HOUSING DESIGN, LENGTH OF STAY AND ANIMAL SHELTER COSTS: IN THE SHORT AND LONG TERM

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Pre-Construction Cost = $

- Immediate costs
  - Building cost – budget – X dollars - easy
  - How this money is spent - harder
    - Generally not able to get everything wanted
    - Generally a need to prioritize where dollars are spent
      - Many very important things
      - Hard to know priorities
        - Too many choices – decision fatigue – bad choices

Seek out resources and get expert help

- Highly recommend involving animal shelter specialists: consultant architects, engineers and folks that are animal shelter population health experts (not all veterinarians are) in the planning and design process of your animal shelter facility.

Post-Construction…. Known and Unknown Costs/Benefits

- Operational – money to run facility
  - Staffing
    - Expectations and what is actually needed
  - Energy cost
  - Maintenance
  - Efficiency of use- performance
- Staff satisfaction/turnover
- Volunteer support/participation
- Meeting mission
- Community good will
- Donor support
- Animal health and well being

Five Freedoms

1. Freedom from Hunger and Thirst
   - by ready access to fresh water and diet to maintain health and vigor.
2. Freedom from Discomfort
   - by providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from Pain, Injury or Disease
   - by prevention or rapid diagnosis and treatment.
4. Freedom to Express Normal Behavior
   - by providing sufficient space, proper facilities and company of the animal's own kind.
5. Freedom from Fear and Distress
   - by ensuring conditions and treatment which avoid mental suffering.

Animal Health and Well Being

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Lucky Day – Win Win Situation

An easy first choice for animal shelter dollars:

Animal health and well being

1. Length of stay - appropriate

2. Housing design – meet animal needs

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1. Length of Stay

Initial cost, building costs = # housing units
Once built there are also daily care costs

- Shorter ave. LOS
  - Need fewer housing units
  - Short LOS means less daily care costs/animal
  - A housing unit is freed up more often for sheltering another animal
    - Ave LOS 40 days, housing unit can serve up to 9.1 animals/year
    - Ave LOS 14 days, housing unit can serve up to 26 animals/year
- Longer ave. LOS
  - Need to provide more housing units
    - $$, $$$$, $$$$$$$$
      - Animal health in general decreases with increasing LOS
      - Larger facility
      - Ability to serve numbers of animals is reduced
        - …fewer lives saved

Length of Stay (LOS) in Holding

- Length of stay
  - Required hold + management
  - Holding capacity needs

Daily Intake	Required hold	Ave. Observed hold	Housing units needed
10	3 days	3 days	30
10	3 days	6 days	60

- Big impact on housing needs in holding
- Big impact on daily care needs of facility

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Capacity

- Annual Intake 4500
  - Monthly daily average intake 12 animals a day
- 2 possible scenario shelters
  - Shelter “A” has 500 housing units and holds up to 500 animals, annual care days = 182,500
    - (365/40 = 9, 9 x 500 = 4500)
  - Shelter “B” has 200 housing units and holds up to 200 animals, annual care days = 73,000
  - Potential annual animals served “A” = 4500
    “B” = 5200

Ave. LOS “A” = 40
Ave. LOS “B” = 14

Ave. LOS = 10 days, need 123 housing units to serve 4500 animals

This is just math – function of the design. Shelter “A” could easily operate identical to shelter “B” by only using 200 housing units - their ave. LOS will reduce to 14 days. Unfortunately it is really hard for a 500 housing unit facility to operate with 300 empty housing units because there is this law: Murphy’s Law for animal shelters…any open housing tends to fill. Maintaining open housing even just for proper operations can be hard to pull off in some communities – even when it is the best thing for well being and welfare of the animals and resource allocation of the shelter.

Overbuilding is super risky-can lead to basically the operation of big costly “boarding” facility.

“Right sizing”- Capacity

- Not too big not too small
  - “Just right” – Goldilocks it
    - Function of design:
      - Ave. daily intake (shelter data)
        - Careful – need to look at max intakes
          - Cat capacities can see seasonal doubling(more) of housing needs
      - LOS

- “Just Right” Target Ave. LOS:
  - 10-14 days

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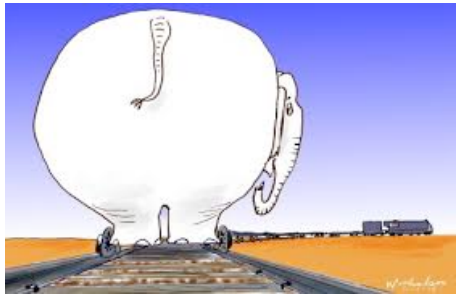
“Right sizing”- Capacity



- WHAT ABOUT FUTURE GROWTH?
  - Expected human population growth does not automatically = expected increase in animal intake
    - Examine trends in shelter data and community
  - Existing and future shelter programs and outreach have big impact on intake, LOS and future housing needs
    - Examples:
      - Spay neuter services
      - Return to owner in field (dogs)
      - Food bank
      - Help desk- solving problem prior to an intake
      - Low cost clinic
      - Community cat programs

LOS

- Best thing: you don't have to wait untill you have a new facility to try it out – many of the LOS tools available can be put into practice in your current facility.

www.sheltermedicine.com

- LOS information sheet
- Capacity 4 Care (C4C)
  - Fast tracking
  - Open selection

2. Housing Design

Double Compartment Housing

Housing Design – Single vs. Double Compartment and Cost

- Initial cost/building cost – ~ square footage
  - $ or $$
  - Get the same number of housing units
- Once built there is operational/functional and animal well being costs essentially for the life of the building
  - $ = $$$$$$
  - $$ = $
  - Hard and costly to make changes once housing is built
- Double compartment housing- easy to plan for hard to retrofit….for dogs
  - …Cat housing – retrofitting is possible

Housing Design:
Double Compartment Cages

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Double Compartment Cages

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Housing Design:
Double Compartment Kennels

Housing Design:
Double Compartment Real Life Room

Why Double Compartment Housing in an Animal Shelter?

- Meets animals behavioral needs/desire to eliminate away from bed/ food/water
  - Stress reduction
  - Research has shown need/desire for this separation in both cats and dogs
    - Support positive behavior - behavior used for house training dogs
- Less confining housing
  - Sufficient space to normally posture, lie down and stretch, move about a bit – stress reduction
- Supports animal health
  - Lower URI rates
- Efficient routine care
  - Routine daily care can be provided in efficient and safe manner
    - Allows ease of less stressful and more efficient care - spot cleaning
      - Less time spent cleaning- more time for other tasks
  - Less time spent cleaning – less time noisy – less stressful day for animals

Why Double Compartment Housing in an Animal Shelter?

- Better disease prevention and control
  - Marked decrease in need for animal handling during cleaning time…. Reduced risk of the human fomite….reduced risk for disease transmission.
  - Less handling during cleaning = less stress for the animals
- Staff safety
  - Less mandatory handling….less risk for staff injury
- Best practice
  - Meets ASV guideline recommendations for standards of care in animal shelters

Win Win Win Win Win Win

- Cost
  - Upfront cost is more – about double
  - Long term cost savings in animal health, treatment costs, staff time, staff injury…year after year after year

Win

Caution:


ON HOLD
Bunny
Medical Hold
In Memory of
SMOKEY & SAM


Pet Mobile
ON HOLD
In Memory of
SMOKEY & SAM

Hmm…that was not the intention

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Double Compartment Housing

- Animal welfare that is built in

Double Compartment Cat Cages -Specifics

- Floor space 9 ft^2 or greater
  - Favorite for flexibility and space: two 30” wide cages with a portal
  - Basics: a cage that is 4’ long and 28” deep that has two compartments
    - Two 2x2 cages with a pass through
    - A 48” wide cage with a 33” main compartment and a 15” litter compartment
- 2 compartments
  - Side to side and/or up to down
    - Flexibility in use
  - Normal posturing
- Shelving should be minimum 12” wide
- Bars are great – adopter/animal interaction…bond
- Height 30” max for stackable cages(5’ when stacked)
  - Allows it to be raised off ground- less stress better for staff
    - max top of cages height ~6’ – people issue
  - Minimum 28” if purchasing new

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Double 30” Cages = Flexibility

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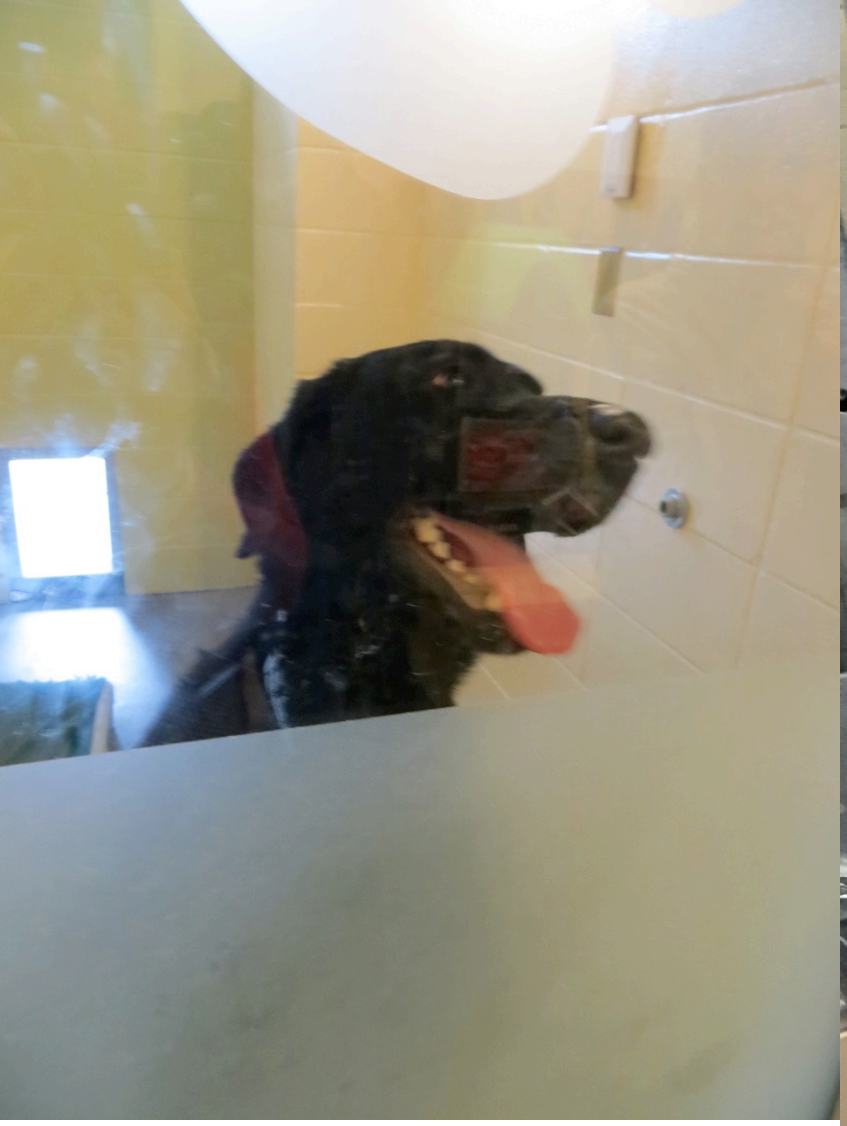
Double Compartment Kennels - Specifics

- Old school design
  - Front to back kennel
    - Front to back transfer door
      - Notice transfer door span
    - Indoor/outdoor or indoor/indoor
      - Both are good
      - Preference for outdoor when possible
    - Side to side transfer is ok – doesn't have all the benefits of front to back
  - Solid sidewalls to at least 4'6"
  - Width - variable
  - Length - variable
  - Open bars are great
  - Visual barriers- careful
    - Use pathways when possible



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Adoption Housing

- Variety to meet needs
  - Animal
  - Adopter
- Double compartment
  - Cages
  - Kennels
  - Rooms(dogs)
    - Cat group rooms fine
      - Porches are great though

Cat Adoption

- Variety
  - Cages
    - Portaled up to down and side to side
  - Individual rooms
  - Group rooms

Dog Adoption

- Real life rooms
  - Double compartment
  - Supports house training behavior
    - Helps contain waste out of site
  - Quiet adoption area
- Kennels
  - Fast track dogs- dog you know will move quickly
    - Some people want to adopt dogs from kennel housing
  - Efficient housing

Combine Ave. 10-14 day LOS with Double Compartment Housing:

Happy healthy shelter animals

Resources

- www.sheltermedicine.com
  - Fast tracking
  - Open selection
  - Capacity for Care C4C:
    - http://www.sheltermedicine.com/documents/business-of-saving-lives-capacity-for-care-for-cats
- MCC (Million Cat Challenge) http://www.millioncatchallenge.org/
- Facility design:
- http://www.sheltermedicine.com/shelter-health-portal/information-sheets/facility-design-and-animal-housing