



**City of Saginaw**  
Bond Committee Meeting Agenda

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Tuesday, November 12, 2024, 6:00 PM  
333 West McLeroy Boulevard  
Saginaw, Texas 76179

In accordance with Section 551.043 of the Texas Government Code, this agenda has been posted at Saginaw City Hall, and distributed to the appropriate news media within the required time frame. All meetings of the Bond Committee are open to the public. Public participation and written comments are invited on all open session business items.

We request that all cell phones and pagers be turned off or set to vibrate. Members of the audience are requested to step outside to respond to a page or to conduct a phone conversation. The City Hall is wheelchair accessible and special parking is available on the east side of the building. If special accommodations are required please contact the City Secretary a minimum of 72 hours in advance at 817-232-4640.

1. Call To Order

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1A. Introductions

2. Presentations

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2A. Debt Capacity Discussion

2B. Future Animal Shelter

2C. Other Projects

3. Adjournment

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Date Posted: \_\_\_\_\_ Time: \_\_\_\_\_ By: \_\_\_\_\_

Date Retrieved: \_\_\_\_\_ Time: \_\_\_\_\_ By: \_\_\_\_\_

*Date Posted: November 6, 2024*



Bond Committee Memorandum

Prepared By: Janice England

A. Debt Capacity Discussion

Meeting	Agenda Group
Tuesday, November 12, 2024, 6:00 PM	Presentations Item: 2A.
Reference File	
Community Goals	

**BACKGROUND/DISCUSSION:**

This discussion will include a general overview of the City's financial position and capacity for issuing debt (bonds).

**Attachments**

[debt capacity considerations.pdf](#)



# DEBT CAPACITY CONSIDERATIONS



November 21, 2019

Honorable Mayor and City Council

The Saginaw Citizens' Bond Committee has met a total of six times since September of this year to review the City's Capital Improvements Plan. We have reviewed presentations from consultants and staff regarding finance, community facilities (buildings), streets and parks. We have toured existing facilities and had the opportunity to discuss what we believe would be in the best interest of the City as a whole in preparing recommendations to you regarding long range planning and prioritizing projects for voters to consider in a May, 2020 election.

The Committee was asked to prioritize \$100 million in projects for long range planning. At our meeting on November 18, 2019 we were able to accomplish this objective. The following list of projects were agreed upon by all in attendance and is provided for your consideration.

PROJECT PRIORITY	PROJECT DESCRIPTION	COST
1	Central Fire Station Relocation	\$ 14,500,000
2	Knowles Drive Reconstruction Phase 1 / Knowles Drive - Bailey Boswell Signal Knowles / McLeroy Intersection Improvements	\$ 7,600,000 \$ 400,000 \$ 2,600,000
3	Combination Library /Senior Center	\$ 24,000,000
4	Renovate Existing Library/City Hall Complex	\$ 5,800,000
5	Parks Improvements	\$ 12,000,000
6	Knowles Drive Phase 2&3	\$ 12,800,000
7	W. McLeroy Phase 3	\$ 10,400,000
8	E. Bailey Boswell to E. McLeroy North/South Collector	\$ 10,200,000
		\$ 100,300,000.00

The Committee is also recommending that the City Council call a bond election in May, 2020 and ask the voters to approve the top five projects from the list.

I want to thank the City Council for allowing us to be a part of the planning process and also thank my fellow committee members for their participation and dedication to helping make Saginaw a better place to live, work and play.

Respectfully,

Travis Albritton, Chairman  
Saginaw Citizens' Bond Committee

CC: Committee Member Pat Shelton  
Committee Member Brack St. Clair  
Committee Member David Jones  
Committee Member Monica Dixon  
Committee Member Rick Russell  
Committee Member Don Cromwell  
Committee Member Kathryn Johnson  
Committee Member Siobhan Lilley  
Committee Member Tim Miller  
Committee Member Jane Lyon  
Committee Member Stephen Watson  
Committee Member Chuck Inmon



# 2021 Citizen Bond Committee - Recommendations



<u>PROJECT PRIORITY</u>	<u>PROJECT DESCRIPTION</u>	<u>COST ESTIMATE</u>
1	Central Fire Station Relocation	\$ 14,500,000
2	Knowles Drive Reconstruction Phase 1 / Knowles Drive - Bailey Boswell Signal	\$ 7,600,000 \$ 400,000
	Knowles / McLeroy Intersection Improvements	\$ 2,600,000
3	Combination Library /Senior Center	\$ 24,000,000
4	Renovate Existing Library/City Hall Complex	\$ 5,800,000
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8	E. Bailey Boswell to E. McLeroy	\$ 10,200,000
		\$ 100,300,000

# 2020 CERTIFICATES OF OBLIGATION



PROJECT	AMOUNT
KNOWLES DRIVE DESIGN AND CONSTRUCTION DOCUMENTS	2,500,000.00
NORTH OLD DECATUR ROAD DESIGN/RECONSTRUCTION	750,000.00
SIDEWALK AND ADA IMPROVEMENTS	1,000,000.00
WJ BOAZ/ODR INTERSECTION IMPROVEMENTS	1,000,000.00
INTRSECTION IMPROVEMENTS BLUE MOUND/INDUSTRIAL	500,000.00
FIRE STATION DESIGN AND CONSTRUCTION	14,415,689.00
KNOWLES/BB SIGNAL	334,311.00
<b>TOTAL</b>	<b>20,500,000.00</b>



# 2021 BOND PROGRAM

							AUTHORIZED		ISSUED		REMAINING
PROPOSITION A - STREET AND ROADWAY IMPROVEMENTS							37,550,000		19,750,000		17,800,000
PROPOSITION B - PARKS IMPROVEMENTS AND NEW SENIOR CENTER							11,200,000		11,200,000		-
PROPOSITION C - NEW LIBRARY							18,700,000		18,700,000		-
TOTAL ALL PROPOSITIONS							67,450,000		49,650,000		17,800,000



# CURRENT DEBT SERVICE REQUIREMENTS

SEPTEMBER 30,	PRINCIPAL	INTEREST	TOTAL
2025	3,880,000	3,096,903	6,976,903
2026	3,645,000	2,985,500	6,630,500
2027	3,875,000	2,878,351	6,753,351
2028	4,210,000	2,743,652	6,953,652
2029	4,315,000	2,580,170	6,895,170
2030	4,475,000	2,402,738	6,877,738
2031	4,550,000	2,215,376	6,765,376
2032	4,745,000	2,025,024	6,770,024
2033	4,935,000	1,833,199	6,768,199
2034	4,565,000	1,632,520	6,197,520
2035	4,750,000	1,446,700	6,196,700
2036	4,445,000	1,251,150	5,696,150
2037	4,625,000	1,064,600	5,689,600
2038	4,275,000	884,700	5,159,700
2039	4,450,000	713,400	5,163,400
2040	4,625,000	534,800	5,159,800
2041	3,405,000	332,350	3,737,350
2042	3,020,000	189,150	3,209,150
2043	1,255,000	50,200	1,305,200
<b>TOTALS</b>	<b>\$ 78,045,000</b>	<b>\$ 30,860,484</b>	<b>\$ 108,905,484</b>

# ESTIMATED DEBT SERVICE REQUIREMENTS



SEPTEMBER 30,	PROJECTED TOTAL
2025	6,976,903
2026	7,171,750
2027	7,882,026
2028	8,366,327
2029	8,304,945
2030	8,288,488
2031	8,180,751
2032	8,183,449
2033	8,183,324
2034	7,612,770
2035	7,610,500
2036	7,106,925
2037	7,100,775
2038	6,574,475
2039	6,574,750
2040	6,570,925
2041	5,151,225
2042	4,618,525
2043	2,713,050
2044	1,409,075
2045	1,412,825
2046	1,018,875
<b>TOTALS</b>	<b>\$ 137,012,659</b>

# Tax Impact

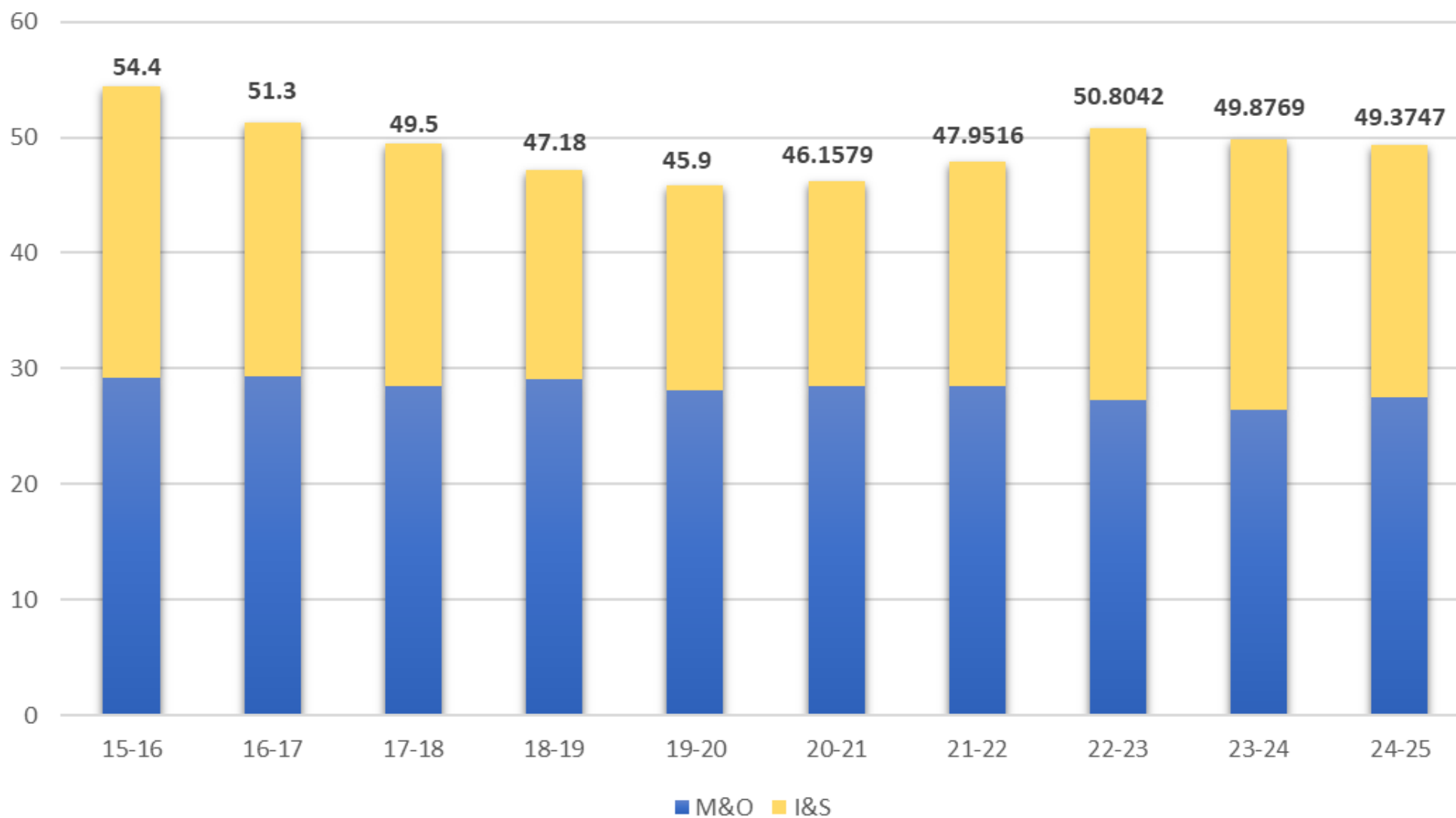


Bond Election Estimates	
Tax rate increase	13 cents
Tax increase	\$249.29

Actual to Date							
	Fiscal Year 20/21			Fiscal Year 24/25			DIFFERENCE
O&M	0.284238	\$	534.65	0.27533	\$	712.05	(0.008908) \$ 177.40
I&S	0.177341	\$	333.58	0.218417	\$	564.86	0.041076 \$ 231.28
Total Tax Rate	0.461579	\$	868.23	0.493747	\$	1,276.91	0.032168 \$ 408.68
Avg Home Value		\$	188,101		\$	248,725	\$ 60,624
Estimated - debt only							
	Fiscal Year 20/21			Fiscal Year 26/27			DIFFERENCE
O&M	0.284238	\$	534.65	0.23481	\$	712.05	(0.049428) \$ 177.40
I&S	0.177341	\$	333.58	0.230559	\$	584.93	0.053218 \$ 251.35
Total Tax Rate	0.461579	\$	868.23	0.465369	\$	1,296.98	0.003790 \$ 428.75



## Historical Property Tax Rates





Any additional debt issued before 2034 would increase taxes; there is no capacity due to retirement of debt before then.

Preliminary estimates show \$40M in additional debt issued in 2027 and 2029 would raise the tax rate to 54.5 cents; \$50M would result in a tax rate of 59 cents.

These estimates only include increasing the debt portion of the tax rate; it is reasonable to assume increases in the operating portion of the tax rate will also be necessary.





# General Fund

## FY25/26 Operating increases/additions:

- Cost of living and STEP increases
- Full year ambulance fee \$203,030 (\$254,290-\$51,260)
- Weekly deep cleaning of Community Center \$9,620
- Full year operations of Library & Senior Activity Center \$203,380
- New ERP system expense



# General Fund

## Staffing

- 50% of Emergency Management Coordinator \$66,345
- Temporary PT Open Records Coordinator \$40,975
- Temporary FT PW Administrative Coordinator \$71,255
- Temporary FT Building Maintenance Coordinator \$94,200
- Temporary PT Animal Shelter Technician \$29,265



# General Fund

## Special Requests Not Funded in FY24/25

- Contractual accounting services \$25,000
- Fire Department convert 3 Lieutenants to Captain rank \$50,628
- Fire Department Administrative Support Position \$75,343
- 6 Police Officers \$639,756
- Facility Flower Bed Maintenance \$80,000
- Children's/Youth Library Assistant \$56,224
- Circulation Manager \$61,986
- 3 PT Library Assistants \$87,459
- PT Shelving Page position \$20,310
- Adult Services Librarian \$79,113



# General Fund

## Special Requests Not Funded (continued)

- FT Animal Shelter Technician \$36,400
- Reclassify PT Technician to Administrative Services position \$11,687
- Multimedia Specialist position \$84,000



# Capital Projects - unfunded

- Parks Master Plan projects
- Animal Shelter
- Keeter Library Building remodel
- Construction East McLeroy Phase 2b
- Design and Construction West McLeroy Phase 4
- Design and Construction Industrial



Bond Committee Memorandum

Prepared By: Janice England

B. Future Animal Shelter

Meeting	Agenda Group
Tuesday, November 12, 2024, 6:00 PM	Presentations Item: 2B.
Reference File	
Community Goals	

**BACKGROUND/DISCUSSION:**

The needs assessment for an animal shelter facility will be discussed.

**Attachments**

[City of Saginaw Animals Services Workshop Report\\_Final.pdf](#)

City of Saginaw

Needs Assessment Report

April 2023



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## 1. Executive Summary

The City of Saginaw, Texas has an opportunity to replace an undersized and aging animal shelter with a new best-practice facility that provides mandated animal control and animal holding services, and also helps the city deliver the best outcomes for pets. The new shelter will create a positive, customer-service-friendly space where the public can interact with animal services, find their lost pets, and adopt new pets. The new shelter will be a safer and healthier place for people and animals.

In January of 2023, Heather Lewis and David Farnsworth of Animal Arts hosted a Needs Assessment Workshop with leaders and staff members from the City of Saginaw to evaluate the existing shelter facility and discuss how it relates to today's best practices. The team then worked together to develop and confirm an animal shelter program of spaces based on the number of animals that need to be housed, human population growth, and required services provided. From this program several budget options were developed to assist with funding of the shelter.

The following report documents an analysis of the existing facility, recommendations for a new facility based on needs, and the budget options.

### New Facility Statistics

Below are estimates for the new facility to serve the City of Saginaw for the next thirty years.

- Recommended Square Footage

Interior Conditioned	Exterior Covered Space	Utility Structures
12,429 GSF	4,632 GSF	2,252 GSF

- Recommended Animal Holding Capacity not including Medical Housing
  - 40 *Canines*
  - 36 *Felines*

Animal Arts developed several budget options to assist the city with creating a fiscally responsible project. Cost per square foot is based on numerous relevant comps. Using these comps, the construction methods have been adjusted to seek the best value.

Base Option	Traditional, Custom Constructed Building	Recommended Budget Range Including Hard and Soft Costs: \$15.75 - \$16.25 million
Value Option 1	Offices in Modular Building	Recommended Budget Range Including Hard and Soft Costs: \$14.5 - \$15.00 million
Value Option 2	Shelter (except kennel) is a Pre-Engineered Metal Building	Recommended Budget Range Including Hard and Soft Costs: \$15.0 - \$15.5 million
Value Option 3* Recommended	Combination of Pre-Engineered Buildings and Modular Buildings	Recommended Budget Range Including Hard and Soft Costs: \$14.25 - \$14.75 million
Value Option 4	Reduce Program below level of needs, Use Variety of Building Types, Reduce Contingencies	Recommended Budget Range Including Hard and Soft Costs: \$12.00 - \$12.5 million

**Value Option 3 is the recommended option, as it is the best value while still meeting the requirements of the program.** Value Option 4, while less expensive, is not recommended as it does not meet the project needs.

*\*\*\* Note: Based on the project timeframe, 5 percent per year escalation should be added. Please see the full Budget discussion in Section 9 of this report for details on these budget numbers.*

## 2. Best Practices

Best-practice industry standards are important to analyze and incorporate when designing a new shelter building. By considering these standards, a new shelter can be right sized and not overbuilt. An overbuilt shelter costs more to build and operate than necessary. The basics for best practices for animal care are:

- Hold only when essential, reduce time in care.
  - Reduction of mandated holds if possible (in this case, the shelter is following state minimum holding times).
  - Provide in-house medical care to reduce the burden of illness and disease.
  - Create a public-friendly building so people want to come to adopt animals.
  - Utilize foster care to the greatest extent possible.
  - Utilize resources to prevent relinquishments.
- Provide a healthy and sanitary environment.
  - For staff.
  - For animals.
- Design for easy operations.

### Hold Only When Essential, Reduce Time in Care

A shelter is a stressful place for a pet. Therefore, reducing time in care is one of the most important goals for best-practice animal sheltering. Animal behavior experts explain that two weeks is about the length of time a dog can stay before it begins to deteriorate behaviorally. Both dogs and cats are more likely to become ill in the shelter environment the longer they stay. More information on this topic can be found at [www.sheltermedicine.com](http://www.sheltermedicine.com).

Saginaw currently follows minimum hold times for animals as required by law, but it is important to see if there are other ways to streamline the number of days an animal stays in care. In-house medical care, including surgical services can greatly decrease the length of stay for sheltered animals. Currently there is no efficient access to veterinary care. Most animals coming in are stray, and in most cases, they require sterilization and/or vaccination. Animals who need these services must be transported to an off-site facility on specific days of the week, lengthening hold times. An onsite medical care facility provides opportunities to reduce the length of stay for stray animals as it provides a place on campus for partnering veterinarians to work, without the inefficiency of transport. It may take effort and some time to develop partnerships to bring a veterinarian onsite, but this will be the best long-term solution for the city. We assume that the city will continue to work with part-time, independent partnering veterinarians, rather than hiring one fulltime, due to the shortage of veterinarians nationwide, and at this time, we have not included a surgical facility in the proposed building.

Creating an adoption-friendly facility should be of high priority. This includes having a friendly, welcoming space for adopters to view adoptable pets. After viewing, one-on-one, meet and greet spaces can be utilized to introduce the shelter pets and potential adopters. The Humane Society of the United States published a manual to help animal shelters design their adoption programs called *Adopters Welcome* (<https://humanepro.org/page/adopters-welcome-manual>). *Adopters Welcome* is a research-based set of guidelines that can be very helpful when considering operational goals for the new City of Saginaw Animal Shelter.

Saginaw should utilize a foster care program to the greatest extent possible. More pets in foster care means fewer pets in the shelter; therefore, less housing is needed, and a smaller capacity facility can be designed.

Utilize resources to prevent relinquishments. As noted during the workshop, the new shelter facility for City of Saginaw will be more community facing than the older facility. A simple example of a resource that could be provided is a volunteer-run pet food bank.

### **Provide a Healthy and Sanitary Environment**

The most important aspect of providing well-being for shelter pets is to operate the City of Saginaw shelter in such a way as to be able to provide humane care for each animal. This includes strategies to reduce the number of pets in care, but also means constructing and staffing the shelter such that each animal is housed in an environment that supports its well-being. For more information about capacity for care, refer to [Overview of Capacity for Care \(C4C\) | Resources | Koret Shelter Medicine Program](#). A healthy and sanitary environment is directly beneficial to shelter pets while supporting staff during their day-to-day tasks. Laundry rooms, dishwashing, and food prep areas, along with kennels that are well draining and easy to clean are all crucial infrastructure components for staff to reduce the time they spend on essential tasks. This then provides more staff time for animal enrichment and helps meet the goals of capacity for care.

A new animal shelter would typically have areas for isolation of infectious disease. Infectious disease has been a major burden to staff operations at the City of Saginaw shelter and increases the risk of euthanasia for the animals in the shelter. Isolation areas should be dedicated to housing infectious animals and should not be used as overflow healthy housing. Isolation areas can be designed for proper protocols such as the donning of personal protective equipment and should be separated by species and type of disease, for safety and the well-being for dogs and cats.

Create a Fear Free® environment. Fear Free is a movement that provides guidelines to reduce fear, anxiety, and stress for pets in veterinary hospitals and shelters. Fear Free Sheltering training is specific to animal shelters, is self-paced, and available online, at no charge (<https://fearfreeshelters.com/>).

### **Design for Easy Operations**

As described in the previous section, easy-to-operate laundry, dish washing, and food prep areas, as well as easy-to-clean kennels, will free up hours per day of staff time. This time can be better spent on customer service, animal enrichment, and animal placement efforts.

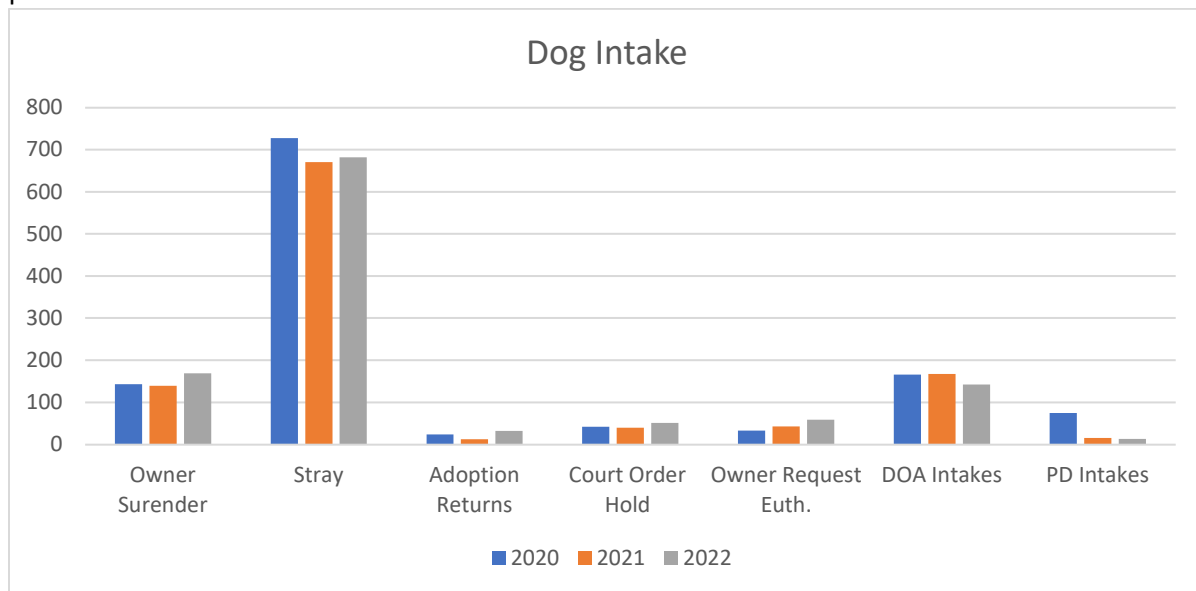
Best practice animal control facilities are designed with efficient and safe intake areas. A sallyport (enclosed area where officers can unload animals) will prevent animal escapes and will increase officer safety and comfort. From a sallyport, animals should be able to be moved safely into intake examination areas and housing. Dogs on bite holds and dogs with other dangerous behaviors should be able to be moved efficiently. This requires good flow design such as wide hallways and wider kennels that are easier and safer for staff to enter with dogs.

Another task that can be very time consuming for staff is moving dogs from housing into yards for play. Flow from dog areas to yards should be short. Yards can be designed to separate groups of dogs, or individual dogs depending on the dogs' behavior and the staffing or volunteers available to run play group programs. Yards should be partially covered for use during hot weather and rain.

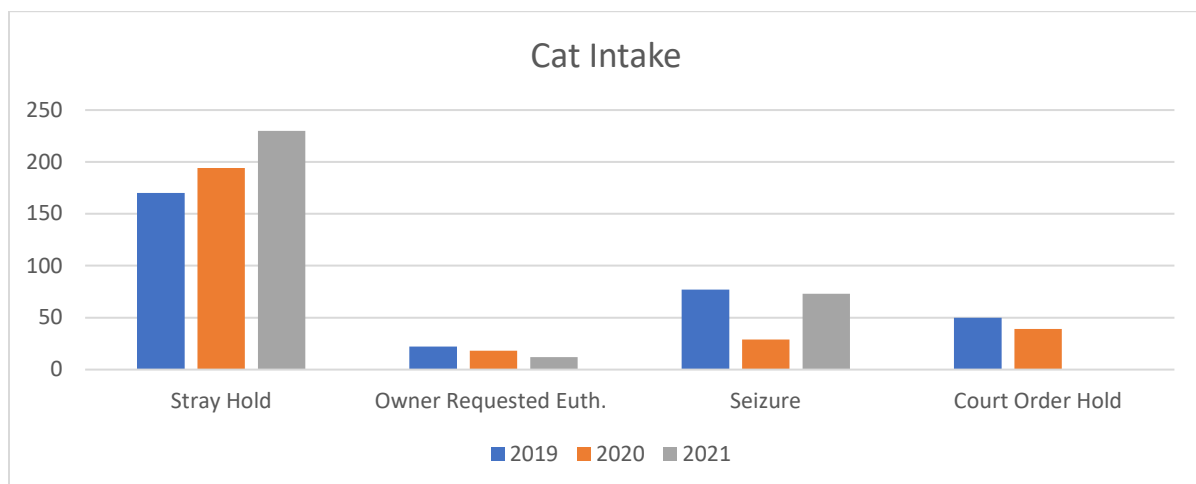
On the customer service side of the building, safety and security should be considered in the design. Public areas are separated from staff areas with secure doors. Public lobbies should be designed for the safety of staff during critical incidents such as a threatening customer. Designing for safety is a balance of creating a welcoming feeling, but with the underlay of safety infrastructure such as vestibules, safe rooms, security cameras, and panic buttons.

### 3. Statistical Trends

One of the first steps we take when working with an organization is to review data for intakes and outcomes for animals. We work together with our clients to build on positive trends, and to design around strategic goals. Based on data, we can design facilities to last an organization several decades into the future. The City of Saginaw had only three years of data, due to a change in software management, so we are using this data to understand general information rather than as a trend predictor.



As can be seen by the above diagram, most dog intakes are stray dogs, which makes sense for an animal control agency that is responding to calls.



Stray intakes are also most significant for cats, which is typical based on the large number of cats free roaming in communities.

Saginaw achieves the following live release rates for dogs and cats. With additional programs and a better facility, the city will be able to achieve above 90 percent live release for dogs and cats, as have other jurisdictions around the nation, regardless of socioeconomic conditions. Analyzing operations is out of the scope of our report, so we have limited focus to the creation of best practice facilities.

80.2%	LRR Dogs
74.6%	LRR Cats

### Calculating Animal Capacity Requirements

We examined the animal statistics at City of Saginaw Animal Services to determine recommended capacity for the new shelter, and also considered human population growth, which is a major factor, as the Dallas/Fort Worth area is one of the fastest growing areas of the country. The goal with sizing the animal shelter is right sizing. Too much capacity means animals are likely to stay longer, and too little capacity can result in overcrowding, especially as the city grows. Animal capacity is calculated using the following:

- Annual intakes.
- Expected human population growth.
- Current average length of stay.
- Peak capacity (ratio of highest month of intake to average month).

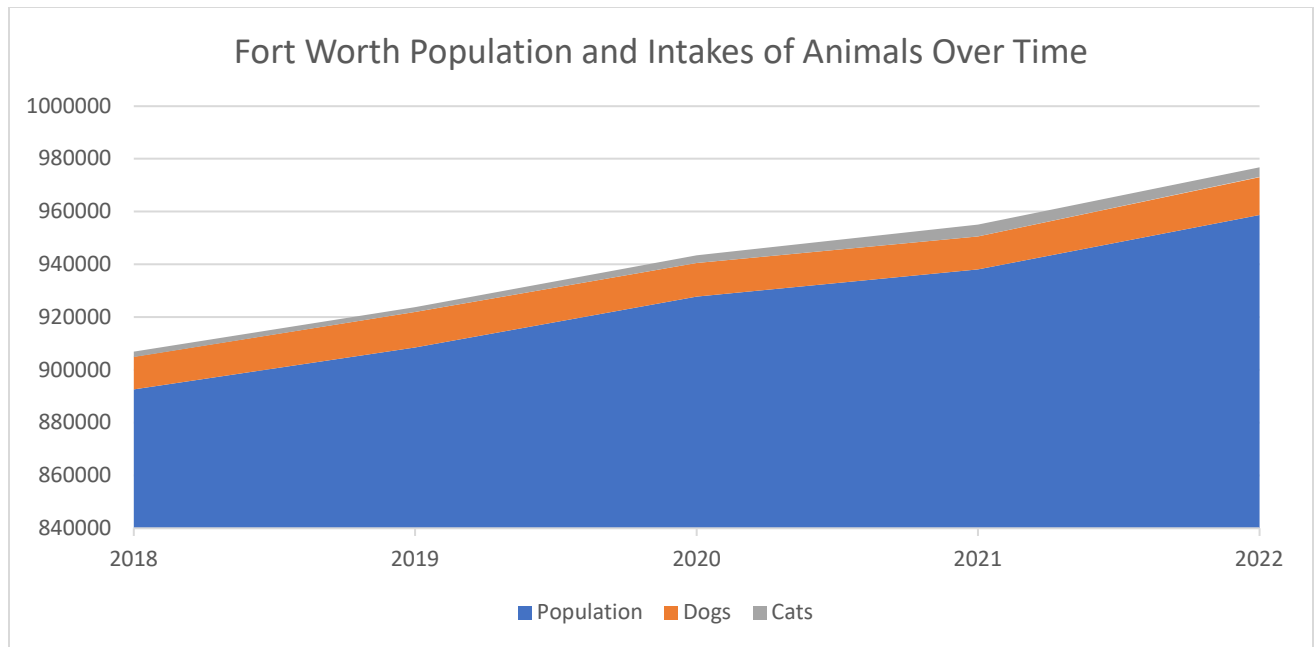
The recommended capacity can be calculated based on the following:

Average Daily Intakes (projected to meet growth)	X	Average Length of Stay	=	Animals in Shelter per Day	X	Peak Capacity	=	Animal Capacity
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### Adjustment for Human Population Growth

The relationship between animal intake into the shelter and human population growth is complicated. As populations of people urbanize, the number of animal intakes per thousand capita of humans tends to decrease, as there is less habitat for free-roaming animals. Programs provided by animal shelters also play a significant role in increasing or decreasing intakes, as does the approach to animal control. For example, if there are more officers to respond to calls, more animals may be impounded. On the other hand, if there are more programs to help people keep their pets, intake may decrease.

Animal Arts reviewed data from the City of Fort Worth animal shelter for a local comparison. The City of Fort Worth's statistics are available online. The chart on the following page illustrates the City of Fort Worth animal shelter intakes relative to the human population. Currently the city admits approximately 19 animals per 1,000 people in the city per year. We believe this number is low, because the City of Fort Worth shelters intentionally do not impound very many cats. However, the chart clearly illustrates that animal intakes are growing at approximately the same rate as the human population. This supports our professional opinion that the City of Saginaw will also need to impound more animals as its human population grows. Fortunately, the City of Saginaw is geographically bounded, meaning that the animal shelter can be sized for SOME future growth, without having to grow indefinitely.



The City of Saginaw shelter impounds about 25 animals per thousand people in the community, which is a more typical statistic for small communities around the country. We have included a 20 percent human population growth factor in our model, at the same intake ratio per 1,000 humans, for the new shelter. We carefully reviewed this adjustment with the animal shelter staff, and these projections are logical to those closest to the animal shelter operations.

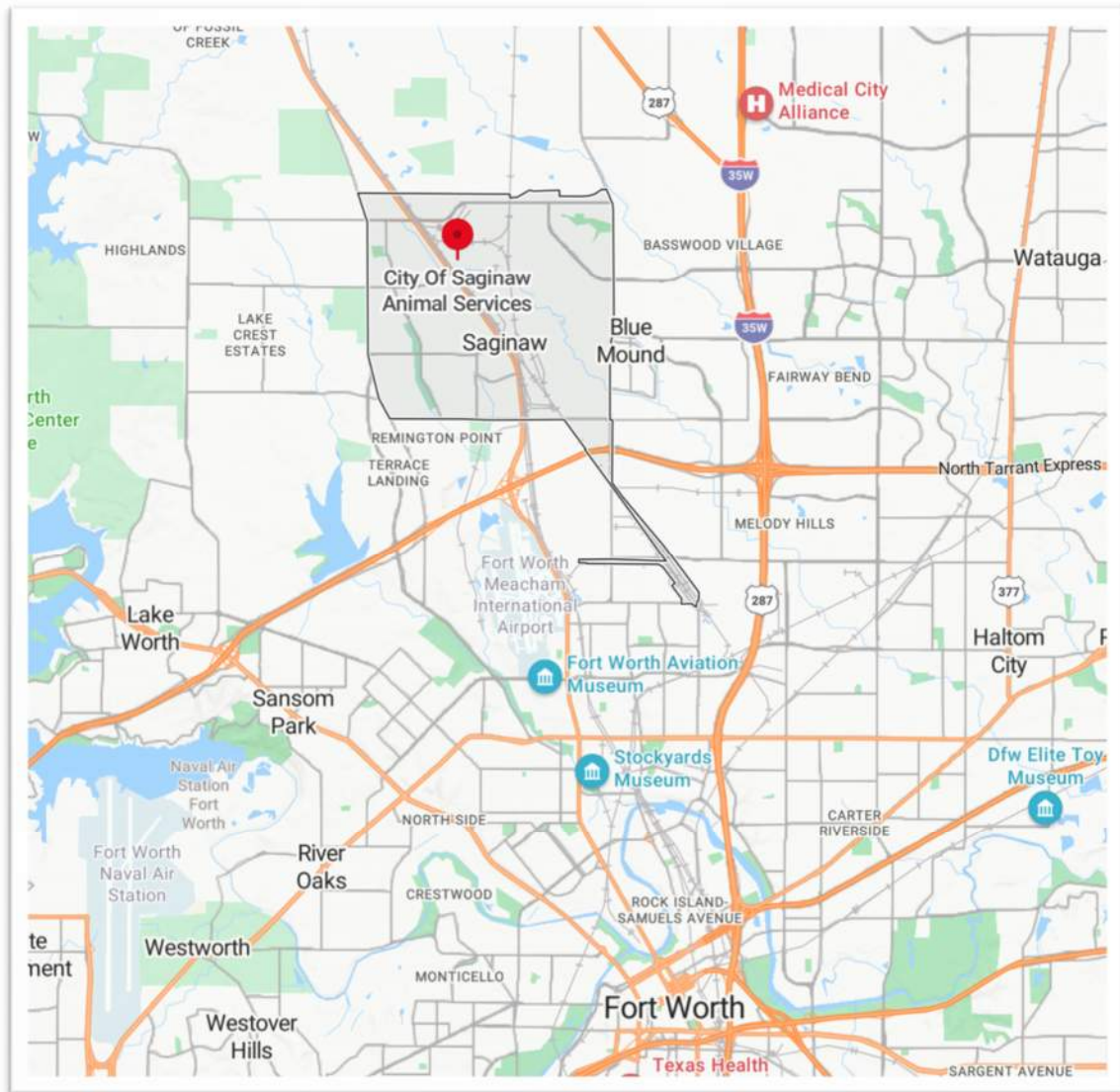
The other adjustment we propose is to decrease the length of stay for animals in care. Currently, animals stay longer than is ideal for many reasons. A new shelter will assist in streamlining operations, and therefore we have reduced the length of stay slightly in the proposed model. After the adjustments discussed in this section, we propose the following calculator for sizing the new shelter facility:

Type	Current Intake	Adjusted Intake (+20%)	Div/365	Length of Stay	Capacity	Peak Factor	Peak Capacity	Housing
Adult Dogs	362	435	1.2	24	29	1.25	36	36
Puppies	59	70	0.2	10	2	1.5	3	1
Adult Cats	160	192	0.5	24	13	1.75	22	22
Kittens	124	148	0.4	10	4	2.5	10	5

In addition to space for dogs and cats, the shelter needs an area for livestock impounds, and places to stage short stays for wildlife.



## 4. Demographics

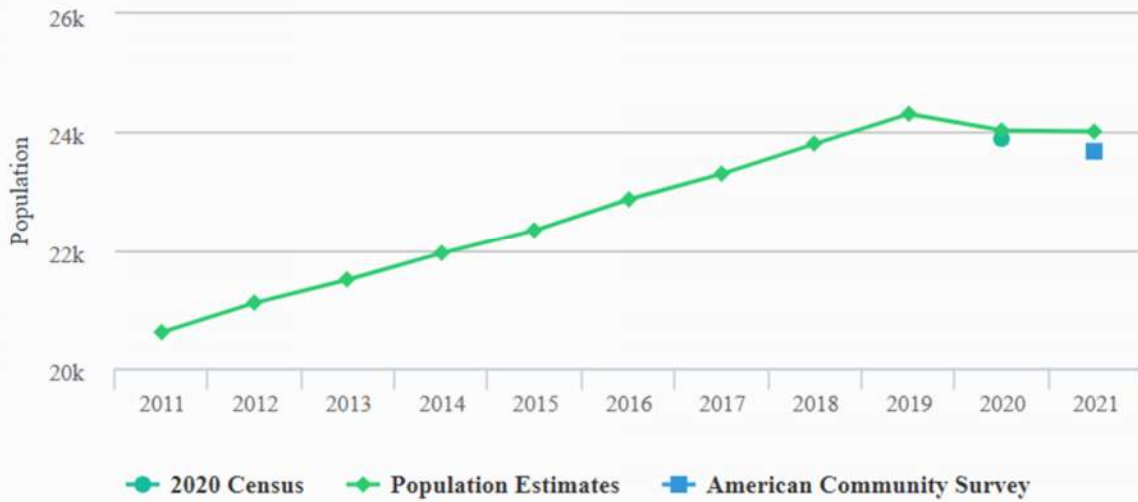


### Human Population Statistics

Population growth trends are important to analyze when considering the location of a future animal shelter because these trends imply where services are needed and at what scale. The City of Saginaw has experienced a 10 percent growth in population between 2011-2020, bringing the population to more than 24,000 people today. Saginaw is currently growing at a rate of 2.02% annually.

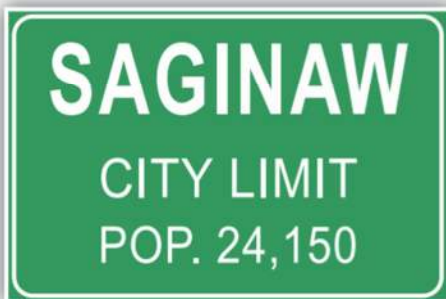
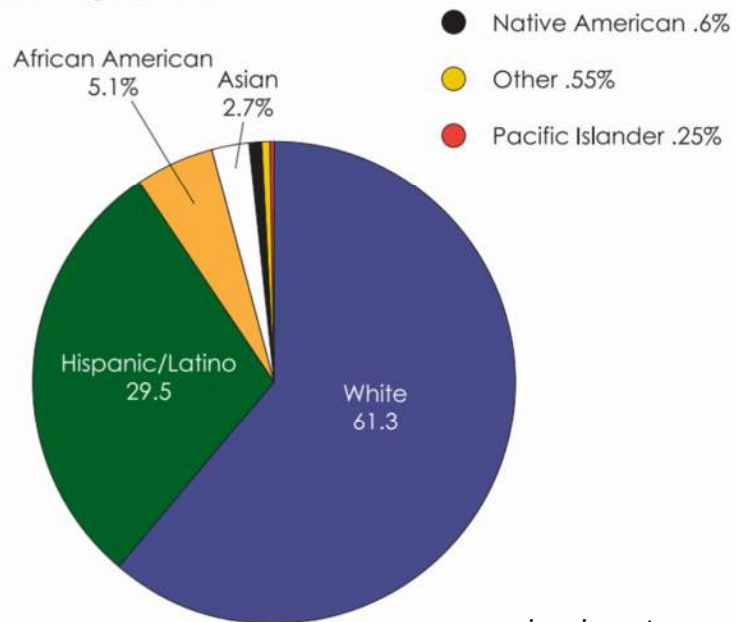
The average household income in Saginaw is \$114,673 with a poverty rate of 5.03%. The median rental costs in recent years comes to \$1,206 per month, and the median house value is \$292,000. The median age in Saginaw is 36.3 years, 34.9 years for males, and 37.7 years for females. Overall, Saginaw is a reasonably affluent, young, and growing community.

## City of Saginaw



Saginaw is a city located in Texas. With a 2020 population of 24,150, it is the 119th largest city in Texas and the 1526th largest city in the United States. Saginaw is currently growing at a rate of 2.02% annually and its population has increased by 27.80% since the most recent census, which recorded a population of 19,806 in 2010. Saginaw reached its highest population of 24,150 in 2021. Spanning over 7.75 square miles, Saginaw has a population density of 3,116 people per square mile.

### Demographics



## 2021 SAGINAW TEXAS BY THE NUMBERS

**24,150**  
POPULATION

**7.75 Square Miles**  
CITY SIZE

**1952**  
YEAR INCORPORATED

**\$114,673**  
AVERAGE HOUSEHOLD INCOME

**\$292,000**  
AVERAGE NEW HOME VALUE

**19,381**  
DAYTIME POPULATION

**\$0.461579**  
CITY TAX RATE

**EAGLE MOUNTAIN/  
SAGINAW I.S.D.**  
17 - Elementary Schools  
6 - Middle Schools  
4 - High Schools



# SAGINAW TEXAS



## SAGINAW RESIDENTS

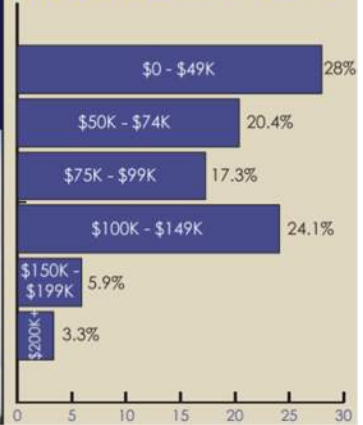
**AVERAGE AGE: 34**

**EDUCATION: 59%**  
(with post-secondary training)

**FAMILY SIZE: 3.45**

**OWN OR RENT: 82%**

### HOUSEHOLDS BY INCOME



[www.ci.saginaw.tx.us](http://www.ci.saginaw.tx.us)

## 5. Future Site Recommendations

With a new project, it is beneficial to determine the minimum site requirements needed to accommodate the square footage of the building(s), parking, outdoor yard spaces, and site setbacks or easements. Ideally, a new animal shelter site would have a usable area that is at least five times larger than the building's total gross square footage, as determined in the program of spaces listed below.

Total Footprint of Buildings and Covered Exterior Space = 17,061 GSF.

Total square footage requirements:  $17,061 \text{ GSF} \times 5 = 85,307 \text{ GSF}$  of land.

Total acreage requirements:  $85,307 \text{ GSF} / 43,560 \text{ GSF per acre} = 2 \text{ acres}$ .

The new animal shelter will need at least two usable acres, but more land is recommended because:

- The shelter may grow to include a veterinary clinic or classroom.
- Large animal pastures and paddocks require more land.

**Overall, we recommend 4-5 acres for the new City of Saginaw animal shelter.**

Below are some recommended qualities of a new site for the City of Saginaw Animal Services.

- Not in a FEMA flood zone or plain (can be studied with county GIS data).
- City utilities are available.
- Three phase power is available.
- Proper zoning designations and/or ability to rezone or achieve special use permits.
- In a safe area, easily accessible to visitors.
- Near a quiet area to allow for outdoor dog activities without disturbing neighbors.

### Existing Site



The existing site would pose some potential issues for a new animal shelter building. The site is roughly one acre, which would not be sufficient for the expanded building program. It is too small even for the existing building program. Another issue with using the existing site would be phasing. The existing



building would need to be demolished, leaving shelter operations unable to continue, because the site is not large enough to stage operations.

If there is the potential of utilizing adjacent land owned by the city, this site can continue to be considered for use.

Pros:

- Easy to stage operations to a new building.
- Is in a quiet area where neighbors are not an issue.
- Is near other city land.

Cons:

- Staff universally registered a concern for how hard the shelter is to find. Signage could help, but the shelter is very out of the way, which likely discourages visitors.
- The train can block traffic into and out of the site, although this may happen in many places within the city.

**Potential Site - Option Two - Adjacent to Blue Mound Road**



At approximately five acres, Option 2 would serve the area requirements for the new building program. However, there are some concerns with this location. One of our concerns would be accessing the site. There does not appear to be a prominent road for access to this site. Another concern, similar to the existing site location, would be wayfinding. This location could be hard for some people to navigate to. The site is also located partially in a flood plain, which means not all of its area is usable. Lastly, the site was previously used as a shooting range and could potentially have lead contamination in the soil. A

soils analysis should be completed, and a lead extraction process would most likely need to be completed before development of the site could begin. Boundaries of the flood plain should be studied, and a site footprint would need to be developed to test the viability of the location.

#### Potential Site - Option Three - Adjacent to Blue Mound Road



Option Three, located adjacent to Option Two, shares similar challenges. The site is partially in a flood plain as well. The site would have better street frontage adjacent to Blue Mound Road. The site is approximately four acres, but with the flood plain running through the site, it is not nearly large enough for the animal shelter programs.

If the City of Saginaw would like Animal Arts to perform additional analyses, we could review the possibility of placing animal shelter programs creatively across the entire Option 2 and 3 parcels to avoid the flood plain. We could also consider a two-story building, but this almost always significantly increases costs.

## 6. Programming Workshop Summary

In January of 2023, Animal Arts conducted a workshop with the City of Saginaw Animal Services, which was attended by staff and council members. Enclosed are notes from the open facilitated discussion of the need for a new animal shelter.

### *What do you like about City of Saginaw Animal Services*

- Small-town feel.
- Plenty of volunteers.
- Community oriented.
- Positive interactions with staff and community members.
- The feeling of making a difference in the life of each animal.
- Shelter staff cares and has an open mind.
- Good organization.
- Staff.

### *What do you wish you could change about City of Saginaw Animal Services*

- Increase rescue capacity.
- Find cost-effective solutions to pet care.
- Community education.
- Class options located at the shelter.
- Better conditions for staff and volunteers.
- Be more proactive.
- Reduce the waitlist time for new animals.
- Reduce the number of euthanized animals.
- Better collaboration.
- Understaffed.

### *What would you like to see in a new facility?*

- Quieter kennel areas.
- Odor reduction.
- Better cleanability.
- More room for storage/supplies.
- More room for training new staff and meetings.
- Conference room.
- Outside areas to walk.
- Increased areas for animal play.
- Better signage.
- Easier to locate.
- Better street access.
- Make shelter a destination.
- Room for staff offices.
- Lobby.
- Flexible spaces for training and classrooms.

- Exam areas located near sallyport.
- Pull through sallyport.
- Bathrooms.
- Improved medical areas.

*Final Comments:*

- House as many animals as we can so they don't have to be euthanized.
- Built-in efficiency - more time to care for animals and less "busy work."
- Kiosks for working areas to rent to those making products and provide services.
- Supplements from private donors.
- Better lighting in the medical rooms.
- Better way to store food.
- Increased animal safety and staff safety.
- Increased security.
- Find ways to allow staff to be more efficient.
- Create better working conditions for staff.
- Find better ways to house larger dogs.
- Find ways to make volunteers feel more welcome.



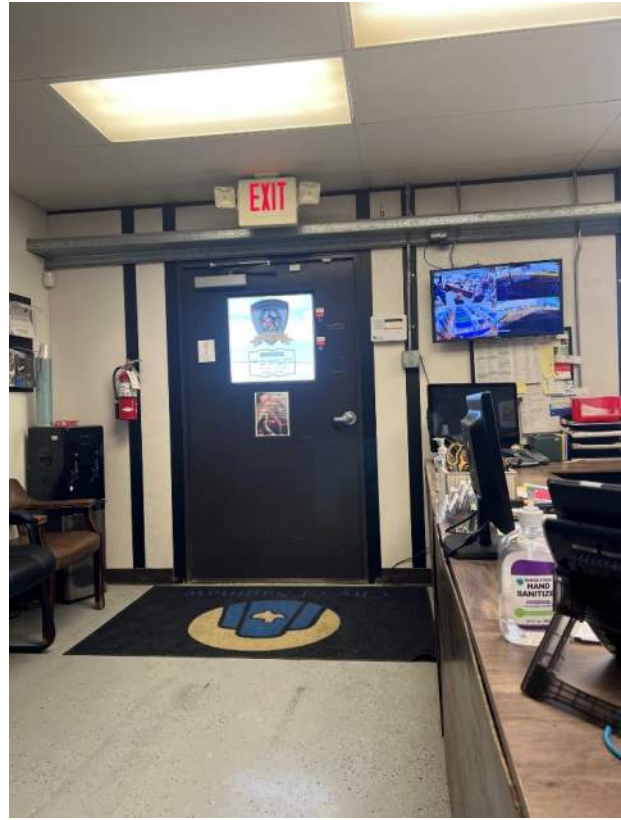
## 7. Brief Overview of Existing Facility

### Lobby and Reception



The lobby and reception areas were noted as being undersized and very cramped. There was not sufficient room for more than a couple people at one time. Having more than one animal at a time would be a safety concern for both the animals and people.

## Lobby/Hall



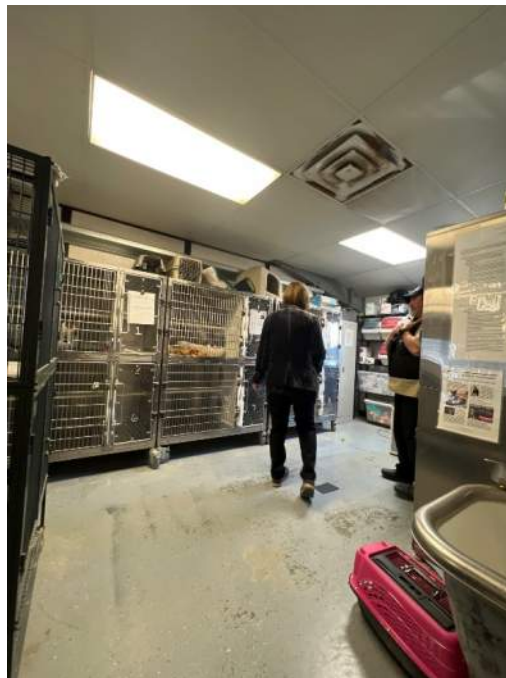
There were multiple areas throughout the shelter where items were being stacked in the hallways due to minimal storage space or simply no storage space available. In these images we can see how small the entry/lobby areas are, and we can also see the adjacent hallway clutter and storage occupying much of the space. ADA accessibility code and fire egress code requirements are also a large concern with these spaces.

### **Lockers/Staff Area**



The Locker Room/Staff Area was also noted as being undersized with very little room for interaction and lacking sufficient area for storage of items.

### **Cat Housing**



Cat housing was also a crowded space. There were few storage options available in this room. Pet odor was very strong in this room, suggesting a lack of ventilation.

## Dog Housing



Similarly, Dog housing was very poorly ventilated leading to excessive amount of odor in this space. This not only makes the space uncomfortable for those working, the odor is unenjoyable for visitors. As is the case with all animal housing areas, poor ventilation can also lead to an increase in infectious disease.

## Outside Storage



Staff members are universally concerned about lack of storage space at the animal shelter. The storage options that are available are spread out and hard to access. They also lead to other issues such as mice and other animal infestations.

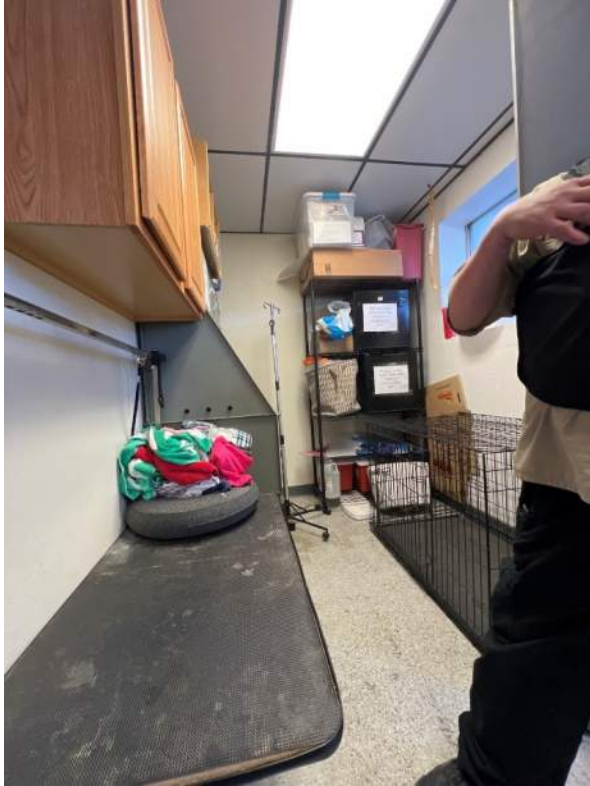


## Building Condition



It should be noted that the overall condition of the building was deteriorating. Many areas of the exterior provided very little insulation or separation from the outside and portions of the building were missing.

## AOC Building/Laundry/Dishes



Behind the main building is the animal control intake area, dog quarantine, and laundry areas. As is the case with the main building these spaces are crowded. This overutilization not only makes the space far less efficient than it could be, it also creates an atmosphere that is very unpleasant to work in for staff and volunteers. Again, as in the main building, there was practically no space designated for the storage of items and in many areas, there was very little room for any type of circulation. These issues are not only contributing to a lack of efficiency, they also create many code issues for egress and ADA accessibility. The washer and dryer in this space is also not an industrial type and is undersized. There were no automated dishwashing systems.

## Dog Quarantine



The dog kennel areas were very small, and the surfaces of these spaces were noted as being very difficult to clean. We received similar feedback from staff while visiting. The runs and hardware were very dated. The ventilation was very poor and the odor in these spaces was substantial. As with all the animal spaces, this contributes to a very unpleasant and potentially very unhealthy space.



## Outside Play Areas and Storage



The outside areas for play were small and fencing lacked the necessary height to secure the animals adequately, leading to safety concerns for the staff and other animals. None of the outside areas provide any shade for the animals, and water runoff can lead to flooding of these areas. Outside storage areas were small and insufficiently protected from intruders including mice and insects and other animals. There is also very little protection from environmental conditions such as freezing temperatures and excessive heat.

### Cat Quarantine/Diseased Animal Storage



The cat quarantine areas were also noted as being small and the interaction between quarantine and medical procedures in these spaces seems to be a concern. These spaces were also somewhat far from the main buildings. The materials in these spaces also create cleanability issues.

## Waste Disposal



Waste disposal is done only through this toilet which is removed from the main building. This is a non-industrial toilet fixture, and it tends to clog.

## Sallyport/Food Storage



The sallyport is located at the rear of the facility. It is a small metal overhang and does not cover a vehicle fully. There is also no security around the perimeter of the sallyport. Food storage is in a large metal shipping container located in the back. This, as with the other outdoor storage containers, is not well protected from the elements. It is not a suitable work environment for those who have to access it.

In summary, the existing animal shelter is too small in every functional area and has pervasive issues including crowding, lack of storage, poor-quality environments, and poor ventilation. The shelter needs to be replaced with a more durable, appropriately sized building.

## 8. New Facility Recommendations

After the workshop, with careful review by animal shelter staff and including Animal Arts recommendations based on our experience, the below recommended program of spaces was developed.

### Program of Spaces

Space	#	Size				Net	Load	Gross	Ext. Cov.	Utility Structures	Ex. Uncov.	Dogs	Cats
Public													
Lobby	1	20	X	30	=	600	1.35	810					
Public Restrooms	2	8	X	9	=	144	1.35	194					
Office	1	10	X	10	=	100	1.35	135					
Volunteer Room	1	10	X	10	=	100	1.35	135					
Storage/Janitorial	1	8	x	10	=	80	1.35	108					
Cat, Small Dog													
Cat Meet	1	10	X	10	=	100	1.35	135					
Cat Cages	14	2.5	X	5	=	175	2.75	481					14
Kitten Cages	5	2.5	X	5	=	62.5	2.75	172					13
Cat Runs	3	5	X	6	=	90	2.00	180					5
Cat Group	1	10	X	10	=	100	1.35	135					5
Catio	1	10	X	10	=	100	1.00		100				
Small Dog/Puppy	3	4	X	8	=	96	2.50	240				6	
Dog Kennels													
Covered Connectors									500				
Meet/Greet	2	10	X	12	=	240	1.35	324					
Dog Runs Indoor	30	5	X	6	=	900	3.25	2,925				30	
Dog Runs Outdoor	30	5	X	6	=	900	2.50		2,250				
Flex/Bite Quarantine	4	6	X	6	=	144	3.25	468				4	
Dog Runs Outdoor	4	6	X	6	=	144	2.50		360				
Kennel Janitorial	2	8	X	12	=	192	1.35	259					
Dog Yards	6	20	x	40	=	4800	1.00				4,800		
Support Spaces													
Laundry	1	16	X	20	=	320	1.35	432					
Food Prep + Dishes	1	16	X	20	=	320	1.35	432					
Bathing	1	10	X	12	=	120	1.35	162					
Central Janitorial	1	10	X	10	=	100	1.35	135					
Mechanical	1	10	X	16	=	160	1.35	216					
Electrical	1	10	X	10	=	100	1.35	135					
IT Room	1	10	X	10	=	100	1.35	135					
Intake													
Sallyport Bay	1	15	X	36	=	540	1.15		621				

<i>Wash Bay</i>	<i>1</i>	<i>15</i>	<i>X</i>	<i>36</i>	<i>=</i>	<i>540</i>	<i>1.15</i>	<i>621</i>				
Conditioned ACO Storage	1	10	X	10	=	100	1.35	135				
Intake Exam Room	1	10	X	12	=	120	1.35	162				
Flex Room	1	9	x	10	=	90	1.35	122				
Euthanasia Room	1	10	X	14	=	140	1.35	189				
<i>Freezer</i>	<i>1</i>	<i>10</i>	<i>X</i>	<i>12</i>	<i>=</i>	<i>120</i>	<i>1.50</i>	<i>180</i>				
Clinic + Isolation												
Shelter Treatment	1	14	X	24	=	336	1.35	454				
Shelter Surgery	0	12	X	14	=	0	1.35	0				
Wards	0	10	X	16	=	0	1.35	0				
Office	0	10	X	12	=	0	1.35	0				
Feral Cat Hold	1	10	X	10	=	100	1.35	135				
Vestibule	1	10	X	10	=	100	1.35	135				
Isolation Wards	3	10	X	10	=	300	1.35	405				
Staff + Office												
Officer Stations	3	6	X	8	=	144	1.65	238				
Other Stations	3	6	X	8	=	144	1.65	238				
Enclosed Offices	2	10	X	12	=	240	1.65	396				
Staff Restrooms	2	8	X	9	=	144	1.35	194				
Shower Room	1	6	x	9	=	54	1.35	73				
Locker Room	1	12	x	14	=	168	1.35	227				
Break Alcove	1	12	X	16	=	192	1.35	259				
Conference Room	1	20	X	30	=	600	1.20	720				
Exterior Structures												
<i>Storage</i>	<i>1</i>	<i>30</i>	<i>x</i>	<i>50</i>	<i>=</i>	<i>1500</i>	<i>1.00</i>	<i>1,500</i>				
<i>Donations (shed)</i>	<i>1</i>	<i>10</i>	<i>x</i>	<i>12</i>	<i>=</i>	<i>120</i>	<i>1.00</i>	<i>120</i>				
<i>Lawn Equip. (shed)</i>	<i>1</i>	<i>10</i>	<i>x</i>	<i>20</i>	<i>=</i>	<i>200</i>	<i>1.00</i>	<i>200</i>				
<i>Livestock</i>	<i>1</i>	<i>12</i>	<i>x</i>	<i>24</i>	<i>=</i>	<i>288</i>	<i>1.50</i>	<i>432</i>				
									12,429	4,632	2,252	4,800
									GSF	GSF	GSF	GSF
											40	36
											Dogs	Cats
Total Footprint							17,061	GSF				

The program of spaces includes today's standards for animal housing, which are described below.

### Feline Housing, Husbandry and Enrichment

The best practice standards for feline housing are as follows:

- Per the Association of Shelter Veterinarians (ASV), a cage that is appropriately 4'-5' long.
- Double compartment for safe handling and cleaning.
- Variety of enrichments items in the housing.
- Cats housed away from dogs.
- Cats housed to fast track through the shelter.





*Cat Portal*

The above image shows a cat walking through a portal within their cat cage. This portal connects two stainless steel cat cages together, which transforms inadequate cat cages into fulfilling the four-to-five-foot size requirement and the double-compartment requirement. These requirements are extremely important to cats because to be happy and healthy they need at least a three-foot separation between their litter box and their food. Double-compartment cages allow for food to be on one side, and a litter box to be on the other side. Additionally, while a staff member cleans one side of the housing, the cat can be on the other side which allows for a minimally stressful cleaning experience for all parties involved. Stress is directly related to the incidence of upper respiratory infections in cats so by providing appropriate housing spaces and short lengths of stay, the rate will be reduced or mitigated altogether.



*Feline Housing*

Another important factor for socialized felines in animal shelters is their ability to socialize with either staff members, volunteers, or potential adoptees. The above image shows an example of housing spaces large enough for people to socialize with the cats. The lower portion is frosted glass which allows for privacy without promoting claustrophobia, while the upper portion is metal grating which promotes air flow. These rooms are large enough for people and cats to be together comfortably which can help the cats' mental well-being, along with giving adopters a comfortable space to socialize and get to know different felines.

Appropriate double-compartment cages are a requirement for cats in confinement. Ample space not only reduces stress for the cats and lowers rates of upper respiratory infections as a result, but compartments with a door between them can be closed so the staff can spot clean one side of the compartment safely. Spot cleaning is imperative as removing cats from their enclosure to do a deep disinfection is contraindicated as it is stressful for the cats, removes familiar scents, and increases risk for the staff. Full sanitation can be done once the cat leaves the enclosure permanently.

Cats, like people, have a variety of preferences. Some cats may enjoy a free-roam room in the company of other cats, while others prefer their own double-compartment housing. Options to behave normally are crucial, so perching options in a free-roam room and hiding spots in both types of housing are imperative. Some experts recommend only using free-roam rooms for bonded cats as it may take up to three weeks for the cats to assimilate to one another (and the industry standard recommendation is less than 14 days in the shelter to their live outcome opportunity).

All animals in confinement need appropriate enrichment in their environment where they can behave normally. For cats this includes scratching, interactive toys, and a soft bed. Since cats are grazers, they should always have access to dry food and the option of canned food twice daily.

### **Canine Housing, Husbandry and Enrichment**

The best practice standards for canine housing are as follows:

- Most importantly, durable housing.
- Sized appropriately for the dog.
- Double compartment for easy, safe handling and cleaning.
- Access to the out of doors.
- In kennel enrichments.
- Strategies to reduce length of stay.



*Canine Kennel*

The above photo shows the interior portion of a double-compartment canine kennel. The front of the kennels have metal grates, which allow the dogs to have ventilation and be aware of what is going on outside of their kennel. This also allows staff members a view of the canines, potentially even from another room through an interior window. Another important aspect of interior housing for canines is



cleanability, which involves flooring material, drains, and a means to clean. Ideally, non-slip, wet-application flooring is installed, with drains within the kennels, as well as the hallways (so that each space can be cleaned independently), and ceiling-mounted hoses for washing down and the application of disinfectant. The ability to clean is especially important for canines because they are housed on the floor.



*Outdoor runs, canine kennel*

Indoor/outdoor runs are beneficial to canines' mental well-being and physical health. The outdoor portions of kennels should ideally be covered by an overhang to protect the canine from harsh sunlight and rain. There are visual barriers between each dog, but the front of the runs have metal grids which help the dog not feel trapped and promote quality air flow.



*Canine Enrichment*

Enrichment can be woven in with architecture as seen here. This is a designed, interactive play yard, but something as simple as a kiddie pool filled with water can bring much joy into a shelter dog's stay.

Double-compartment kennels benefit both dogs and people. To easily sanitize the kennel, which should be done each morning, the staff can sequester the dog on one side and close the divider door. This is the

safest and most efficient for the staff. Fresh food and water can be provided after the kennel is cleaned, then the dog moves over so the opposite side of the kennel can be sanitized. Dogs should be fed a mixture of consistent quality dry and canned food twice daily. Food puzzles are another excellent way to provide added enrichment and treats to occupy dogs while in confinement.

Play groups are an important part of the enrichment program for shelter dogs. Every dog, every day should have play group time with the exception of those who do not enjoy play groups. Dogs Playing for Life ([dogsplayingforlife.com](https://dogsplayingforlife.com)) and Shelter Playgroup Alliance ([shelterdogsplay.org](https://shelterdogsplay.org)) are the two organizations offering onsite training. When designing a new shelter facility, appropriate play yard spaces should always be included.

Natural, free play and exercise are imperative for dogs in confinement. These programs have proven to lower stress hormones, decrease the length of stay, and increase adoptions (<https://pubmed.ncbi.nlm.nih.gov/21862471/>, <https://dogsplayingforlife.com/2021-impact-report/>). Many of these programs are run 100 percent by volunteers and they offer the added benefit of endless opportunities to get social media content of dogs at their best.

Human and canine companionship, in and out of kennel enrichment, and a comfortable, soft bed to rest are key components of a Fear Free shelter environment for dogs. But focusing on preventing their intake and if they do enter, the shortest length of stay to the best possible placement, are more beneficial for dogs and people.

## 9. New Facility Budget Recommendations

### Comparisons

Animal Arts has designed dozens of animal shelter facilities around the United States and maintains a good set of comparisons. That said, budgets are notoriously difficult to predict in today's market, and so we have included many data points that are beyond our normal dataset, to make budgetary recommendations for this project. The chart below includes a variety of projects, all adjusted to 2023 numbers and averaged to the "average" location within the United States. The chart also includes projects by architects other than Animal Arts to be more realistic and inclusive of many different project parameters and design approaches.

Architect	Project Name	State	Turner Cost Index		RS Means	
			Inflated to 2023	Cost/s.f.	Location	Adj. Cost/s.f.
AA	Arizona Humane Society	AZ	\$40,610,566	\$561.87	105.00%	\$535.11
AA	Atlanta Humane Society	GA	\$20,002,200	\$503.26	94.00%	\$535.39
BG	Broward County Animal Care & Adoption	FL	\$23,388,750	\$584.72	99.00%	\$590.63
AA	Confidential Project	NY	\$24,960,000	\$780.00	99.90%	\$780.78
AA	Dumb Friends League***	CO	\$36,791,115	\$566.02	118.00%	\$479.68
AA	Fulton County Animal Services	GA	\$30,404,378	\$556.50	94.00%	\$592.02
SPOA	Harris County Pets	TX	\$25,383,890	\$528.83	100.00%	\$528.83
JR	Houston SPCA Campus Expansion	TX	\$29,967,798	\$356.65	100.00%	\$356.65
AA	Humane Society of the Pikes Peak Region	CO	\$5,294,986	\$656.54	94.00%	\$698.45
AA	Larimer County Animal Shelter	CO	\$23,696,801	\$613.91	116.00%	\$529.23
AA	Loudoun County Animal Services	VA	\$17,044,767	\$728.13	120.00%	\$606.77
SPOA	Montgomery County Animal Care	VA	\$5,687,160	\$339.88	75.00%	\$453.17
AA	Mountain Humane	ID	\$19,945,200	\$633.18	150.00%	\$422.12
SPOA	Operation Kindness	TX	\$12,971,000	\$405.34	100.00%	\$405.34
AA	Pima Animal Care**	AZ	\$21,895,240	\$480.16	100.00%	\$480.16
AA	Santa Cruz SPCA	CA	\$6,591,653	\$927.62	130.00%	\$713.55
AA	Seattle Humane Society	WA	\$27,165,780	\$482.99	147.00%	\$328.56
				<b>\$570.92</b>		<b>\$531.56</b>
				<b>Average</b>		<b>Average</b>

For the City of Saginaw project, we recommend \$550 per s.f. for traditional animal shelter construction for a preliminary ballpark number. This is higher than some of the comps on this chart, but keep in mind that the **Fort Worth region's current construction costs are around 26 percent higher than industry average**, and this is because of rapid growth, which makes the labor market tighter. At this early stage, when we know nothing of the project site, and we know little about the other aspects that may increase or decrease costs, it behooves the city to use a conservative number for earliest preliminary ballpark budgeting. It is easier to tighten up a budget after more design parameters are known. Some of our budget options explored in this section are well below \$550, because they utilize different types of buildings such as pre-engineered buildings for a better value.

## Budget Options for the City of Saginaw Animal Shelter

We have included several options for the City of Saginaw Animal Shelter budget and have described them in the pages following.

### Base Budget

#### Best-Practice Animal Shelter, Built with Longevity in Mind

	Offsite Utility Improvements		=	N.I.C.	
	Site Development Costs		=	\$1,900,000	Based on Typical Percentage
	Generator Allowance		=	\$250,000	Guesstimate
12,429	Interior Shelter GSF	\$550	=	\$6,836,129	Based on Strong Comps
4,632	Exterior Covered GSF	\$350	=	\$1,621,200	Covered Kennel, Sallyport
2,252	Utility Structures	\$100	=	\$225,200	Sheds, Storage Buildings
				\$10,832,529	Subtotal
	Cost Escalation	10%		\$1,083,253	
				<b>\$11,915,782</b>	<b>Hard Costs (Recommended)</b>
	F, F, and E, IT Infrastructure	14%	=	\$1,668,209	Incl. Contractor Install
	Professional	10%	=	\$1,191,578	
	Owner Contingency	10%	=	\$1,191,578	
	Owner Project Manag.		=	N.I.C.	CM or Owner's PM fees not incl.
	Permitting, Entitlements		=	N.I.C.	Not included for now
				<b>\$4,051,366</b>	<b>Soft Costs (Recommended)</b>
				<b>\$15,967,147</b>	<b>Approximate Project Costs</b>
				<b>Range</b>	<b>\$15.75 million to \$16.25 million</b>

### Budget Option 1

#### Value Engineered Option - Staff/Offices in a Modular Office Building (M.O.B.)

	Offsite Utility Improvements		=	N.I.C.	
	Site Development Costs		=	\$1,900,000	Based on Typical Percentage
	Generator Allowance		=	N.I.C.	Deferred
2,345	Modular Office Building	\$275	=	\$644,875	Based on Strong Comps
10,084	Interior Shelter GSF	\$550	=	\$5,546,379	Covered Kennel, Sallyport
4,632	Exterior Covered GSF	\$350	=	\$1,621,200	Sheds, Storage Buildings
2,252	Utility Structures	\$100	=	\$225,200	Subtotal
				\$9,937,654	Based on Typical Percentage
	Cost Escalation	10%		\$993,765	
				<b>\$10,931,419</b>	<b>Hard Costs (Recommended)</b>
	F, F, and E, IT Infrastructure	14%	=	\$1,530,399	Incl. Contractor Install Civil, Landscape, Architectural,
	Professional	10%	=	\$1,093,142	Structural, MEP

	Owner Contingency	10%	=	\$1,093,142	
	Owner Project Manag.		=	N.I.C.	CM or Owner's PM fees not incl.
	Permitting, Entitlements		=	N.I.C.	Not included for now
				<b>\$3,716,683</b>	<b>Soft Costs (Recommended)</b>
				<b>\$14,648,102</b>	<b>Approximate Project Costs</b>
				<b>Range</b>	<b>\$14.5 million to \$15 million</b>

## Budget Option 2

### Value Engineered Option – Building is a Pre-Engineered Metal Building

	Offsite Utility Improvements		=	N.I.C.	
	Site Development Costs		=	\$1,900,000	Based on Typical Percentage
	Generator Allowance		=	N.I.C.	Deferred
8,453	PEMB Shelter	\$500	=	\$4,226,663	All but Kennels Cost per s.f. slightly increased because not averaged w/ Shelter
3,976	Kennels	\$600	=	\$2,385,600	
4,632	Exterior Covered GSF	\$350	=	\$1,621,200	Covered Kennel, Sallyport
2,252	Utility Structures	\$100	=	\$225,200	Sheds, Storage Buildings
				\$10,385,663	Subtotal
	Cost Escalation	10%		\$1,035,866	
				<b>\$11,394,529</b>	<b>Hard Costs (Recommended)</b>

	F, F, and E, IT Infrastructure	14%	=	\$1,595,234	Incl. Contractor Install Civil, Landscape, Architectural, Structural, MEP
	Professional	10%	=	\$1,139,453	
	Owner Contingency	10%	=	\$1,139,453	
	Owner Project Manag.		=	N.I.C.	CM or Owner's PM fees not incl.
	Permitting, Entitlements		=	N.I.C.	Not included for now
				<b>\$3,874,140</b>	<b>Soft Costs (Recommended)</b>
				<b>\$15,268,669</b>	<b>Approximate Project Costs</b>
				<b>Range</b>	<b>\$15.00 million to \$15.5 million</b>

## Budget Option 3 (Preferred)

### Value Engineered Option - Staff in M.O.B., Shelter Except Kennels in a Pre-Engineered Metal Building

	Offsite Utility Improvements		=	N.I.C.	
	Site Development Costs		=	\$1,900,000	Based on Typical Percentage
	Generator Allowance		=	N.I.C.	Deferred
2,345	Modular Office Building	\$275	=	\$644,875	Staff, Offices, ACO Space
6,108	PEMB Shelter	\$500	=	\$3,054,163	All but Kennels Cost per s.f. slightly increased because not averaged w/ Shelter
3,976	Kennels	\$600	=	\$2,385,600	
4,632	Exterior Covered GSF	\$350	=	\$1,621,200	Covered Kennel, Sallyport
2,252	Utility Structures	\$100	=	\$225,200	Sheds, Storage Buildings

				\$9,831,038	<i>Subtotal</i>
	Cost Escalation	10%		\$983,104	
				<b>\$10,814,141</b>	<b>Hard Costs (Recommended)</b>
	F, F, and E, IT Infrastructure	14%	=	\$1,513,980	<i>Incl. Contractor Install Civil, Landscape, Architectural, Structural, MEP</i>
	Professional	10%	=	\$1,081,414	
	Owner Contingency	10%	=	\$1,081,414	
	Owner Project Manag.		=	N.I.C.	<i>CM or Owner's PM fees N.I.C.</i>
	Permitting, Entitlements		=	N.I.C.	<i>Not included for now</i>
				<b>\$3,676,808</b>	<b>Soft Costs (Recommended)</b>
				<b>\$14,490,949</b>	<b>Approximate Project Costs</b>
				<b>Range</b>	<b>\$14.25 million to 14.75 million</b>

## Budget Option 4 - NOT RECOMMENDED

### Maximum Reduction Option – Not Recommended Because Square Footage Is Well Below Requirements

	Offsite Utility Improvements		=	N.I.C.	
	Site Development Costs		=	\$1,805,000	<i>Reduced slightly</i>
	Generator Allowance		=	N.I.C.	<i>Deferred</i>
1,819	Modular Office Building	\$275	=	\$500,225	<i>Staff, Offices, ACO Space</i>
3,607	PEMB Shelter	\$500	=	\$1,803,500	<i>All but Kennel</i>
					<i>Cost per s.f. slightly increased because not averaged w/ Shelter</i>
5,214	Kennels	\$600	=	\$3,128,100	
3,851	Exterior Covered GSF	\$350	=	\$1,347,850	<i>Covered Kennel, Sallyport</i>
1,352	Utility Structures	\$100	=	\$135,200	<i>Sheds, Storage Buildings</i>
				\$8,719,875	<i>Subtotal</i>
	Cost Escalation	6%		\$523,193	<i>Risky to Reduce Escalation Costs</i>
				<b>\$9,243,068</b>	<b>Hard Costs (Recommended)</b>
	F, F, and E, IT Infrastructure	13%	=	\$1,201,599	<i>Incl. Contractor Install Civil, Landscape, Architectural, Structural, MEP</i>
	Professional	10%	=	\$924,307	
	Owner Contingency	8%	=	\$739,445	<i>Risky</i>
	Owner Project Management		=	N.I.C.	<i>CM or Owner's PM fees N.I.C.</i>
	Permitting, Entitlements		=	N.I.C.	<i>Not included for now</i>
				<b>\$2,865,351</b>	<b>Soft Costs (Recommended)</b>
				<b>\$12,108,418</b>	<b>Approximate Project Costs</b>
				<b>Range</b>	<b>\$12 million to \$12.5 million</b>

### **Brief Summary of Recommended Option**

Option 3 is the recommended option because it is the best value while not taking risky moves such as cutting into contingencies, nor does it reduce the square footage below the minimum required program to serve the City of Saginaw.

Please note that Pre-engineered metal buildings, while perfectly reasonable for most areas of a shelter, do not work well at all for kennel space for many reasons. Kennels are best built as masonry buildings. Thus each option that uses a metal building still utilizes a traditionally constructed kennel.

In option 3, because we were searching for the best value, the staff offices are in a modular building. The city should expect to replace this building in 15 years.

### **Budget Considerations**

Below are some reasons why animal shelters are more expensive than other types of projects.

#### **Designing for Sanitation**

Shelters must provide a clean and sanitary environment for the health of animals. Unlike human hospitals where patients are protected by footwear, animals are in direct contact with the floors and walls of housing and circulation spaces. Sanitation systems are expensive because they involve skilled trades and significant infrastructure. A well-designed shelter has:

- Floor drains in every animal housing enclosure, as well as in the aisles outside the enclosures.
- Thickened concrete slabs to incorporate drainage systems.
- Hoses and disinfectant mixing stations throughout housing areas.
- Waterproof floor and wall systems. This is extremely important to prevent degradation of finishes and to extend the lifespan of the shelter.
- Commercial-grade dishwashers for sanitizing bowls and equipment.
- Commercial-grade washing machines for sanitizing laundry.
- Sag-resistant ceilings to withstand humid conditions during cleaning.
- Doors and interior window openings that are durable enough to be cleaned with water and disinfected.

#### **Designing for Healthy Air**

Just as floors, walls, and equipment must be sanitary, the air that the animals breathe must be clean and free of pathogens and odors. Odors are indicative of unhealthy air quality, and so animal shelters are typically designed to prevent noticeable odor in the air. An odor-free environment also creates a more positive experience for visitors and staff. Animal shelters employ these strategies to maintain healthy and odor-free environments:

- Enhanced air changes.
- Greater dilution with outside air.
- Air pressurization strategies to prevent contaminated air from flowing through the shelter from one space to another.
- Energy recovery strategies to recover the energy lost by moving more air.
- Greater levels of filtration to catch dust and animal hair.

#### **Designing for Lighting and Power**



Buildings such as shelters that have larger mechanical systems also need more electrical capacity to run these systems. Shelters contain equipment such as commercial laundry equipment that require dedicated power. Shelters also must be lit brightly and evenly for good cleaning, the safety of the animals and staff, and to promote adoptions. Given current energy codes, shelters must be designed with highly efficient lighting systems to afford the illumination levels that are needed. This equates to more expensive lighting selections.

### **Durability and Use**

The only building type that receives more daily, difficult use than an animal shelter is a correctional facility. Unlike schools, shelters are used 24 hours per day by the animals. Unlike hospitals, shelters are cleaned with a hose and water. Shelters are used daily by staff, volunteers, the public, and animals, and therefore they must be durable enough to withstand the unpredictable use patterns of this combined group. To last for years, shelters typically have:

- Specialized doors and hardware.
- Wall protection to prevent damage from carts and leashes.
- Tempered glass in interior openings to prevent breakage.
- Flooring that holds up to cart traffic and dog claws.
- Higher performance paints and finishes for easy cleaning.

### **Importance of Well-Built Shelters**

Animal shelter organizations do not have many opportunities to build buildings. Therefore, shelters should be designed to protect important investments and to maintain functional, efficient, and healthy operations for decades to come. Good shelter buildings may cost more money in the short term, but they reduce long-term operational expenses. A great shelter building supports the work that staff and volunteers do to provide humane and compassionate care for the animals, to control disease, and to keep the public safe.



## 10. Next Steps

The City of Saginaw Animal Shelter is planned to be both fiscally responsible and right sized for today and the future. Via the needs assessment process and rigorous engagement with animal shelter staff, we are confident that this project is the right project for the city's minimum mandated services, as well as an adoption-friendly, customer-oriented approach.

Animal shelters can be difficult projects to plan because they are expensive compared to other building types. With budget in mind, we recommend these next steps in the process of planning the new animal shelter for the City of Saginaw.

1. **Choose a project site.** Additional due diligence to review project sites should be performed until the best site is chosen. A confirmed site will allow for defining some budget parameters that are currently nebulous, such as the condition of soils, or environmental concerns, access to the site, and off-site utility costs.
2. **Preliminary Design.** After developing a preliminary design, budgets can be re-validated using confirmed square footages of building elements.
3. **Confirm a project timeline based on funding.** This will confirm the required escalation costs within the project budget.

Once the project is fully approved for construction documents, the city could consider ongoing budget management. For additional real-time cost estimating, and rigorous budget management, the City of Saginaw could consider retaining a Construction Manager at Risk. Many projects are being delivered using this method to ensure the project does not increase in costs as it is being designed.

We look forward to the success of this project and to the best outcomes for pets and people in your community.

## 11. Appendix

# Designing a Best Practice Animal Shelter

City of Saginaw Workshop

1-18-2023

Heather E. Lewis, AIA, NCARB, AAA





# The Basics – What Are They?

- Design / Operate to Minimize Need to Shelter Animals
- Healthy and Sanitary Environments
- Design for Easy Operations



# Minimizing The Need to Shelter Animals

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# Maintaining a Right-Sized Shelter!

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Healthier for Animals



Better Use of Public Funding



Easier to Operate



Fewer \$ to Maintain



Costs Less to Build





# Triaged Intake



# Adoption Counseling





# Community Cat Programs

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# Foster Care





# High Volume Spay/Neuter



# Classrooms





# Pet Food Banks



# Simple Math Examples

10	dogs	x	12 days	=	120	dogs in care
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8	dogs	x	12 days	=	96	dogs in care
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***150 s.f. per dog x 24 dogs = 3,600 s.f. x \$450 per s.f. = \$1,620,000 Saved by Reducing Intakes***

10	dogs	x	12 days	=	120	dogs in care
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10	dogs	x	10 days	=	100	dogs in care
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***150 s.f. per dog x 20 dogs = 3,000 s.f. x \$500 per s.f. = \$1,350,000 Saved by Reducing LOS***







# Healthy and Sanitary Environment

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# Cat Housing Basics

- Best Practice 4' to 5' long cat caging
- Enrichments in the housing
- Cats housed away from dogs



# Good Basic Housing

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# Good Basic Housing



# Better Housing



Architect: Animal Arts  
Photo Credit: Tim Murphy/Foto Imagery

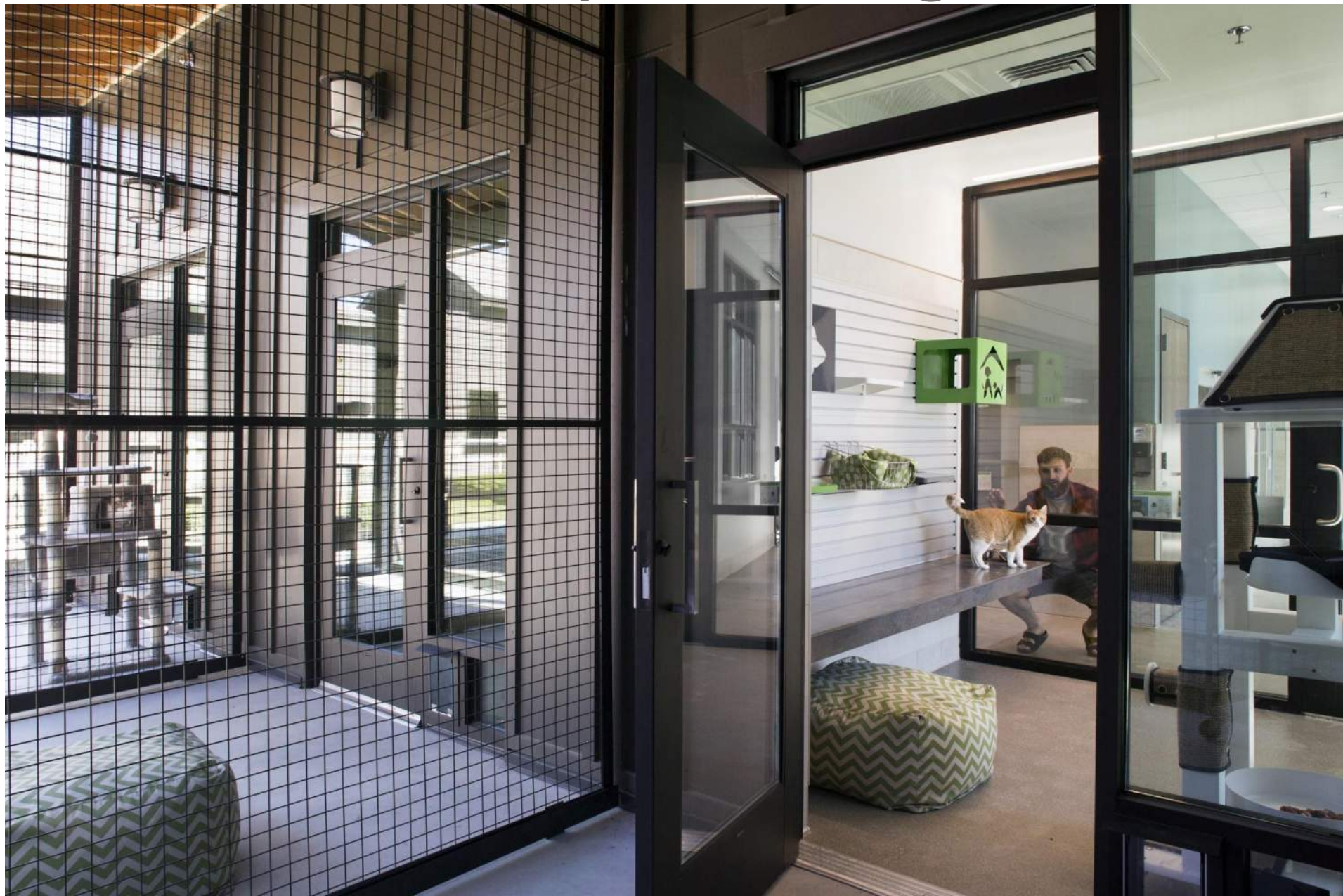


# Adoption Friendly Versions





# Group Housing



# Adoption Strategies for Cats

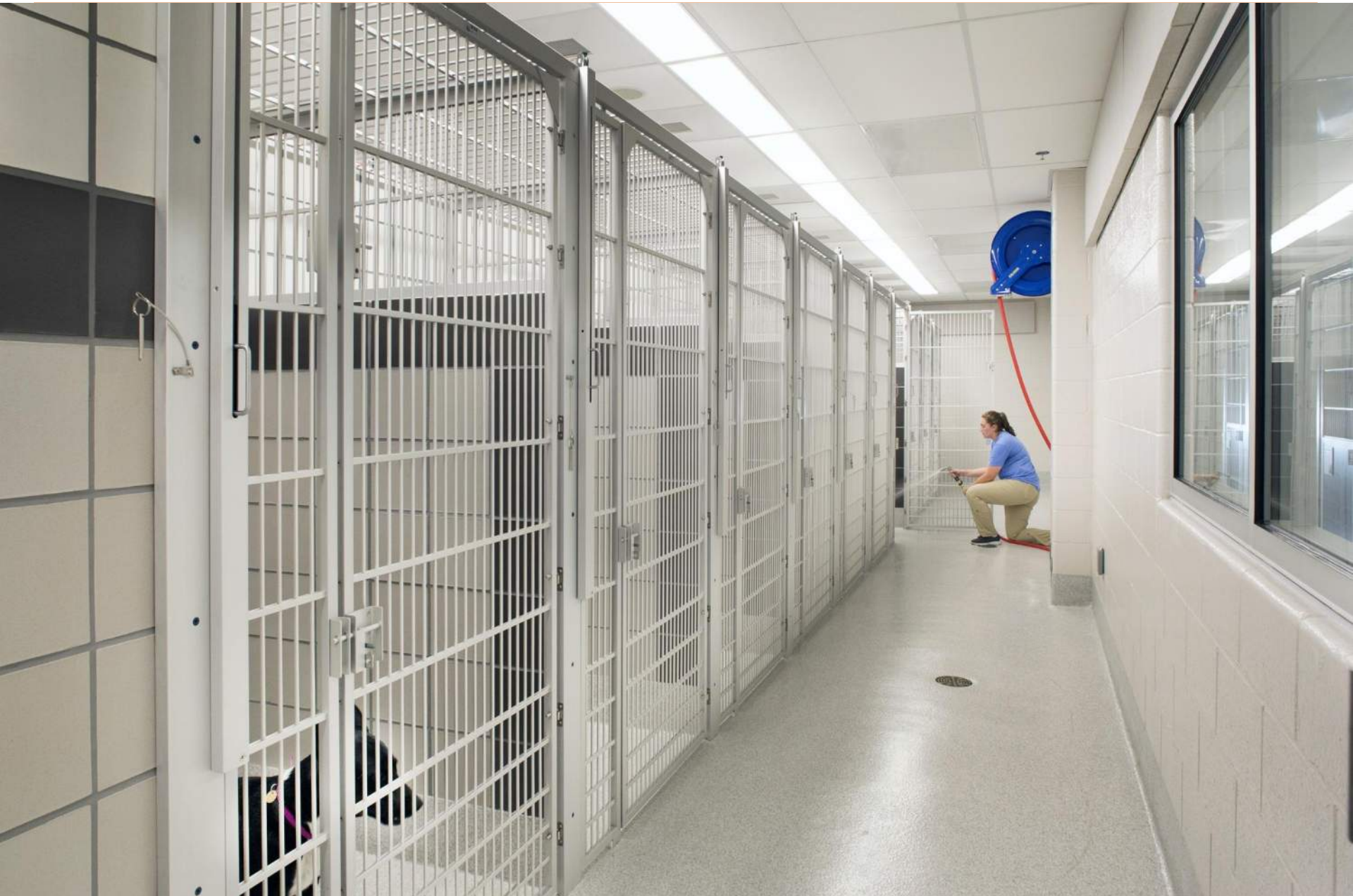




# Isolation Housing - Cats



# Good Basic Housing





# The Best Drain Design

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# Indoor/Outdoor Housing

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# The Gallery – A LIFE CHANGER



# Another Gallery Example





# Indoor Play / Training

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# Outdoor Quasi- Enclosed

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# Outdoor Minimally Covered

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# Outdoor Uncovered



# Wellness for People





# Staffing



# Wellness for Staff Members







# Design for Operations

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# Staff Areas: Making Work Easier



# Staff Areas: Making Work Easier





# Staff Areas: Making Work Easier



# Staff Areas: Making Work Easier





# Staff Areas: Making Work Easier



# Summary of Priorities

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- Operations *Before* Construction
- Right Sized, not Oversized
- Build it Right (healthy, durable)

