and afternoon shifts overlap; discontinue the practice of assigning Animal Control Specialists as back up assistance to the receiving counter due to their inability to handle monetary transactions
- Review the capability and use of ASD's Chameleon software to assist clinical staff in managing the delivery of medical care to shelter pets.
- At the Homestead spay and neuter clinic:

- Due to a significant number of “no-shows,” pilot the scheduling of an increased number of surgery appointments daily and monitor the impact on service levels and overtime.
- Pilot an alternative appointment scheduling approach (either multiple appointment times or a window of time for arrival) to reduce crowding at the small facility.
- Update the ASD web page regarding spay and neuter surgery to include information regarding the Homestead clinic.
- If possible, modify the facility layout to allow for a separate exit.
- Modify the report provided to clinic staff at the beginning of the day to include information on pet size and sex.

OMB is available to respond to questions regarding this study and to provide technical assistance in developing and tracking performance measures.

#### Background and Methodology:

In June 2016, Miami-Dade County’s Animal Services Department (ASD) opened its new Pet Adoption and Protection Center in Doral. The new shelter is twice the size of the previous facility and incorporates numerous improvements for customers and for animal welfare. For example, dogs and cats are now housed in air conditioned space thanks to improved HVAC systems. Pets are housed in multiple rooms (known as pods in ASD parlance), reducing the risk of widespread disease outbreaks. There are also separate rooms for customers to interact with potential pet adoptees. The shelter also has dedicated play areas to promote animal health. These features create staffing needs in excess of staffing levels at the previous shelter.

In order to accommodate the increased size, capacity and variety of services offered in the facility, staffing levels have increased. Of note, an additional 20 Animal Care Specialists were included in the FY 2016-17 Adopted Budget, increasing the total from 37 to 57. Despite increases in staff, however, the Department has continued to rely on high levels of overtime and temporary employees have been utilized to ensure coverage.

Consequently, ASD requested that OMB perform a staffing analysis and business process review of the Kennel Operations and Veterinary Clinic divisions. To complete this project, OMB:

- Interviewed key staff and reviewed existing procedures and processes to develop an understanding of the major objectives, responsibilities and tasks in the selected work areas
- Accompanied Animal Care Specialists and Veterinary Technicians throughout several shifts on the job (in the shelter and in off-site facilities) to observe typical activities
- Analyzed employee time data and schedules
- Used lean tools such as value stream mapping and calculated takt times, cycle times and lead times to analyze selected processes and determine minimum staffing requirements
- Reviewed workload, staff activities and departmental performance measures with respect to business objectives
- Conducted benchmarking of similar agencies
- Reviewed literature on best practices in animal shelter operations and performance measurement

In conducting its staffing analysis, OMB reviewed in particular detail two classifications, at the request of ASD: Animal Care Specialist and Veterinary Technician. Together, these positions accounted for 73% of the overtime worked by ASD employees between August and November 2016.

The Animal Care Specialist is responsible for the care and maintenance of kennel animals, as well as customer service to shelter visitors. Most of these employees are assigned to specific pods. A large portion of the Animal Care Specialist's responsibility entails ensuring the cages are sanitized and pets are fed prior to the opening of the shelter for adoptions. Thereafter, their main responsibility shifts to maintaining a clean and safe environment for the pets and visitors. This includes sick or injured pets, who are housed in separate rooms, as well as healthy pets on the adoption floor. Animal Care Specialists also help with the movement of pets (such as bringing surrendered pets to the kennel), and provide enrichment activities such as dog walking on a daily basis. Additionally, some Animal Care Specialists are assigned to support functions such as coordination of dog walking or laundry of animal linens, or to other locations such as PetSmart or the Medley facility for quarantined animals.

Animal Care Specialists work one of two shifts, from 6:30 a.m. to 3:00 p.m. and from 10:30 a.m. to 7:00 p.m. The shelter is open to the public for adoption and lost and found from 10:00 a.m. to 6:30 p.m. on weekdays and from 10:00 a.m. to 4:00 p.m. on weekends. (General facility hours are from 10:00 a.m. to 7:00 p.m. on weekdays and from 8:00 a.m. to 5:00 p.m. on weekends.)

The Veterinary Technician, under the guidance of a veterinarian, is responsible for the medical care of the kennel animals, as well as the medical assistance during the spaying or neutering surgery. The Veterinary Technicians care for the kennel animals throughout the day by monitoring injured/sick animals that have been separated from the general population of kennel animals, providing prescriptive medicines on a schedule, and responding to animal emergency walk-ins for medical attention.

Most Veterinary Technicians work either a 7:00 a.m. to 3:30 p.m. or 10:30 a.m. to 7:00 p.m. shift.

OMB has also been helping ASD obtain consulting services through the County's Management Advisory Services (MACS) Pool to review many of its Standard Operating Procedures (SOPs). As of May 2017, the solicitation was under review by ASD and the County Attorney's Office. It is possible that such a consulting engagement may result in recommendations that impact ASD staffing levels.

### Time and Leave Data

OMB performed an in-depth analysis of time and leave usage for all ASD classifications; the time period reviewed was from August to November 2016. The results of this analysis are provided in the following attachments:

- Attachment A shows regular time and overtime worked, as well as leave hours used, for all ASD classifications, broken out by day of the week. Classifications identified by ASD as being of particular interest are highlighted. The daily leave usage data may assist ASD in developing daily employee schedules to ensure key posts are covered. However, it should be noted that this data excludes hours worked by temporary employees. Of note, Attachment A calculates the average rate of employee leave (for any reason) for each position. On average, *Animal Care Specialists were on leave 15% of the time, while Veterinary Technicians were on leave 22% of the time.*
- Attachment B shows the average daily number of FTEs, inclusive of overtime and temporary employees and inclusive of all assignments and locations, working in the Animal Care Specialist and Veterinary Technician classifications. Attachment B also determines the number of

positions that would be required to accomplish the same level of work effort (assuming no change in business processes) while providing for seven day a week coverage, including coverage for employee leave, with no overtime and no use of temporary employees. The analysis showed that, on average, the equivalent of 45 Animal Care Specialists (spread over two shifts) and 16 Veterinary Technicians worked each day. Additionally, the analysis showed that *73 Animal Care Specialist positions and 29 Veterinary Technician positions would be required to achieve this same level of work without overtime or the use of temps.*

Notwithstanding the analysis described above, OMB recognizes that some small level of overtime will always be unavoidable due to natural variations in workload, employee leave patterns, special events and emergencies.

#### Lean Staffing Analysis of Kennel Operations

As previously mentioned, a major activity of the Animal Care Specialists is the cleaning and sanitizing of animal kennels prior to the shelter opening time at 10:00 a.m. Employees are currently scheduled to start this process at 7:00 a.m. (feeding is done at the start of the morning shift between 6:30 and 7:00).

Attachment C provides the results of OMB's analysis of this process using Lean tools and techniques. OMB:

- Identified the major steps of the cleaning process
- Conducted observations to measure the time required for each step, inclusive of required disinfecting time
- Calculated the process takt time or "pace" required to clean all of the kennels within the required time frame
- Based on the overall cage cleaning cycle time and the takt time, determined the minimum number of staff needed. This included variations depending on the number of kennels being cleaned simultaneously.

The analysis assumes an animal population of 304 large dogs, 101 small to medium dogs, and 229 cats, based on actual shelter population statistics provided by ASD for June 2016 through January 2017. The analysis also assumes that staff can clean two large dog kennels, four small and medium dog kennels, and four cat kennels simultaneously. In summary, the analysis showed that 24 Animal Care Specialists are required on a daily basis to clean all kennels before 10:00 a.m. This is consistent with the finding described above that an average of 45 Animal Care Specialist FTEs worked each day between August and November 2016, or an average of 22.5 FTEs per shift.

According to the American Humane Association, cat kennels and cat colony rooms may be spot cleaned daily. Cat kennels should be completely cleaned and sanitized when the cat leaves and cat colonies should be completely cleaned and sanitized weekly. (American Humane Association, 2010) Therefore, ***it is recommended that sanitizing cat kennels and colony rooms daily be a lower priority, particularly on days with staffing shortages.***

Attachment C is also being provided to ASD as an Excel file, so that ASD staff can manipulate the various assumptions such as available cleaning time or number of kennels. The spreadsheet could easily be customized for a specific pod or group of pods. OMB is available to answer any questions regarding the use of the spreadsheet.

OMB conducted a similar analysis of dog walking, which is provided in Attachment D. Medium and large dogs are walked at least every other day for ten minutes. This can occur at any time of day.

Currently, small dogs are taken outside for ten minutes of group play daily during the morning to facilitate the kennel cleaning process. Results vary depending on the number of hours in the workday of time allotted for dog walking. Assuming that 82% of shelter dogs are walked every other day (as opposed to small dogs that are taken to play groups), 30% of those are walked by volunteers, and that employees walk dogs solely between 10:30 a.m. and 3:00 p.m. (when the morning and afternoon shifts overlap), OMB found that 13 Animal Care Specialists must be assigned to this function during this time in order to meet workload demand. OMB also found that, assuming that 18% of shelter dogs are taken to play groups by staff every day in the morning between 7:00 and 9:45, four employees are required to meet workload demand. These estimates may be somewhat overstated since on any given day, some animals will be sick or injured and hence, not taken for walks or play groups.

#### Animal Control Specialist Posts

OMB reviewed, in consultation with ASD staff, the lists of Animal Care Specialist posts needed at the shelter. A summary of this information is provided in the table on the following page. A total of 56.4 daily posts were identified. OMB determined that in order to provide seven day per week coverage, excluding a relief factor for employee absences, a total of 79 Animal Care Specialists are required. The 56.4 daily posts (if fully staffed) exceed the average daily 45 FTEs that worked from August to November 2016 and represents a higher level of service. These posts are described in greater detail below. The additional positions should greatly reduce ASD's use of overtime as well as temporary employees. Twenty-two additional positions were approved in 2017, bringing the Department to a total of 79 Animal Care Specialist positions.

#### *Kennel Pod Posts*

ASD indicated that at least one employee is required for each pod per shift; in some pods – primarily pods with larger dogs - ASD indicated that two posts are required. In addition to ensuring that essential tasks such as feeding and kennel cleaning are completed timely, ASD staff stated that this staffing model results in improved animal health and welfare. Assigning staff to specific pods minimizes the opportunity for the spread of pathogens between pods, and allows Animal Control Specialists to better get to know the animals under their care and provide a meaningful level of human companionship. Additionally, this practice can result in better service for ASD customers, since pods will typically have a staff member present who can answer specific questions about the animals in that pod. ASD further stated that the practice of assigning Animal Control Specialists to specific pods encourages accountability and facilitates greater ease of supervision.

A review of the literature provides some guidance regarding minimum staffing requirements in animal shelters. The National Animal Control Association and the Humane Society of the United States recommend a minimum of 15 minutes per day per animal for feeding and cleaning. (The Association of Shelter Veterinarians, 2010) Assuming a daily animal population of 400 dogs and 200 cats (the approximate average from June 2016 to January 2017, according to data provided by ASD), this would equate to 21.5 employees daily.

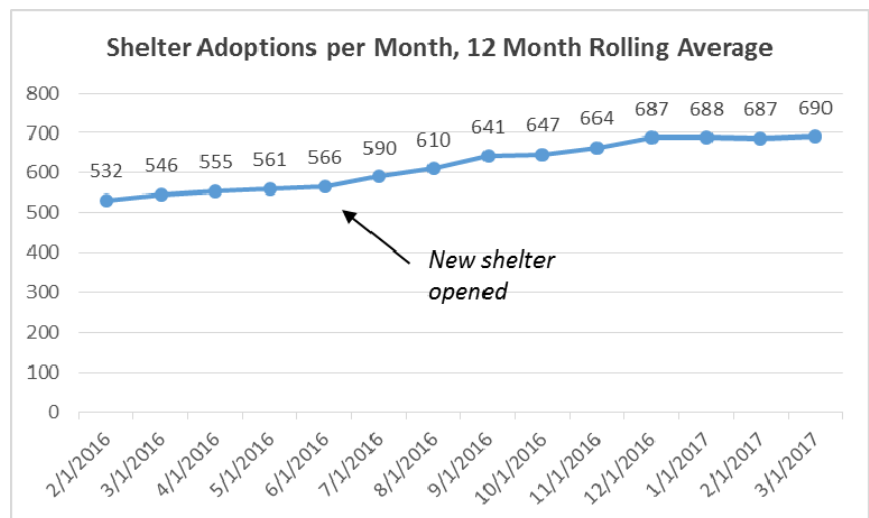
However, the minimum standards do not take into account operational needs of the shelter, such as completing kennel cleaning before the 10:00 a.m. opening, or providing excellent service to potential adopters visiting the various pods. Additionally, the literature indicated that regular social interaction, mental stimulation and physical activity are essential for animal health and well-being. (The Association of Shelter Veterinarians, 2010) An important duty of the Animal Care Specialists is to ensure that shelter animals are provided enrichment that meets these needs.

## Animal Care Specialists - Staffing Requirements (per ASD)

	A: Daily Require- ment	B: 7 day coverage (A*7/5)	Comments
<b><u>Doral Shelter</u></b>			
Regular posts	Kennel pod posts - a.m. shift	24	33.6
	Kennel pod posts - p.m. shift	24	33.6
	Groomer - single shift	1	1.4
Special posts	Walk coordinator - a.m. shift	1	1.4
	Walk coordinator - p.m. shift	1	1.4
	Laundry attendant / inventory control - a.m. shift	1	1.4
	Laundry attendant / inventory control - p.m. shift	1	1.4
<b><u>Medley Shelter</u></b>			
	Single shift	2	2.8
<b><u>Homestead Clinic</u></b>			
	Single shift (3x per week)	0.4	0.6
<b><u>Petsmart</u></b>			
	Single shift	1	1.4
<b>Total</b>	<b>56.4</b>	<b>79.0</b>	excludes relief factor

*Excludes employees assigned to union activity*

Data to measure the performance impact of staffing levels is limited. A review of available data in the County's performance management system, ASE, shows that shelter adoptions have steadily increased over the past year. Since the new shelter opened in June, the 12-month rolling average of monthly shelter adoptions has increased by 22% (from 566 to 690). Though it is difficult to directly quantify the impact of staffing levels on adoptions, it is logical to presume that it is one component. Currently, ASD does not include performance measures that would directly measure customer service or animal health and welfare in ASE. Consequently, OMB cannot determine the impact that staffing levels may have on outcomes in these areas. See also the discussion and recommendations under Performance and Information Management later in this report.



## Specialty and Off-Site Posts

ASD indicated that specialty posts for functions such as laundry attendant, dog walking coordination, inventory control and grooming provide for smoother operations and ensure that pod attendants do not devote excessive time to these tasks, which takes time away from their primary duties of caring for animals in the pods and assisting customers. Additionally, ASD identified a number of posts that are required at satellite facilities such as the Medley shelter (used for animals that must be quarantined prior to adoption), the Homestead spay and neuter clinic, and a PetSmart store where shelter animals are offered for adoption.

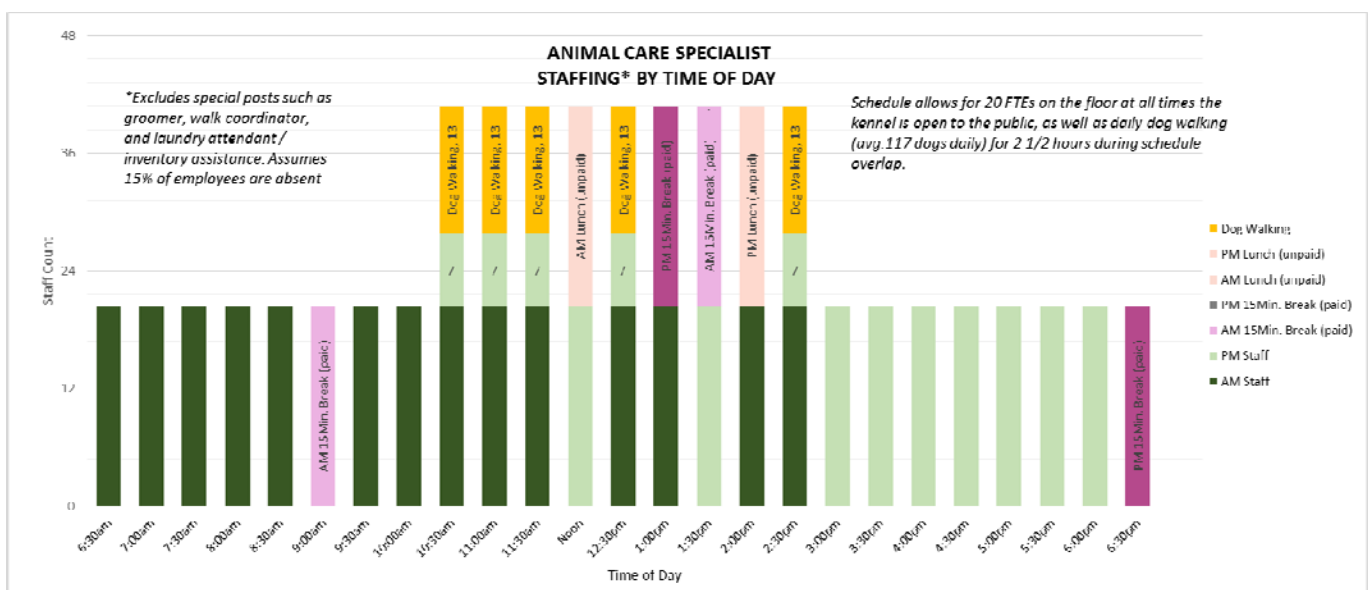
OMB observed that laundry, in particular, is a critical post. OMB staff visited the shelter on a day that no laundry coordinator was present and observed that Animal Care Specialists made multiple, time consuming trips back and forth to the laundry room from their assigned pods to see whether a machine was available. When a laundry coordinator is assigned, the need for these excessive trips is eliminated. Consequently, **OMB recommends that the laundry coordinator post be given a high priority on short staffed days.**

Additionally, **it is recommended that ASD review the feasibility of outsourcing the laundry function**, as it is not part of ASD's core business of caring for animals.

## Daily Staffing Availability

OMB reviewed current employee schedules and identified the total number of Animal Care Specialists available for work throughout the day. A summary of this analysis is provided in the chart below. The analysis assumes that all Animal Care Specialist positions have been filled and that 24 Animal Care Specialists are assigned to pod posts during each shift, but 15% of Animal Care Specialists (or four per shift) are on scheduled or unscheduled leave each day as found in the analysis of time and leave data. The analysis also assumes that all dog walking performed by employees is done midday during the two and a half hours when employees are not on breaks; the lean analysis detailed earlier in this report that 13 employees are needed to walk the required number of dogs within this time frame.

As the chart makes clear, additional staffing resources are available midday. However, some shortages of staff resources for pod posts occur. **OMB recommends that once the 22 additional Animal Care**



**Specialist positions are filled, the Department monitor the impact on kennel operations, particularly at the beginning and end of the day, as well as any impacts on animal health, safety, and/or customer satisfaction** (see discussion on Performance and Information Management later in this report) **prior to determining whether additional positions are required. Should additional resources be needed, OMB recommends the Department create part time positions to fill the gaps in the morning and late in the day** (see also the discussion of recruitment on the following page). **Staggering employee break schedules may also provide greater coverage** throughout the day.

#### *Additional Activities and Observations*

OMB observed that frequently, Animal Care Specialists have been assigned to provide coverage for functions such as attending to customers at the receiving counter, Trap, Neuter and Release (TNR) post-surgery pickup calls and monitoring of post-surgery animal health. This results in a shortage of Animal Care Specialists for pod and specialty posts. The use of Animal Care Specialists at the receiving counter is particularly problematic. Because employees in the Animal Care Specialist classification are not permitted to handle financial transactions (as Shelter Intake Clerks are), OMB observed that customers paying fees for trap rentals, euthanasia and other services were directed to the front desk at the time of the financial transaction. The front desk is a significant distance away and is not visible from the receiving counter location; consequently, staff had no way of knowing whether the customer would, indeed, report to that location and pay the fee. It is not difficult to imagine that some customers may have left the shelter without making a payment. Therefore, **it is recommended that this practice be discontinued**. To that end, ASD requested, and OMB approved, additional resources for the shelter receiving function.

**To the extent that assistance with functions not related to direct animal care is needed, it is recommended that Animal Care Specialists only be reassigned between the hours of 10:30 a.m. and 3:00 p.m., when the morning and afternoon shifts overlap.**

#### Veterinary Technician Posts

As previously mentioned, Veterinary Technicians provide medical care to shelter animals and assist during surgeries and community events. Detailed information regarding Veterinary Technician posts, along with workload data corresponding to those posts, is provided in Attachment E. Veterinary Technician posts include attending to animals before, during and following surgery (in Doral as well as a satellite clinic in Homestead); examining and vaccinating animals upon intake at the shelter; examining and dispensing medication to shelter animals on the adoption floor; and caring for sick and injured animals. For the most part, daily work volume seemed appropriate for the assigned posts; however, reliable data was not available for all activities. See the discussion on performance and information management below.

A total of 16 daily posts were identified, in addition to special posts that are required several times per week. On average, this equates to 18 posts per day. The 18 daily posts (if fully staffed) exceed the average daily 16 FTEs that worked from August to November 2016. OMB determined that in order to provide seven day per week coverage, excluding a relief factor for employee absences, a total of 25 Veterinary Technicians are required.

Prior to the completion of OMB's review of Veterinary Clinic Division operations, six additional Veterinary Technician positions were approved, bringing the Department to a total of 28 positions. **It is recommended that ASD monitor the impact of the additional resources on clinic operations and**

***animal health over the coming year and then determine whether additional positions are needed.***

#### Recruitment Benchmarking

ASD staff frequently noted the difficulty in attracting and retaining employees for the Animal Care Specialist job, low skilled work which involves daily exposure to animal waste. In particular, ASD staff noted the difficulty in finding candidates with the six months of experience in animal handling that are currently required.

Consequently, OMB conducted benchmarking of job descriptions and pay ranges from four jurisdictions (Broward County, FL, Jacksonville, FL, Austin, TX and San Jose, CA). The agencies studied are all public shelters, as is Miami-Dade County, offering kennel animal care, adoptions, and spay and neutering services. They were chosen either because of their similarity to our animal shelter services, or because they were identified by ASD as industry leaders.

The findings are summarized in the following table.

Jurisdiction	Job Title	Pay Range (hourly)	Minimum Qualifications:
Miami-Dade County, FL	Animal Care Specialist	\$12.81 - \$19.58	-High School/GED -6 Months experience in care & feeding of dogs / cats in a professional setting
Broward County, FL	Animal Care Specialist	\$16.19 - \$25.84	-No experience required -Class E DL required -Must obtain euthanasia certification within 6 months of hire.
City of Jacksonville, FL	Animal Care Asst.	\$9.95 - \$19.15	-Euthanasia Tech. certification required -Class E DL required -Jacksonville Public Driver Certification required
	Animal Care Asst. – Senior (lead worker)	\$11.23 - \$21.61	-2 years combination of education, training, & animal care / handling experience, 1 year of which was working directly with animals - Same as Animal Care Asst.
City of Austin, TX	Animal Care Worker	\$13.50 - \$20.46	-High School / GED -6 months work experience
	Animal Care Specialist (trains/delegates to other staff)	\$15.12 - \$23.57	-High School / GED -2 years work experience; 1 year in a field related to the job
City of San Jose, CA	Animal Care Attendant	\$18.67 – \$22.70	-High School / GED -Must obtain euthanasia certification within 1 year of hire

Of the jurisdictions examined, only Miami-Dade County requires previous work experience in animal care for the entry level position, though two jurisdictions require animal care experience for higher level, lead worker jobs. Additionally, ASD has stated that for its temporary employees working in the Animal Care Specialist position, no experience is required. Given ASD's current difficulties in filling vacancies,

**OMB recommends that ASD work with the Human Resources Department to revisit the minimum qualifications for this position and potentially eliminate the requirement for six months of animal care experience. As an alternative, ASD could establish an animal care certification that employees would be required to achieve within a certain time frame. Additionally, increasing the number of lead workers could help in training of newly hired Animal Care Specialists and possibly improve staff retention.**

Pay for Animal Care Specialists was fairly similar across the jurisdictions.

#### Performance and Information Management

As part of this project, OMB reviewed the performance measures related to kennel and clinic activities that are tracked on ASD's scorecard in the County's performance management system, Active Strategy Enterprise (ASE). Detailed data regarding kennel activities, such as animal intake, adoptions, and certain clinic activities such as spay and neuter surgeries, is readily available. ASD also tracks its save rate, an important outcome measure.

As previously discussed, ASD has stated that an important business objective is to maximize animal health and welfare, and minimize the spread of disease. The new animal shelter was designed with these objectives in mind. However, performance measures related to animal health are not currently tracked on the ASD scorecard. The Association of Shelter Veterinarians states that shelter statistics should include "an evaluation by age group, health and behavior status at intake as well as at outcome. More detailed data monitoring such as tracking incidence of disease at intake (pre-existing) and during shelter stay (from previous exposure or shelter-acquired) is a best practice." (The Association of Shelter Veterinarians, 2010)

Similarly, the Director of Maddie's Shelter Medicine Program at Cornell University points out the many benefits of tracking shelter animal health data including diagnosing outbreaks, monitoring the effectiveness of health related protocols, identifying risk factors for disease, and monitoring progress toward goals. (J.M. Scarlett, 2011)

Notably, it is acknowledged in the literature that the incidence of disease developing during the shelter stay *will include disease related to previous exposure*, in addition to disease acquired in the shelter. Nonetheless, measurement of disease incidence and prevalence is considered a best practice and an important tool in managing the health of the shelter population. Consequently, **OMB recommends that ASD develop and track similar performance measures related to animal health.**

#### **Other recommended metrics for inclusion on the ASD scorecard include:**

- **number of safety incidents at the shelter** (for example, kennel animal bites)
- **customer satisfaction**, as tracked through customer surveys and complaint data
- **average shelter animal length of stay**
- **average monthly (or month end) count of both dogs and cats in the shelter** (this information is currently available, but not reported on the ASD scorecard)

OMB is available to provide facilitation and technical assistance in the development of any performance measures that will assist ASD in monitoring and continuously improving performance.

A review of ASD's information technology systems was outside the scope of this project. However, in the course of studying Veterinary Technician activities related to the administration of medication and care of sick and injured animals, OMB observed that work seem to be managed, in part, manually.

Daily reports provided to Veterinary Technicians at the start of their shift do not include all the information needed to efficiently identify all daily work requirements (such as animal re-checks), and employees must supplement reports with manual written notes. Additionally, clinic staff informed OMB that although ASD's shelter management system, Chameleon, includes a component for animal medical care, in which re-checks are documented once completed, no management reports related to these activities are available. (Workload data related to spay and neuter surgeries and rabies vaccinations is readily available). Consequently, **OMB recommends that ASD review the capability and use of Chameleon to assist clinical staff in managing the delivery of medical care to shelter animals.**

#### Additional Observations Regarding the Homestead Clinic

ASD operates a satellite public spay and neuter clinic from a double-wide trailer in Homestead three days per week. At this facility, the Animal Care Specialist arrives at 8:00 a.m. along with the Intake Clerk, and begins to house the incoming processed pets into cages to await surgery. The Veterinary Technicians arrive by 8:30 a.m. to start the surgery preparation. Approximately 20-25 surgeries are scheduled daily, beginning at 9:00 a.m. until completed. Surgeries typically are performed from 9:00 a.m. – 3:30 p.m. to allow for pet recovery time and pick-up by 5:00 p.m., when the facility closes. Services are by appointment only (via online or 311 scheduling), except that, as space permits, walk-ins (or call-ins) are accepted. All appointments are scheduled for the same drop-off time, so pets are lined up for surgery on a first-arrived-first-served basis.

To make the most productive use of available clinic staff resources, animals must be available for surgery. This is generally not an issue at the Doral shelter, due to the large volume of community cats brought to the clinic as part of ASD's TNR program which can be used to fill any scheduling gaps. However, the volume of TNR cats is much smaller at the Homestead Clinic (as is the capacity to house as many pets for surgery), which can create a shortage of available animals for surgery. Frequently, scheduled appointments do not show up the day of surgery. (Data regarding the number of no-shows was not available.) Although same day walk-ins may be accepted if space and time permit, this option is not advertised to customers.

Consequently, **OMB recommends that**, rather than scheduling only 20 surgery appointments per day at the Homestead facility, **ASD pilot the scheduling of an increased number of pets (possibly 30-35) daily and recommend the impact on service levels and overtime.** As part of the pilot, **OMB recommends that ASD update its web page regarding spay and neuter surgery** (<http://www.miamidade.gov/animals/spay-neuter.asp>) to include information regarding the Homestead Clinic (none was provided as of May 2017).

OMB also observed that the practice of scheduling all daily appointments at 9:00 a.m., as well as the facility design, can lead to a sense of disarray in the morning. The single arrival time results in a bottleneck at the beginning of the day, especially at the front door. This situation can upset customers, who expect a smooth and quick pet drop-off since they have an appointment and have not been made aware that other customer have also been given the same appointment time. It also results in a high level of crowding and noise in the small trailer lobby, which is stressful to pets and staff, and increases the risk of aggressive animal behavior and fights.

One option would be to establish multiple appointment times, perhaps at 8:00 a.m., 9:00 a.m. and 10:00 a.m. Alternatively, ASD could establish a window of time, possibly from 8:00 to 10:00 a.m., when surgery drop-offs could be made. (This is the practice at the Doral facility, where customers are instructed to drop off pets between 7:30 and 9:30 a.m.) **OMB recommends that ASD pilot one of**

**these alternatives and monitor the impacts on customer service and crowd and noise levels. Additionally, customers should be informed in advance that there may be multiple customers arriving at the same time.**

Another element contributing to the lack of crowd control during pet drop-off at the trailer is the physical access, a single door for visitor entry and exit. Currently, all pet owners, pets, and family members line up just outside the door to be processed inside. As pets or family members leave, they must walk right by the line, allowing for a possible animal fight or bite. **Redesigning the existing ramp to allow for a separate egress would result in a smoother flow of foot traffic.**

Finally, OMB observed that, although information regarding the sex and the size of the pet is captured at the time the appointment is made (either online or by calling 311), it does not print on the daily surgery schedule, so clinic staff does not have this information. **OMB recommends modifying this report to include this important information to allow staff a better opportunity to prepare for the upcoming surgeries that day.** Additionally, this information would help staff estimate whether or not there might be sufficient time for walk-ins on a given day.

### Conclusion

OMB is available to respond to questions regarding this study and to assist in developing and tracking the performance measures discussed.

## References

American Humane Association. (2010). *Operational Guide: Sanitation and Disease Control in the Shelter Environment*. Retrieved May 11, 2017, from <https://www.americanhumane.org/publication/animal-shelter-operational-guide-sanitation-and-disease-control-in-the-shelter-environment/>

J.M. Scarlett, D. P. (2011). *Using Data to Improve Health in Animal Shelters*. Retrieved May 5, 2017, from Petpoint.com: <https://www.petpoint.com/downloads/Using-Medical-Data-To-Improve-Health-In-Animal-Shelters.pdf>

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Sum of Hours                      Column Labels

	Sun					Mon					Tue					Wed					Thu					Fri					Sat					Grand Total - All Days				
Classification																																								
	Regular Hours	OT Reported	Sun Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)	Regular Hours	OT Reported	Mon Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)	Regular Hours	OT Reported	Tue Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)	Regular Hours	OT Reported	Wed Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)	Regular Hours	OT Reported	Thu Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)	Regular Hours	OT Reported	Fri Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)	Regular Hours	OT Reported	Sat Total Hours Worked	Leave Reported	Leave as a % of Scheduled Hours (RT+Leave)					
ACCOUNT CLERK			-				124		124	20	14%	133		133	11	8%	142		142	2	1%	120		120	16	12%	112		112	24	18%			-						
ACCOUNTANT 1			-				102		102	42	29%	101		101	43	30%	99		99	45	31%	96		96	40	29%	88		88	48	35%			-						
ACCOUNTANT 2			-				104		104	40	28%	112		112	32	22%	100		100	44	31%	108		108	28	21%	91		91	45	33%			121						
ANIMAL CARE SPEC. ASST. COORD.		22	22				8		8		0%	104	10	114		0%	104	10	114		0%	80	10	90	8	9%	72	15	87	16	18%	85	36	124	3	3%				
ANIMAL CARE SPECIALIST COORDIN			-				80	9	89	16	17%	96	8	104		0%	92	6	98	4	4%	72	13	85	16	18%	72	9	81	16	18%		3	3						
ANIMAL SERVICES ENFORCE SUPERV		8	8				112	8	120	32	22%	90	2	91	55	38%	101	9	110	43	30%	96	11	107	40	29%	88	4	92	48	35%			286						
ANIMAL SERVICES RESCUE COORDIN	8	46	54		0%		24	24				264	19	283	24	8%	280	27	307	8	3%	248	15	263	24	9%	216	14	230	48	18%	272	14	2,932		0%				
ASD ADOPTION CLERK	2,084	136	2,220	92	4%	1,395	12	1,407	213	13%	1,505	47	1,551	79	5%	1,194	88	1,283	102	8%	1,327	96	1,422	193	13%	1,911	155	2,066	530	22%	2,458	188	7,737	126	5%					
ASD CARE SPECIALIST	4,149	621	4,770	485	10%	4,386	675	5,061	993	18%	4,723	1,082	5,805	664	12%	4,497	1,307	5,804	473	10%	4,113	898	5,010	866	17%	3,567	889	4,456	1,145	24%	4,127	965	5,092	536	11%					
ASD CITATION & COLLECTIONS SUP			-				120		120	24	17%	128		128	16	11%	125		125	19	13%	104		104	32	24%	96		96	40	29%			-						
ASD COLLECTION SPECIALIST 1			-				232		232	64	22%	254		254	42	14%	276		276	20	7%	196		196	84	30%	206		206	74	26%			-						
ASD COLLECTION SPECIALIST 2			-				111		111	34	23%	133		133	11	8%	112		112	32	22%	112		112	24	18%	96		96	40	29%			1,042						
ASD CONTROL SPECIALIST	966	70	1,036	92	9%	794	112	906	150	16%	1,054	99	1,153	122	10%	1,323	97	1,420	149	10%	990	126	1,116	236	19%	804	108	912	344	30%	972	70	1,154	152	14%					
ASD CUST SERVICE SUPV 1			-				8	8	16		0%	128		128	16	11%	128		128	16	11%	104	4	108	32	24%	80		80	56	41%	104	8	1,356	24	19%				
ASD CUSTOMER CLERK	1,262	49	1,311	124	9%	996	38	1,034	149	13%	1,195	29	1,224	148	11%	1,207	52	1,259	181	13%	997	43	1,040	233	19%	773	57	831	220	22%	1,180	64	1,244	113	9%					
ASD DISPATCHER			-				128		128	16	11%	144		144		0%	127		127	17	12%	150	8	158	16	10%	125		125	27	18%			239						
ASD DISPOSAL TECH	232		232	40	15%	224		224	64	22%	264		264	33	11%	247	16	263	42	14%	328	12	340	88	21%	224		224	48	18%	239		239	33	12%					
ASD FACILITIES MANAGER			-				120		120	24	17%	144		144		0%	136		136	8	6%	128		128	8	6%	88		88	48	35%			293						
ASD INVESTIGATOR	277		277	63	19%	259		259	122	32%	338		338	23	6%	601	24	625	179	23%	300	30	330	70	19%	270		270	100	27%	293		293	87	23%					
ASD LICENSING CLERK			-				352	3	355	113	24%	400	21	421	77	16%	395		395	37	9%	344		344	64	16%	325		325	84	20%			410						
ASD OUTREACH SPECIALIST	196	45	241	20	9%	88	2	90	40	31%	168	20	188	16	9%	273	20	293	7	3%	328	16	344	48	13%	319	37	355	73	19%	376	34	432	9	2%					
ASD PHARMACY CLERK		8	8				112		112	33	23%	128	3	131	16	11%	136		136	17	11%	126	7	133	24	16%	92		92	44	33%		22	22						
ASD PROCUREMENT & INV SUPV			-				120		120	24	17%	128		128	16	11%	128		128	16	11%	128		128	8	6%	120		120	16	12%			232						
ASD SHELTER CLERK	205	2	207	34	14%	218		218	27	11%	375		375	29	7%	213		213	26	11%	205		205	27	12%	206		206	27	12%	232		360	10	4%					
ASD SHELTER PROG COORDINATOR		19	19					8				120		120	24	17%	120	4	124	24	17%	114	5	119	22	16%	104	7	111	32	24%	112	17	129	24	18%				
ASD SHELTER PROGRAM MANAGER			-				104		104	184	64%	136		136	152	53%	136		136	160	54%	120		120	144	55%	96		96	168	64%			136	4	100%				
ASD TRANSPORT SPECIALIST		7	7					-				128		128	16	11%	136		136	8	6%	120		120	16	12%	112		112	24	18%	136		136		0%				
BUYER			-				120		120	24	17%	128		128	16	11%	128	4	132	16	11%	100	4	104	36	26%	104		104	32	24%			-						
CH ASD ADM&COLLECT DIV			-				107		107	37	26%	120		120	24	17%	128		128	16	11%	104		104	32	24%	96		96	40	29%			-						
CH ASD SHELTER SERVICES DIV			-				96		96	48	33%	120		120	24	17%	128		128	24	16%	136		136	24	15%	116		116	52	31%			-	4	100%				
CH ASD SHLTR OPS&CD ENFR DIV			-				96		96	32	25%	115		115	13	10%	118		118	10	8%	96		96	24	20%	96		96	24	20%			-						
CHIEF ANIMAL SERVICES DIVISION			-				128		128	16	11%	136		136	8	6%	144		144		0%	112		112	24	18%	110		110	26	19%			-						
CHIEF OF VETERINARY SERVICES			-				100		100	44	31%	144		144		0%	136		136	8	6%	104		104	32	24%	96		96	40	29%			104						
CLERK 4			-					-				126		126	18	13%	112	1	113	32	22%	91	1	92	45	33%	88		88	56	39%	104		224	32	24%				
CUSTODIAL WORKER 1			-					-				112		112	32	22%	136		136	8	6%	120		120	16	12%	120		120	16	12%	120		120	16	12%				
DIR ANIMAL SERVICES DEPT			-				120		120	24	17%	140		140	4	3%	136		136	8	6%	123		123	13	10%	120		120	16	12%			4						
GRANTS COORDINATOR			-				103		103	49	32%	135		135	9	6%	114		114	31	21%	106		106	31	22%	93		93	43	32%	4		4		0%				
INVENTORY CLERK	120		120		0%	128		128	16	11%	144		144		0%	136		136	8	6%	120	4	124	16	12%	16	12	28			0%		8							
MAINTENANCE MECHANIC			-				120	4	124	24	17%	144		144		0%	128		128	16	11%	120	7	127	16	12%	120	13	133	16	12%		8	8						
MGR.ASD FIN.COLL&LIC.SERV			-				120		120	32	21%	136		136	8	6%	124		124	20	14%	120		120	16	12%	112		112	24	18%			-						
PERSONNEL SPECIALIST 3			-				120		120	24	17%	128		128	16	11%	125		125	19	13%	120		120	18	13%	90		90	46	34%			-						
SENIOR ASST TO DEPT DIR			-				120		120	24	17%	136		136	8	6%	144		144		0%	128		128	8	6%	120		120	16	12%			-						
SOCIAL MEDIA SPECIALIST			-				120		120	24	17%	136		136	8	6%	128		128		11%	120		120	16	12%	120		120	16	12%			-						
SPEC PROJECTS ADMINISTRATOR 1			-				112		112	32	22%	128		128	16	11%	120		120	24	17%	112		112	24	18%	112		112	24	18%			456						
VETERINARIAN	272		272	16	6%	336		336	96	22%	908		908	92	9%	940		940	68	7%	783		783	169	18%	513		513	167	25%	456		583	80	15%					
VETERINARY ASSISTANT	136	1	137		0%	120	2	122	16	12%	136	1	137		0%	136	1	137		0%		8	8					6	6			126	1	1,830	2	2%				
VETERINARY TECHNICIAN	1,657	50	1,707	290	15%	1,442	58	1,500	574	28%	1,677	85	1,762	459	21%	1,534	110	1,644	394	20%	1,856	99	1,954	632	25%	1,356	81	1,437	529	28%	1,643	61	16,230	242	13%					
Grand Total	11,564	1,083	12,647	1,255	10%	13,904	960	14,864	3,558	20%	17,439	1,424	18,863	2,418	12%	17,222	1,775	18,997	2,395	12%	15,723	1,414	17,137	3,599	19%	13,950	1,407													

**All Animal Services Employees and Temps by Classification  
August - November 2016**

**ATTACHMENT B**

Classifications - County Employees	Count of Employee ID	Average of ADJ RATE	Avg Adj Rate + 22% Fringe	Average Daily FTEs (RT)	Average Daily FTEs (OT)	Classifications - Temps	Count of Employee ID	Average of Billing Rate	Average Daily FTEs (RT)	Average Daily FTEs (OT)	Total Staff	Avg Daily Total FTEs	# Employees Needed to Cover 7 Days a Week (with no time off)	Relief Factor (based on Epar data)	# Employees Needed to Cover 7 Days a Week (with leave)
ACCOUNT CLERK	1	\$ 20.43	\$ 24.92												
ACCOUNTANT 1	1	\$ 26.51	\$ 32.35												
ACCOUNTANT 2	1	\$ 26.51	\$ 32.35												
ANIMAL CARE SPEC. ASST. COORD.	2	\$ 18.02	\$ 21.98												
ANIMAL CARE SPECIALIST COORDIN	1	\$ 22.02	\$ 26.86												
ANIMAL SERVICES ENFORCE SUPERV	1	\$ 40.69	\$ 49.64												
ANIMAL SERVICES RESCUE COORDIN	2	\$ 22.54	\$ 27.50												
ASD ADOPTION CLERK	20	\$ 15.68	\$ 19.13			ADOPTION COUNSELOR	1	\$ 26.28			21				
<b>ASD CARE SPECIALIST</b>	<b>55</b>	<b>\$ 14.86</b>	<b>\$ 18.13</b>	<b>31</b>	<b>7</b>	<b>ANIMAL CARE SPECIALIST</b>	<b>18</b>	<b>22</b>	<b>6</b>	<b>2</b>	<b>73</b>	<b>45</b>	<b>63</b>	<b>1.17</b>	<b>73</b>
						KENNEL ASSISTANT	1	\$ 14.78			1				
ASD CITATION & COLLECTIONS SUP	1	\$ 40.31	\$ 49.18								1				
ASD COLLECTION SPECIALIST 1	2	\$ 26.78	\$ 32.67								2				
ASD COLLECTION SPECIALIST 2	2	\$ 29.61	\$ 36.13								2				
ASD CONTROL SPECIALIST	16	\$ 23.61	\$ 28.81								16				
ASD CUST SERVICE SUPV 1	1	\$ 25.26	\$ 30.81								1				
ASD CUSTOMER CLERK	14	\$ 18.06	\$ 22.03								14				
ASD DISPATCHER	1	\$ 22.95	\$ 28.00								1				
ASD DISPOSAL TECH	3	\$ 16.34	\$ 19.93								3				
ASD FACILITIES MANAGER	1	\$ 37.37	\$ 45.59								1				
ASD INVESTIGATOR	5	\$ 31.99	\$ 39.03								5				
ASD LICENSING CLERK	3	\$ 21.50	\$ 26.23								3				
ASD OUTREACH SPECIALIST	3	\$ 22.71	\$ 27.71								3				
ASD PHARMACY CLERK	1	\$ 16.29	\$ 19.88								1				
ASD PROCUREMENT & INV SUPV	1	\$ 29.03	\$ 35.42								1				
ASD SHELTER CLERK	3	\$ 15.05	\$ 18.37			CLERK 1	1	\$ 15.57			4				
ASD SHELTER PROG COORDINATOR	1	\$ 38.47	\$ 46.93								1				
ASD SHELTER PROGRAM MANAGER	2	\$ 33.35	\$ 40.69								2				
ASD TRANSPORT OPERATOR	1	\$ 13.61	\$ 16.61			ANIMAL TRANSPORT	3	\$ 23.52			4				
ASD TRANSPORT SPECIALIST	1	\$ 17.60	\$ 21.48			DRIVER	4	\$ 23.66			5				
BUYER	1	\$ 22.09	\$ 26.95								1				
CH ASD ADM&COLLECT DIV	1	\$ 52.06	\$ 63.51								1				
CH ASD SHELTER SERVICES DIV	1	\$ 43.13	\$ 52.61								1				
CH ASD SHLTR OPS&CD ENFR DIV	1	\$ 47.45	\$ 57.89								1				
CHIEF ANIMAL SERVICES DIVISION	1	\$ 45.45	\$ 55.45								1				
CHIEF OF VETERINARY SERVICES	1	\$ 62.15	\$ 75.82								1				
CLERK 4	1	\$ 17.43	\$ 21.27			CLERK 4	1	\$ 20.80			2				
CUSTODIAL WORKER 1	1	\$ 13.97	\$ 17.04			CUSTODIAL WORKER	1	\$ 19.38			2				
DIR ANIMAL SERVICES DEPT	1	\$ 95.00	\$ 115.90								1				
GRANTS COORDINATOR	1	\$ 31.57	\$ 38.51								1				
INVENTORY CLERK	1	\$ 17.44	\$ 21.27								1				
MAINTENANCE MECHANIC	1	\$ 22.11	\$ 26.97								1				
MGR.ASD FIN,COLL&LICS SERV	1	\$ 31.04	\$ 37.87								1				
PERSONNEL SPECIALIST 3	1	\$ 34.01	\$ 41.49								1				
SENIOR ASST TO DEPT DIR	1	\$ 33.74	\$ 41.16								1				
SOCIAL MEDIA SPECIALIST	1	\$ 22.02	\$ 26.86								1				
SPEC PROJECTS ADMINISTRATOR 1	1	\$ 44.87	\$ 54.75			SPA1	1	\$ 22.53			2				
VETERINARIAN	7	\$ 47.66	\$ 58.15								7				
VETERINARY ASSISTANT	1	\$ 13.97	\$ 17.04								1				
<b>VETERINARY TECHNICIAN</b>	<b>21</b>	<b>\$ 17.97</b>	<b>\$ 21.92</b>	<b>12</b>	<b>1</b>	<b>VETERINARY TECHNICIAN</b>	<b>9</b>	<b>26</b>	<b>4</b>	<b>0</b>	<b>30</b>	<b>16</b>	<b>23</b>	<b>1.28</b>	<b>29</b>

Source: ASD - ePAR data and temp agency invoices. Includes all shifts, locations and functions. Avg. daily FTE data excludes County employees on light duty or working as union reps or under HR capacity. Last updated 2/28/17

## Summary Dashboard - Kennel Cleaning Takt Time and Staffing Requirements

## Large Dogs

<i>Takt Time (seconds):</i>	33	
<i>Number of large dogs secured outside kennel simultaneously</i>	1	2
Lead Time + changeover time	12	15
Average Lead Time per Dog	12.0	7.5
<b>Minimum FTEs</b>	<b>22.1</b>	<b>13.8</b>

## Small/Medium Dogs

<i>Takt Time (seconds):</i>	98			
<i>Number of small/medium dogs secured outside kennel simultaneously</i>	1	2	3	4
Lead Time + changeover time	11	15	19	24
Average Lead Time per Dog	11.0	7.5	6.3	6.0
<b>Minimum FTEs</b>	<b>6.8</b>	<b>4.6</b>	<b>3.9</b>	<b>3.7</b>

## Cats

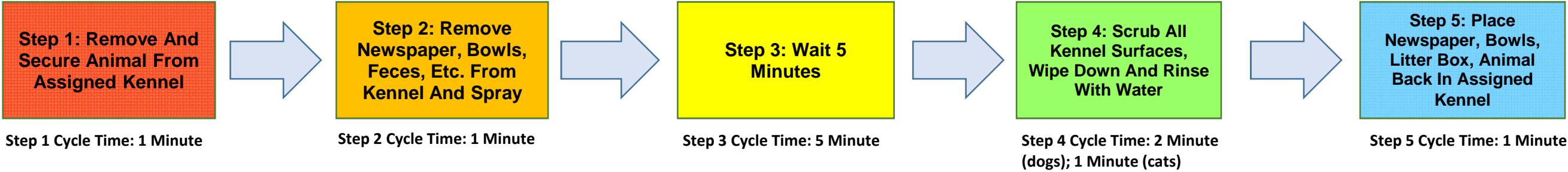
<i>Takt Time (seconds):</i>	43			
<i>Number of cats secured outside kennel simultaneously</i>	1	2	3	4
Lead Time + changeover time	10	13	16	19
Average Lead Time per Cat	10.0	6.5	5.3	4.8
<b>Minimum FTEs</b>	<b>13.9</b>	<b>9.0</b>	<b>7.4</b>	<b>6.6</b>

Insert grand total assumptions in the box below:

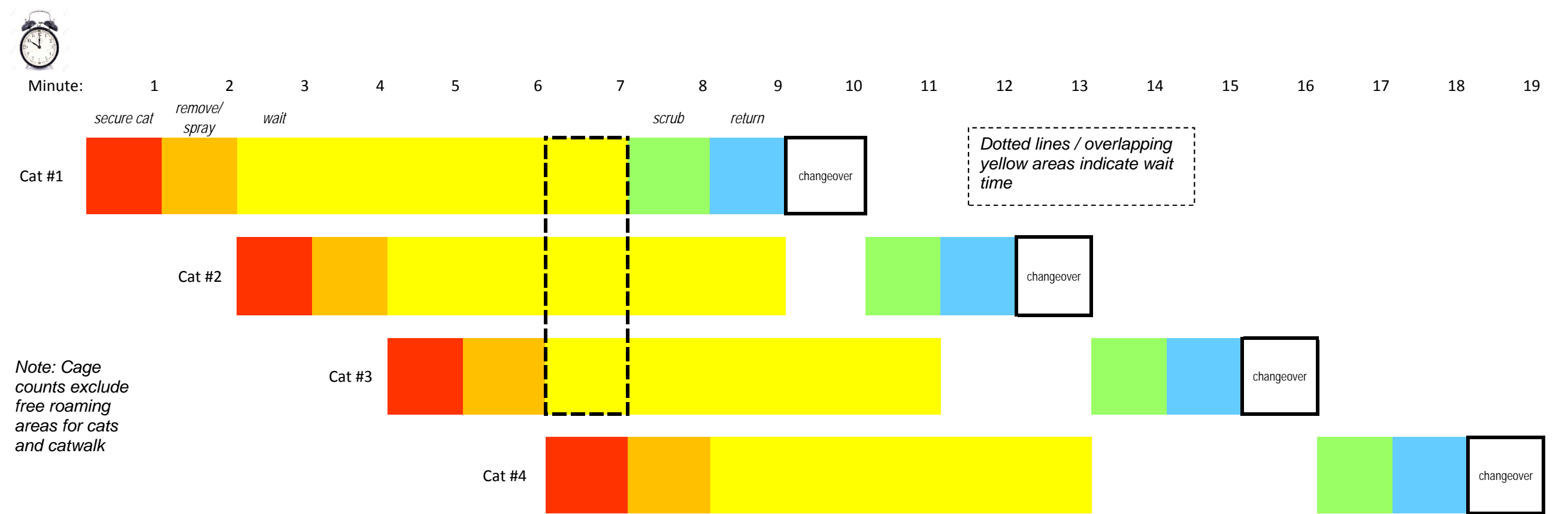
2 large dogs, 4 small/medium dogs, 4 cats

**Grand Total:** 24.1 FTEs

Kennel Cleaning Steps



Minimum Staffing Requirements For Cat Kennel Cleaning



Note: Cage counts exclude free roaming areas for cats and catwalk

Planned process run time (min)	165	(7:00 - 9:45 am. Employees take a 15 minute break at 9:45)
Output Demand (# cages)	229	Based on actual average cats per month end inventory June 2016 - January 2017 (ASPCA reports)
Takt Time (seconds)	43.2	

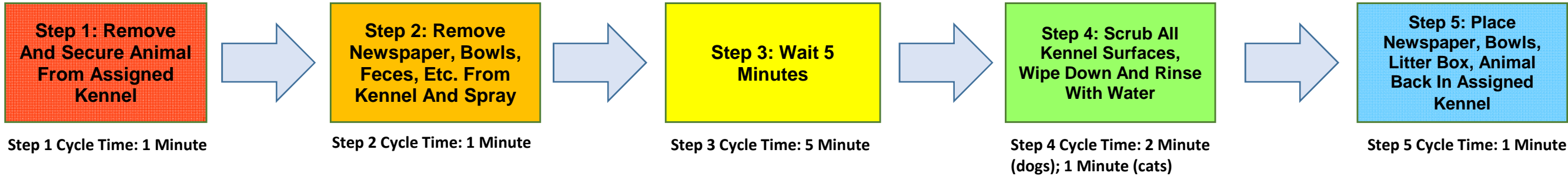
Number of cats secured outside kennel simultaneously	1	2	3	4
Lead Time + changeover time	10	13	16	19
Average Lead Time per Cat	10	6.5	5.3	4.75
Minimum FTEs	14	9	7	7

Takt Time is the process "pace" required to produce/process the required number of outputs within a defined time period.

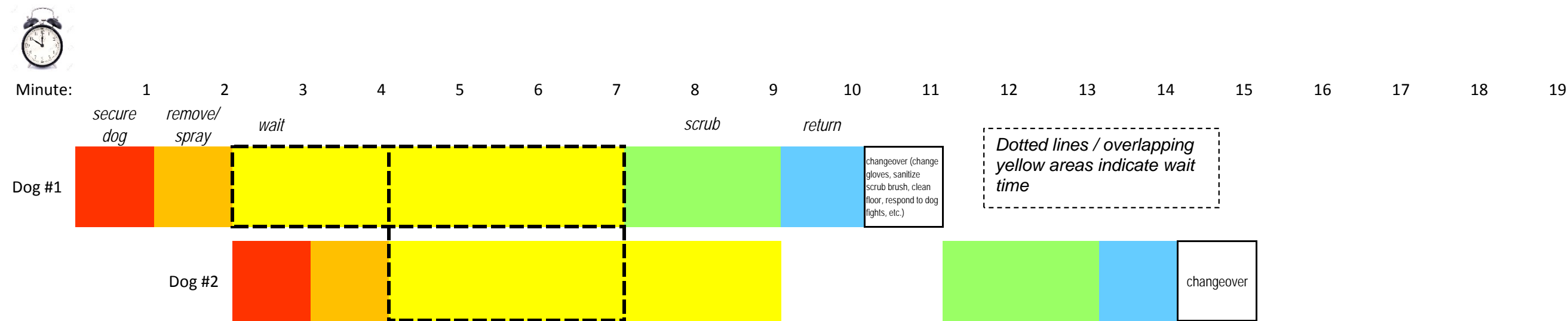
Lead Time is the time needed to produce/process a single output from start to finish.

Minimum staffing requirements can be derived from the Takt Time and the process Lead Time.

Kennel Cleaning Steps



Minimum Staffing Requirements For Large Dog Kennel Cleaning



Note: Cage counts exclude "retail" display rooms for dogs

Planned process run time (min)	165	(7:00 - 9:45 am. Employees take a 15 minute break at 9:45)
Output Demand (# cages)	304.5	Based on actual average dogs per month end inventory June 2016 - January 2017 (ASPCA reports); assumes 75% of dogs are large
Takt Time (seconds)	32.5	

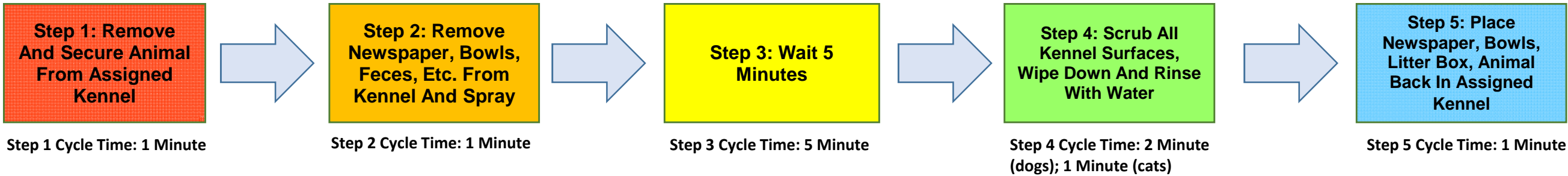
Number of large dogs secured outside kennel simultaneously	1	2
Lead Time + changeover time	12	15
Average Lead Time per Dog	12	7.5
Minimum FTEs	22.1	13.8

Takt Time is the process "pace" required to produce/process the required number of outputs within a defined time period.

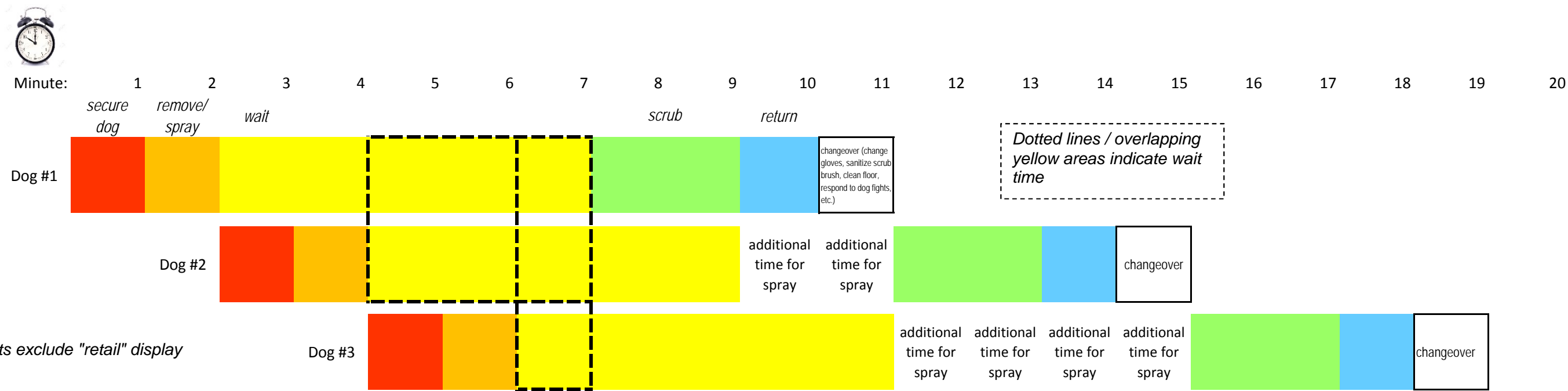
Lead Time is the time needed to produce/process a single output from start to finish.

Minimum staffing requirements can be derived from the Takt Time and the process Lead Time.

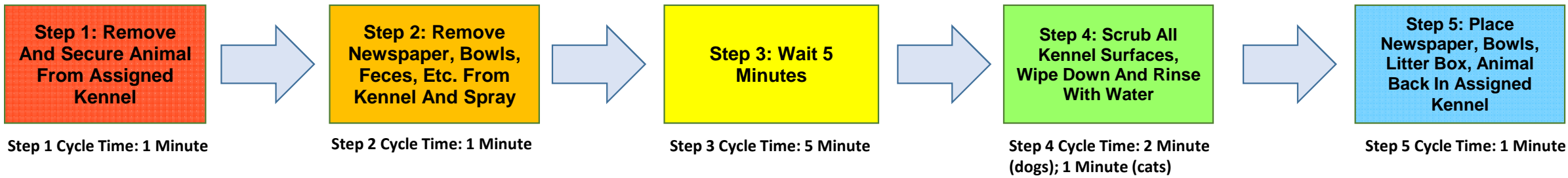
Kennel Cleaning Steps



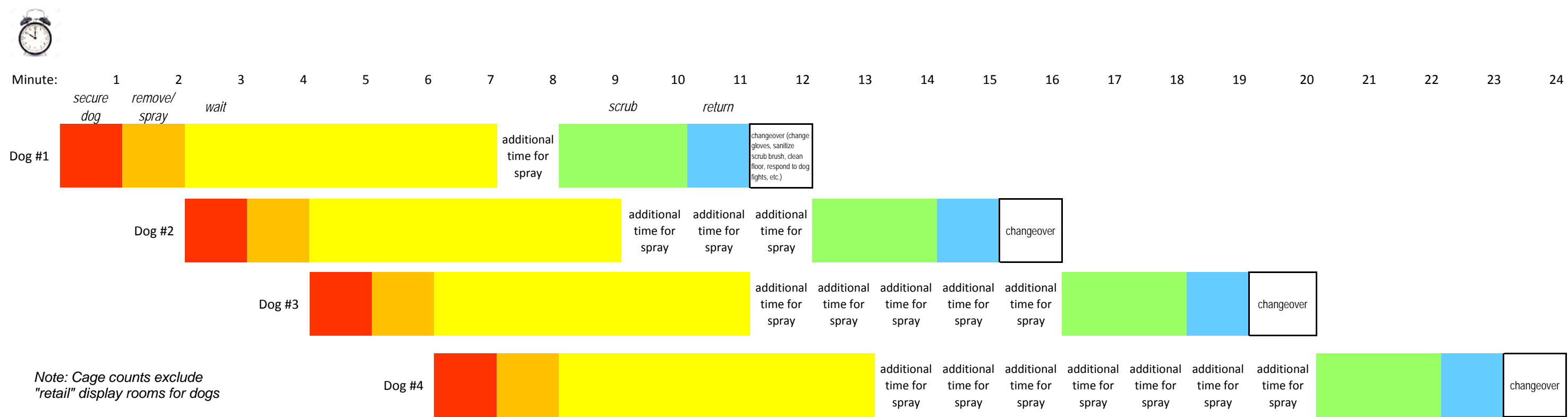
Minimum Staffing Requirements For Small/Medium Dog Kennel Cleaning (up to 3 dogs)



Kennel Cleaning Steps



Minimum Staffing Requirements For Small/Medium Dog Kennel Cleaning (4 dogs)



Planned process run time (min)	165	(7:00 - 9:45 am. Employees take a 15 minute break at 9:45)
Output Demand (# cages)	101.5	Based on actual average dogs per month end inventory June 2016 - January 2017 (ASPCA reports); assumes 25% of dogs are small - medium
Takt Time (seconds)	97.5	
mall/medium dogs secured outside kennel simultaneously	4	
Lead Time + changeover time	24	
Average Lead Time per Dog	6.0	
Minimum FTEs	3.7	

Takt Time is the process "pace" required to produce/process the required number of outputs within a defined time period.

Lead Time is the time needed to produce/process a single output from start to finish.

Minimum staffing requirements can be derived from the Takt Time and the process Lead Time.

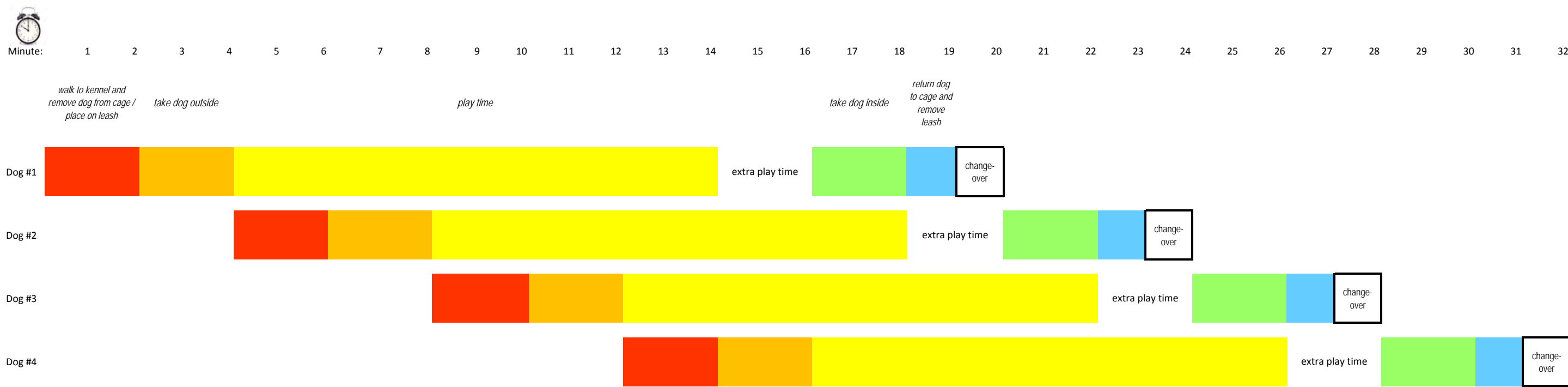
## Minimum Staffing Requirements For Walking Dogs



	Frequency		
	Every 2 Days	Every Day	
Planned process run time (min)	150	150	(10:30 to 3:00 pm, assumptions of 2-15 min break and 2-30 min lunches)
Output Demand (# cages)	116.7057	233	Based on actual average dogs per month end inventory June 2016 - January 2017 (ASPCA reports); assumes 82% of dogs are walked (as opposed to play groups); assumes 30% of dogs are walked by volunteers.
Takt Time (minutes)	1.3	0.6	

Walking (1 dog at a time)	1	1
Lead Time + changeover time	17	17
Average Lead Time per Dog	17	17
<b>Minimum FTEs For Walking Every Large Dog Every Other Day</b>	<b>13</b>	
<b>Minimum FTEs For Walking Every Large Dog Daily</b>		<b>26</b>

Minimum Staffing Requirements For Taking Dogs to Play Groups



Planned process run time (min)	165	(7:00 am - 9:45 am)
Output Demand (# cages)*	73	Based on actual average dogs per month end inventory June 2016 - January 2017 (ASPCA reports); assumes 18% of dogs are taken to play groups (as opposed to walked).
Takt Time (minutes)	2	

Number of dogs in playgroup simultaneously	1	2	3	4
Lead Time + changeover time	20	24	28	32
Average Lead Time per Dog	20	12	9.33	8
Minimum FTEs For Taking Dogs to Play Groups*	9	5	4	4

Calculation does not include FTEs dedicated to watch dogs at playgroups

\*Includes Pods A-D only

Veterinary Technician Post:		Activities:	# of FTE's 7:00 am - 3:30 pm	# of FTE's 10:30am - 7pm	Days a Week	FTEs Required for Weekly Coverage	Workload Data	Daily Work Volume	Comments
SURGERIES	Outside Surgery - Post #1	Assist with surgery preparation (prepare meds, anesthesia needles, microchip needles, cotton balls) prior to starting first surgery	1	0	7	1.40	Chameleon: 10/1 - 1/31/17: (123 Days) Cats: 386 Dogs: 700 TNR: 2,819* Total: 3,905	Approx 26 Cats Daily (26 cats x 9 min surgery + post) = (234 daily / 60min) = 4 hrs surgeries /daily for Cats	Cats Surgery: Total 9 min (4 min surgery +5 min post recovery)  Dogs Surgery: Total 20 min (12 min surgery + 8 min post recovery)  *TNR totals includes assistance by Inside Surgery team
		Assist doctor during surgery (mask pet, tie down, monitor heart rate)							
		Monitor pet post surgery recovery (move pet to post surgery area, then to recovery room/cage)							
		Sterilize tools, and place next to operating table							
	Outside Surgery - Post #2	Surgery preparation (prepare meds, anesthesia needles, microchip needles, cotton balls) prior to starting first surgery	1	0	7	1.40	Chameleon: 10/1 - 1/31/17: (123 Days) Cats: 386 Dogs: 700 TNR: 2,819* Total: 3,905	Approx 26 Cats Daily (26 cats x 7 min prepping) = (182 daily / 60min) = 3 hrs prepping /daily for Cats	Cats Prepping: Total 7 min  Dogs Prepping: Total 12 min
		Prepare pet for surgery. Check surgery list for scheduled surgeries, confirm pet has arrived. Bring pet in from recovery room/cage. Weigh, anesthetize, microchip if needed, place oxygen mask on, shave, vacuum; monitor breathing until moved to operating table. Verbally assist Clerk with notes							
		Carry pet to operating table, assist with tie down							
		Perform laundry of towels, blue cloths and sheets used in surgery							
Outside Surgery - Post #3	Complete medical paperwork (surgical notes, anesthesia log)	0**	0	7		Same as Above	Same as Above	** A clerk is handling the medical paperwork duties in this area	

# VETERINARY TECHNICIAN POSTS ACTIVITIES

Veterinary Technician Post:		Activities:	# of FTE's 7:00 am - 3:30 pm	# of FTE's 10:30am - 7pm	Days a Week	FTEs Required for Weekly Coverage	Workload Data	Daily Work Volume	Comments
SURGERIES	Inside Surgery - Post #1	Assist with surgery preparation (prepare meds, anesthesia needles, microchip needles, cotton balls) prior to starting first surgery	1	0	7	1.4	Chameleon: 10/1 - 1/31/17: (123 Days) Cats: 815 Dogs: 2,340 Total: 3,155	<b>Approx 7 Cats Daily</b> (7 cats x 9 min surgery + post) = (63 daily / 60min) = <b>1 hr surgeries / daily for Cats</b>  <b>Approx 19 Dogs Daily</b> (19 dogs x 20 min surgery + post) = (380 daily / 60min) = <b>7 hrs surgeries / daily for Dogs</b>  <b>Total: 8 hrs surgeries / daily (does not include tools sterilization)</b>	<b>Cats Surgery: Total 9 min</b> (4 min surgery +5 min post recovery)  <b>Dogs Surgery: Total 20 min</b> (12 min surgery + 8 min post recovery)  <b>Also, Inside Surgery Room team assists Outside Surgery team with TNR's once their scheduled surgeries are completed</b>
		Assist doctor during surgery (mask pet, tie down, monitor heart rate)							
		Monitor pet post surgery recovery (move pet to post surgery area, then to recovery room/cage)							
		Sterilize tools, and place next to operating table							
	Inside Surgery - Post #2	Surgery preparation (prepare meds, anesthesia needles, microchip needles, cotton balls) prior to starting first surgery	1	0	7	1.4	Chameleon: 10/1 - 1/31/17: (123 Days) Cats: 815 Dogs: 2,340 Total: 3,155	<b>Approx 7 Cats Daily</b> (7 cats x 7 min prepping) = (49 daily / 60min) = <b>1 hr prepping / daily for Cats</b>  <b>Approx 19 Dogs Daily</b> (19 dogs x 12 min prepping) = (228 daily / 60min) = <b>4 hrs prepping / daily for Dogs</b>  <b>Total: 5 hrs prepping/ daily (does not include laundry of towels, blue cloths, sheets)</b>	<b>Cats Prepping: Total 7 min</b>  <b>Dogs Prepping: Total 12 min</b>
		Prepare pet for surgery. Check surgery list for scheduled surgeries, confirm pet has arrived. Bring pet in from recovery room/cage. Weigh, anesthetize, microchip if needed, place oxygen mask on, shave, vacuum; monitor breathing until moved to operating table							
		Monitor pet post surgery recovery (move pet to post surgery area, then to recovery room/cage)							
		Carry pet to operating table, assist with tie down							
		Laundry of towels, blue cloths and sheets used in surgery							
	Inside Surgery - Post #3	Check surgery list for scheduled kennel surgeries, confirm pet has arrived, begin with pets on list. Check Chameleon for pet status, out-date, blood work on file, whether pet is on meds. Write prescription for doctor signature if pet is leaving to Foster Care; prepare meds for pet leaving with Adopter	1	0	7	1.4	Chameleon: 10/1 - 1/31/17: (123 Days) Cats: 815 Dogs: 2,340 Total: 3,155	<b>Approx 26 Animals Daily</b> (26 animals x 15 min) = 390 daily / 60 min) = <b>Total: 7 hrs surgical support/ daily</b>	<b>Surgical Support Per Dog or Cat: Total 15 min</b>
		Assist with weigh, anesthetize, microchip if needed, place oxygen mask on, shave, vacuum; monitor breathing until moved to operating table							
		Complete medical paperwork (surgical notes, anesthesia log)							

**VETERINARY TECHNICIAN POSTS ACTIVITIES**

Veterinary Technician Post:		Activities:	# of FTE's 7:00 am - 3:30 pm	# of FTE's 10:30am - 7pm	Days a Week	FTEs Required for Weekly Coverage	Workload Data	Daily Work Volume	Comments
	<b>Homestead Surgery -Post #1 and #2 (3 times/week)</b>	Check surgery list for scheduled surgeries, confirm pet has arrived, Bring pet in from cage. Weigh, anesthetize, microchip if needed, place oxygen mask on, shave, vacuum; monitor breathing until moved to operating table	<b>2</b>	<b>0</b>	<b>3</b>	<b>1.2</b>	<b>Chameleon: 10/1 - 1/31/17: (52 Days) Cats: 184 Dogs: 403 TNR: 144 Total: 731</b>	<b>Approx 26 Cats Daily</b> (7 cats x 16 min surgery + post + prepping) = (112 daily / 60min) = <b>2 hrs surgeries /daily for Cats</b>  <b>Approx 6 Dogs Daily</b> (6 dogs x 32 min surgery + post + prepping) = (192 daily / 60min) = <b>4 hrs surgeries /daily for Dogs</b>  <b>Total: 6 hrs surgeries / daily</b>	
		Surgery preparation (prepare meds, anesthesia needles, microchip needles, cotton balls) prior to starting first surgery							
		Assist doctor during surgery (mask pet, tie down, monitor heart rate)							
		Post Surgery Recovery (Move pet to post surgery area, then to cage)							
		Sterilize tools, place next to operating table (currently being performed by Animal Care Specialist)							
		Complete medical paperwork (currently being performed by Receiving Clerk)							
		Laundry of towels, blue cloths and spreadsheets used in surgery (currently being performed by Animal Care Specialist)							
<b>RECEIVING</b>	<b>Dog Receiving - Post #1 and #2</b>	Intake new dogs and perform blood work, physical exam and required vaccines	<b>0</b>	<b>2</b> (on weekends they start at 8:30am)	<b>7</b>	<b>2.8</b>	<b>Chameleon: 10/1 - 1/31/17: Dogs: 4,446</b>	<b>Approx 37 Dogs Daily</b> (37 dogs x 12min exam) = 444 exams /60 min = <b>8 hrs in exams daily for Dogs</b>	Source: Chameleon's Shelter Intake Report by Day/Time, 10/1 - 1/31/17
	<b>Cat Receiving - Post #1</b>	Intake new cats and perform blood work, physical exam and required vaccines	<b>0</b>	<b>1</b> (on weekends they start at 8:30am)	<b>7</b>	<b>1.4</b>	<b>Chameleon: 10/1 - 1/31/17: Cats: 4,604</b>	<b>Approx 38 Cats Daily</b> (38 cats x 10 min exam)= 380 exams / 60min = <b>7 hrs. in exams daily for Cats</b>	Source: Chameleon's Shelter Intake Report by Day/Time, 10/1 - 1/31/17

**VETERINARY TECHNICIAN POSTS ACTIVITIES**

Veterinary Technician Post:		Activities:	# of FTE's 7:00 am - 3:30 pm	# of FTE's 10:30am - 7pm	Days a Week	FTEs Required for Weekly Coverage	Workload Data	Daily Work Volume	Comments
<b>INSIDE CLINIC</b>	<b>Sick and Injured - Post #1 and #2</b>	Assist Clinic Vet w/kennel pets (bringing/returning, treating); monitor pets under Vet. Emergency care; intake injured pets from Code Enf. in cases of emergency	0	2 (on weekends they start at 8:30am)	7	2.8	Approximately 77 Scheduled Daily + Emergency Rechecks + Code Enforcement Walkins	Partial workload only, data not available. Number represents Clinic Vet Check Log (manual); Re-Check board	
	<b>AM and PM Treatments - Post #1 and #2</b>	Dispense preventive care medications to kennel pets (DHPP Booster, Heartworm, eye drops, etc.); dispense special medications to Pet Suites B, C & D	1	1	7	2.8	200 on AM Treatment List. (Excludes Heartworm Treatments Due)	Data not available. 200 represent a sample of the AM log for treatments in 3/14/17	Prefer to have 2 Veterinary Technicians administering shots for safety reasons
		Complete medical paperwork (clinic notes/ follow-up)							
	<b>Live Release - Post #1 and #2</b>	Confirms pet condition, shots prior to all adoptions and rescue groups (including Petco fosters, transports)	2	0	7	2.8	210 Total Adopted & Rescued (3/8 - 3/14/17)	Approximately 30 daily. Excludes foster, transport and Petco.	Source: Live Intake Stats for Dogs and Cats Outcomed Daily Average Between 3/8 - 3/14/17
	<b>Wellness Clinic - Post #1</b>	Treats sick pets to defer surrenders; Medical check on returned adoptions, follow-up medical treatments on adopted pets (+45 mins.); prints kennel surgery schedule; assist w/rabies vaccination paperwork prep for kennel pets being prepped for surgery	1	0	7	1.4	N/A	Data not available	
	<b>Diagnostics/ Infectious (Treatment Rooms A-F) Post #1</b>	Treats pets in URI infectious rooms; Diagnoses pets for infectious diseases; administers End-of-Life treatment when medically necessary	0	1 (on weekends they start at 8:30am)	7	1.4	5 or 1 at Intake = 8/day	Data not available	
<b>OTHER POSTS</b>	<b>Transports/Petsmart/ Petco - Post</b>	Performs rounds. Monitor pets health and dispense medications if necessary. Also assist with neonates		1	2	0.4	N/A	Data not available	
	<b>Special Events, MAC (Surgeries, Vaccinations)</b>		2	0	1.85	0.74	Chameleon: 10/1 - 1/31/17: Cats: 35 Dogs: 54	Estimated at approximately 8 events per month	
<b>Total Regular Seven Day Posts</b>			9	7		<b>25</b>			
<b>Special Posts</b>			4	1					

**Total Positions Required for 7 Day Coverage (excluding relief factor) 25**

**Total Positions Required for 7 Day Coverage (with relief factor of 1.28) 32**