Memorandum

DATE August 26, 2016

TO Honorable Mayor and Members of the City Council

SUBJECT Loose dogs in Dallas: Strategic Recommendations to Improve Public Safety and Animal Welfare in Dallas

On August 30, 2016, the Dallas City Council will be briefed on the Strategic Recommendations to Improve Public Safety and Animal Welfare in Dallas by The Boston Consulting Group. The briefing materials are attached for your review.

Please contact me if you have any questions or need additional information.

Joey Zapata
Assistant City Manager

Attachments

c: A.C. Gonzalez, City Manager
    Christopher D. Bowers, Interim City Attorney
    Craig D. Kinton, City Auditor
    Rosa A. Rios, City Secretary
    Daniel F. Solis, Administrative Judge
    Ryan S. Evans, First Assistant City Manager

    Jill A. Jordan, P.E., Assistant City Manager
    Eric D. Campbell, Assistant City Manager
    Mark McDaniel, Assistant City Manager
    Jeanne Chipperfield, Chief Financial Officer
    Sana Syed, Public Information Officer
    Elsa Cantu, Assistant to the City Manager – Mayor & Council
Loose dogs in Dallas: Strategic Recommendations to Improve Public Safety and Animal Welfare

Presentation of findings to City Council

August 30, 2016
Agenda

Context
Key Findings
Recommendations
Next steps
Context

In June 2016, BCG was engaged on behalf of the city of Dallas to evaluate opportunities to improve public safety, while safeguarding and improving animal welfare.

BCG’s assignment was to:
• Quantitatively understand the supply of dogs in Dallas
• Identify community priorities given varying constituent perspectives
• Identify best practices from other animal services organizations across the US
• Identify and prioritize levers to maximize impact on public safety and animal welfare
• Synthesize findings in a strategic plan for the community of Dallas to achieve its goals

BCG scope was constrained by:
• Focus on dog population only (vs. all animals) given link to public safety
• Not inclusive of process or recommendations surrounding animal cruelty investigation
• BCG efforts focused on improving the current situation, not assessing prior events unless critical to path forward

1. Live Release Rate from shelter; 2. Despite focus on dogs, most recommendations related to increasing live release rate expected to have significant positive impact on cats and other animals entering DAS
BCG developed a strong understanding of the landscape

<table>
<thead>
<tr>
<th>Information Type</th>
<th>Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews with Stakeholders</td>
<td>100+ stakeholder interviews completed including:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Government</strong>: Council Members, Animal Commissions, Code &amp; DAS, DPD</td>
</tr>
<tr>
<td></td>
<td>• <strong>Non-profits</strong>: Animal rescue organizations, funders/philanthropies</td>
</tr>
<tr>
<td></td>
<td>• <strong>Citizens</strong>: Town halls and specific involved individuals</td>
</tr>
<tr>
<td></td>
<td>~40 interviews with stakeholders from comparable benchmark cities (^1) including Atlanta, Austin, Jacksonville, Las Vegas, Los Angeles, Miami, Reno, San Antonio, and San Diego</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>Detailed analysis of all relevant data sources:</td>
</tr>
<tr>
<td></td>
<td>• <strong>DAS data &amp; Government</strong>: Chameleon, bite reports, 311, 911, Sanitation</td>
</tr>
<tr>
<td></td>
<td>• <strong>Community Data</strong>: Historical S/N activity</td>
</tr>
<tr>
<td></td>
<td>• <strong>Public Data</strong>: Census data</td>
</tr>
<tr>
<td>Primary Research</td>
<td>Extensive primary research to collect new and unique information:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Census</strong>: Roaming dog census in North and southern Dallas</td>
</tr>
<tr>
<td></td>
<td>• <strong>Ride-a-longs</strong>: DAS field day, Targeted Response Team and CARE</td>
</tr>
<tr>
<td></td>
<td>• <strong>Surveys</strong>: Community, Rescue/welfare organization</td>
</tr>
<tr>
<td>Secondary Research</td>
<td>Gathered and reviewed large volume of available secondary research:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Industry</strong>: HSUS, ICAMP, WSPA, ASPCA</td>
</tr>
<tr>
<td></td>
<td>• <strong>Academic</strong>: The Ecology of Stray Dogs, Anthrozoos, Advances in Companion Animal Behavior, etc.</td>
</tr>
</tbody>
</table>

\(^1\) Atlanta, Las Vegas, Miami, Reno, and San Diego all operate animal services on the county-level. Information gathered from Fulton County, Clark County, Miami-Dade County, Washoe County, and County of San Diego, respectively.
Dallas dogs can be conceptualized as buckets and flows

1 Imagine the Dallas dog population as a bucket of water

2 The bucket is continuously filled as new dogs are born

3 Some owners surrender their dogs to DAS

4 DAS shelters and attempts to rehome dogs, within its capacity

5 Some dogs "fall through the cracks" and become loose, including runaway, loose-owned, community or feral dogs

6 Loose dogs collected from field to prevent public safety and animal welfare issues

7 DAS returns dogs to their owners or places them through adoptions and transfer partners—overflow results in euthanasia
Issue is difficult to fix because it requires coordinating efforts
Actions that impact only a single point often create unintended consequences

Isolated single actions compromise public safety or animal welfare, or lack sustainability

<table>
<thead>
<tr>
<th>Single Action</th>
<th>Direct or Unintended Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Pick up all the loose dogs</td>
<td>2. People replace pets given large supply of new dogs</td>
</tr>
<tr>
<td>5. Encourage community to keep loose dogs off the street</td>
<td>7. Euthanasia spikes from increased intake</td>
</tr>
<tr>
<td>4. Build a bigger shelter</td>
<td>2. If breeding continues, dog population overwhelms the most responsible of owners</td>
</tr>
<tr>
<td>2. S/N all the dogs</td>
<td>3+6. Intake fills shelter, returns to &quot;business as usual&quot;</td>
</tr>
<tr>
<td></td>
<td>5. Owned pets still roam the streets</td>
</tr>
</tbody>
</table>

- Population growth
- All dogs
- Owner surrender
- Loose dogs
- Field collection & turn-in
- DAS Shelter
- Outcomes
Agenda

Context

Key Findings

Recommendations

Next steps
Executive Findings

Dallas Animal Services (DAS) plays key role responding to 311 requests and as open admission shelter
• Each year, DAS receives 48K service requests, takes in 20K dogs, serves 100K customers
• DAS has made improvements since 2011 across shelter operations, LRR, and in other areas
• DAS has historically been underfunded, but gap in municipal funding has been closed

BCG also observed a number of urgent public safety issues facing Dallas residents:
• ~85% of dogs in southern Dallas not spayed or neutered, contributing to population growth
• Census estimates ~8,700 loose dogs in southern Dallas
• DAS bite reports indicate bites from loose-owned dogs have increased 23% annually
• DAS field intake has fallen ~4% annually since 2011, where intake per officer lags peer cities
• DAS issues ~12 citations per day, but 44% of all citations not responded to by defendants

We also observed opportunities for continued improvement regarding animal welfare:
• Today's level of low-costs spay and neuter surgeries not sufficient to reduce population of intact animals
• Today's LRR of ~59% trails aspirations of 90% LRR
• Despite ~140 partnerships, DAS lacks a contractual partnership with a large-scale brick-and-mortar rescue organization, something that is critical to fill gaps in available government funding

Finally, we observed opportunities for improvement regarding organization and communication
• DAS's existing organizational structure limits its resources, communication, execution and accountability
• Opposing factions exist within the Dallas' animal welfare community that have prevented collaboration
Dallas home to ~350k dogs, with low adoption of spay and neuter in southern Dallas resulting in high population growth

Dallas home to ~350k dogs¹

<table>
<thead>
<tr>
<th></th>
<th>Total dog population (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas¹</td>
<td>195</td>
</tr>
<tr>
<td>Southern Dallas²</td>
<td>153</td>
</tr>
<tr>
<td>Dallas</td>
<td>348</td>
</tr>
</tbody>
</table>

Spay and neuter (S/N) levels vary between North & southern Dallas

<table>
<thead>
<tr>
<th></th>
<th>% of dog population</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas³</td>
<td>80</td>
</tr>
<tr>
<td>Southern Dallas⁴</td>
<td>15</td>
</tr>
<tr>
<td>Dallas</td>
<td>51</td>
</tr>
</tbody>
</table>

Southern Dallas dog population in position to grow quickly⁵

<table>
<thead>
<tr>
<th></th>
<th>% Est. growth rate potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas</td>
<td>-8</td>
</tr>
<tr>
<td>Southern Dallas</td>
<td>13</td>
</tr>
<tr>
<td>Dallas</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Dog population is a function of households and dogs per household. There are 333,700 households in North Dallas and 0.584 dogs per household based on AVMA; 2. There are 173,598 households in southern Dallas and 0.883 dogs per household. Dogs per household is average of American Veterinary Medical Association (0.583 dogs/HH) and Pets for Life (1.182 dogs/HH); 3. Assumes 80% sterilized in North Dallas based on local expert interviews; 4. Based on 2015 DAS shelter and field intake – and inline with local expert interviews; 5. Growth rates based on starting population, birth rate, and death rate. Birth rate assumes 1.16 litters a year, 7 puppies a litter, 75% birth survival rate for an average of 6.09 puppies a year per intact female. Sex ratio assumed to be 50/50. A 10 year life expectancy, implies 10% of dogs die in a given year; Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8 ; Source: DAS Chameleon database, Experian Current Year Estimates (Q2 2015) for population data, AVMA, ASPCA, PFL, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, BCG analysis
Population growth slowed by DAS and community efforts, but will only "pay off interest, not principal"

Population growth contained in two ways

A DAS collection & placement
- DAS removes dogs from area through Field and OTC collects
- DAS places some dogs back into community that have been S/N

B Low-cost S/N surgeries
- DAS and community organizations offer low-cost S/N surgeries that serve dog-owners in the community

Today, efforts have contained growth in southern Dallas, but not reduced intact population

Intact Dogs in southern Dallas (k)

Today's activities prevent rapid population growth

Higher levels of S/N or removal from area required to reduce intact population

1. Assumes no spay and neuter, adoptions, RTO, or transfers; 2. Assumes no spay and neuter; however, number of adoptions, RTO, and transfers into southern Dallas constant to 2015; 3. Surgeries completed by BFBD, SNN, SPCA, DAS (through BFBD), DCAP, PFL specific to southern Dallas. Assumes levels of S/N are constant to 2015. 4% does not align to next slide, due to difference in 10 year CAGR and one year growth rate. Faster growth seen in later years.; Note: Assumes starting intact population of 130,294 dogs in southern Dallas, 6% roaming, 50/50 sex ratio, 1.16 litters a year, 7 puppies a litter, 75% birth survival rate, 10 year life expectancy, 2.8% of owned dogs breeding; Source: AVMA, ASPCA, American Kennel Club, Pets for Life Canine Perinatal Mortality Study 2012, Birth and Death Rate Estimates of Cats and Dogs 2004, PetMD, Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994, BFBD, SNN, SPCA, DAS Chameleon database, DCAP, PFL, BCG analysis
Based on results, estimate ~8,700 loose dogs in southern Dallas
Sizing population can be helpful in identifying resources needed to address issue and progress tracking

What did we see:
136 dogs along 235 miles

BCG counted loose dogs on ~235 miles driven

<table>
<thead>
<tr>
<th></th>
<th>Census Trips</th>
<th>Miles Driven</th>
<th>Dogs Seen</th>
<th>Average Per Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas</td>
<td>5</td>
<td>59</td>
<td>1</td>
<td>0.02</td>
</tr>
<tr>
<td>Southern Dallas</td>
<td>15</td>
<td>176</td>
<td>135</td>
<td>0.77</td>
</tr>
</tbody>
</table>

- Also observed citizens walking with sticks for protection on most routes in southern Dallas

What does it mean:
~8,700 loose dogs in southern Dallas

Observations extrapolated based on road mileage to estimate total loose dogs in Dallas

<table>
<thead>
<tr>
<th></th>
<th>Total Road Miles¹</th>
<th>Dogs Seen / Mile</th>
<th>Unseen Multiplier²</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas</td>
<td>2,226</td>
<td>0.02</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Southern Dallas</td>
<td>1,751</td>
<td>0.77</td>
<td>~6.45x</td>
<td>~8,700</td>
</tr>
</tbody>
</table>

Math shown is simplified, but representative based on approaches endorsed by:

- WHO
- WSPA

Census does not provide indication of trend and would need to be repeated in the future to assess progress

Reported dog bites in Dallas up 15% annually from 2013-15 with bites from loose-owned dogs growing at 23%

DAS completes a "bite report" for every reported dog bite per CDC guidelines

In Dallas, dog bites, especially those from loose-owned, dogs are growing

1. DAS dog bite reports from 2013-2016 (n=4,290); BCG performed manual data entry of key fields; 2. Compounded annual growth rate; 3. Stray defined as a dog without an owner; 4. Compared the total dog bites for January to March of 2015 and 2016 to find ~1.1x growth in 2016. Applied ~1.1x to the total number of bites in 2015 (1,524) to estimate 2016 total dog bites. ; Note: For the fields that were left blank in the bite reports, assumed those reports were distributed in line with completed records. Whether dog was stray or owned had 213 incompletes (~4.9%). Of owned dogs, 1,384 (42.9%) had the "at large," or loose, field incomplete; Note: Dog bites are thought to be underreported in the US. In the future, better tracking of bites may result in an apparent increase as previously unreported bites begin to be reported; Source: DAS bite reports 2013 - Q1 2016, BCG analysis

No. dog bites

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stray</td>
<td>1,148</td>
<td>1,251</td>
<td>1,524</td>
<td>1,647</td>
</tr>
<tr>
<td>23%</td>
<td>21%</td>
<td>21%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td>40%</td>
<td>42%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>37%</td>
<td>39%</td>
<td>42%</td>
<td>44%</td>
<td></td>
</tr>
</tbody>
</table>

Annual Increase (CAGR)

2013-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>2013-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stray</td>
<td>10%</td>
</tr>
<tr>
<td>Restrained owned</td>
<td>10%</td>
</tr>
<tr>
<td>Loose owned</td>
<td>23%</td>
</tr>
</tbody>
</table>

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Since 2011, DAS dog intake flat, with ~4% annual decline in field intake offset by increase in over-the-counter surrenders.

DAS Intake Volume by Type

1. CAGR = compound annual growth rate. 2. TTM = trailing twelve months; Note: ‘Field – Same Day RTO (return-to-owner)’ includes dogs with primary intake type of ‘Field’ and any intake subtype and reunited with owner on the same day; ‘Field – Owner Surrender’ includes dogs with primary intake type of ‘Field’ and intake subtypes of ‘owner surrender’ or ‘confiscated’; ‘Field – Stray’ includes dogs with primary intake type of ‘Field’ and intake subtype of ‘stray’ or ‘stray – confined’; ‘OTC – Stray Turn-In’ includes dogs with primary intake type of ‘OTC’ and intake subtype of ‘stray’; ‘OTC – Owner Surrender’ includes dogs with primary intake type of ‘OTC’ and intake subtypes of ‘owner surrender’ or ‘confiscated’.

Source: DAS Chameleon database, BCG analysis.
Compared to peers, DAS has higher ASO staffing levels and lower ASO field intake

DAS has 45% more ASOs per million people than benchmarks...

...but, DAS field collection lags by 20%

Note: Assumes 33 DAS ASOs with a field intake of 9363 for CY 2015.
DAS Animal Services Officers responsible for 311 responses, Field Collection, Euthanasia — majority of work is reactive

**Field work**

**Reactive (311)**
- Respond to 311 requests
- Collect animals, return dogs to owners, issue citations, and educate community
- Sweeps, cites, educates

**Proactive (Patrol)**
- Target one area with sweeps, door-to-door education, and citations (CARE team)
- Perform sweeps of some neighborhoods

**Shelter work**

**Shelter**
- Create and investigate bite records
- Euthanize dogs at the shelter

80% of ASO time
10% of ASO time
10% of ASO time
Annually, DAS fields ~48k calls, ~60% of which are dispatched for ASO response

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Response timeline</th>
<th>Response goal</th>
<th>Examples</th>
<th>TTM from May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immediately</td>
<td>45m – 1 hour</td>
<td>Animals attacking humans or each other; humans attacking animals; public safety obstruction</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>Immediately after Level 1</td>
<td>1-2 hours</td>
<td>Critically injured animals; animals that will die if left in their current condition/environment; rabies vector species in living quarters</td>
<td>16%</td>
</tr>
<tr>
<td>3</td>
<td>Immediately after Level 2</td>
<td>2-3 hours</td>
<td>Urgent assists to Police or Fire</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>Once levels 1-3 cleared</td>
<td>3-4 hours</td>
<td>Animals on school grounds; aggressive packs of dogs; animal neglect; sick or injured</td>
<td>15%</td>
</tr>
<tr>
<td>5</td>
<td>Once Level 4 cleared</td>
<td>4-6 hours</td>
<td>Animal bite calls/quarantine; confined animals not in danger from the elements; wild animals in living quarters</td>
<td>3%</td>
</tr>
<tr>
<td>6</td>
<td>Once level 5 cleared</td>
<td>12 hours</td>
<td>Low priority police assists; owner surrenders for disabled or senior citizens; loose owned dogs</td>
<td>15%</td>
</tr>
<tr>
<td>7</td>
<td>Case dependent</td>
<td>7-10 days</td>
<td>Follow ups</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>Within 7-30 days</td>
<td>7 days</td>
<td>Compliance calls; loose dogs in non CARE areas</td>
<td>38%</td>
</tr>
</tbody>
</table>

1: Range is 6/1/2015-5/31/2016; Note: TTM is trailing twelve months. Applied Volumes for the calls that had outcomes (~44k) to all calls; Source: 311 interview, Animal Service Request Types matrix from 311 prepared on 6/20/2016, and “Follow-up to Dallas Animal Services Update” to Quality of Life Committee on 5/6/2016, BCG analysis

~45% of dispatched requests

~40% of requests not dispatched at current resource levels
DAS-issued citations growing at ~7% monthly, but only 56% received a response

**Monthly citations growing 7% monthly**

Number of citations Per Month

<table>
<thead>
<tr>
<th>Month</th>
<th>2014-06</th>
<th>2015-01</th>
<th>2016-01</th>
<th>2016-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-06</td>
<td>90</td>
<td>94</td>
<td>130</td>
<td>132</td>
</tr>
<tr>
<td>2015-01</td>
<td>108</td>
<td>132</td>
<td>174</td>
<td>225</td>
</tr>
<tr>
<td>2016-01</td>
<td>176</td>
<td>143</td>
<td>231</td>
<td>231</td>
</tr>
<tr>
<td>2016-05</td>
<td>200</td>
<td>308</td>
<td>286</td>
<td>397</td>
</tr>
</tbody>
</table>

**3,488 citations over TTM**

**44% of citations issued in 2015 were not responded to**

<table>
<thead>
<tr>
<th>No. citations 2015</th>
<th>Responded to by defendant</th>
<th>Not responded to by defendant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,335</td>
<td>44%</td>
<td>44%</td>
<td>2,368</td>
</tr>
</tbody>
</table>

1. For citations that had multiple outcomes classifications, included the outcome with the highest violation number with the assumption that that is the most recent outcome
2. Maximum amount citation fines due was $466,589.73, maximum total paid was $177,661.37. In addition, some citations indicate that a defendant has not responded, but a citation has been paid.

Note: TTM = trailing twelve months

Source: Citation data from municipal courts 2015
Today ~60% of dogs achieve positive outcomes
In past five years, adoptions have grown 25% annually, transfers +15% amid flat volumes

Outcomes for Dogs Entering DAS

Each year DAS has increased live outcomes

1. Other includes animals that died in or were lost at the shelter including those that were dead on arrival (DOA). 2. CAGR = compound annual growth rate. 3. TTM = trailing twelve months.

Source: DAS Chameleon database, BCG analysis
DAS' top 10 transfer partners by volume account for ~70% of volume, with ~140 total partners pulling dogs in 2015

Among smaller volume rescues are organizations that focus only on a specific breed or have much smaller kennel capacity than other rescues.

Source: DAS Chameleon database, BCG analysis

1. Among smaller volume rescues are organizations that focus only on a specific breed or have much smaller kennel capacity than other rescues.

Avg. Dogs transferred/adopted by partner / year

<table>
<thead>
<tr>
<th>Range</th>
<th>Avg. Dogs Transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 5</td>
<td>325</td>
</tr>
<tr>
<td>6 - 10</td>
<td>92</td>
</tr>
<tr>
<td>11 - 15</td>
<td>40</td>
</tr>
<tr>
<td>16 - 20</td>
<td>25</td>
</tr>
<tr>
<td>21 - 25</td>
<td>19</td>
</tr>
<tr>
<td>26 - 30</td>
<td>17</td>
</tr>
<tr>
<td>31 - 40</td>
<td>11</td>
</tr>
<tr>
<td>41 - 50</td>
<td>7</td>
</tr>
<tr>
<td>51 - 139</td>
<td>2</td>
</tr>
<tr>
<td>2015 DAS Dogs Transferred</td>
<td>2,945</td>
</tr>
</tbody>
</table>

2015 DAS Dogs Transferred

Represents ~70% of dog transfers

Smallest ~90 partners pull only ~2 dogs / year
DAS does not have a high-volume relationship with any of the three largest rescue organizations in north Texas

(Data self-reported by rescue organizations)

<table>
<thead>
<tr>
<th></th>
<th>Top 3 Rescues In Dallas</th>
<th>Other Rescues In Dallas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of rescue / transfer organizations</td>
<td>3</td>
<td>~55 (limited to survey)</td>
<td>30,867</td>
</tr>
<tr>
<td>Annual dog intake</td>
<td>20,373 (66%)</td>
<td>10,494 (34%)</td>
<td>30,867</td>
</tr>
<tr>
<td>Dog intake from DAS</td>
<td>386 (2%)</td>
<td>2,559 (24%)</td>
<td>2,945 (10%)</td>
</tr>
</tbody>
</table>

1. Assumes that all transfers not from the top 3 rescues are attributed to the 55 survey participants. In reality, there are 100+ transfer partners, so the actual % of dog intake from DAS by rescues outside of the top 3 is <24%

Note: Intake numbers from CY 2015
Source: Rescue and Animal Organization survey (n=72); DAS Chameleon database; BCG analysis
Historically DAS has been under funded relative to peer cities, but gap has been closed with proposed budget.

Municipal Spending on Animal Services for Benchmark Cities

DAS could augment its funding through an explicit 501(c)3 partnership – a best practice seen in peer cities

100% of partner budget shown to demonstrate potential; partnerships enable shelters to transfer activities and costs to their partner

Municipal and Non-Profit Spending on Animal Services for Benchmark Cities

Municipal Animal Services Budget + Major 501(c)(3)¹ partner budget ($/person)

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Municipal Budget</th>
<th>501(c)(3) Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washoe County (Reno)²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austin³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles⁴</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fulton County (Atlanta)⁵</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Antonio⁶</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacksonville⁷</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County of San Diego⁸</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miami-Dade County⁹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dallas¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clark County (Las Vegas)¹²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houston¹²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean 15.13

Reaching average would require $8M/yr in funding

Existing DAS organization structure negatively impacts its resourcing, communication, execution and accountability

1. Resources and Talent
   - **X** Hiring talent with requisite experience and capabilities difficult due to lower profile and complexity
   - **✓** Can receive layover funds from parent department

2. Communication and Coordination
   - **X** Lacks a "seat at the table" with Dallas's senior city leadership
   - **X** Perceived to not prioritize animal welfare given placement underneath another organization

3. Execution and Accountability
   - **X** Lower-level leadership role (Sr. Program Manager) lacks authority to operate effectively
   - **X** Multiple layers of mgmt cloud accountability

Note: Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves. See compendium for more detailed assumptions.
Source: BCG analysis
Agenda

Context

Key Findings

Recommendations

Next steps
BCG recommends seven actions for Dallas
High level recommendations must be taken as a whole—cherry picking will not work

<table>
<thead>
<tr>
<th>Priority</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission</strong></td>
<td>1. Publicly adopt a mission statement balancing public safety and animal welfare</td>
</tr>
<tr>
<td><strong>Initiatives</strong></td>
<td>2. Increase field intake (up to 8,700 loose dogs) and increase related enforcement and education to prevent dogs from roaming</td>
</tr>
<tr>
<td></td>
<td>3. Increase the number of positive outcomes for Dallas dogs, euthanizing only the sickest animals</td>
</tr>
<tr>
<td></td>
<td>4. Provide approximately 46,000 low-cost spay and neuter surgeries in southern Dallas each year for the next three years</td>
</tr>
<tr>
<td><strong>Enablers</strong></td>
<td>5. Create a collaborative community of partners</td>
</tr>
<tr>
<td></td>
<td>6. Make animal services a priority and strengthen accountability within the city government (e.g., an independent department with additional funding)</td>
</tr>
<tr>
<td></td>
<td>7. Ensure efficiency by measuring outcomes and increasing volunteers</td>
</tr>
</tbody>
</table>
28 specific initiatives provide guidance on how to achieve high-level recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Specific Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mission</td>
<td>1.1 Balanced mission statement</td>
</tr>
<tr>
<td>2 Loose dogs</td>
<td>2.1 Add more ASOs</td>
</tr>
<tr>
<td>3 LRR</td>
<td>3.1 Digital marketing</td>
</tr>
<tr>
<td>4 S/N</td>
<td>4.1 High volume of S/Ns</td>
</tr>
<tr>
<td>5 Collaboration</td>
<td>5.1 Open access to DAS data</td>
</tr>
<tr>
<td>6 Accountability</td>
<td>6.1 DAS as independent department</td>
</tr>
<tr>
<td>7 Efficiency</td>
<td>7.1 DAS employee alignment to plan &amp; metrics</td>
</tr>
</tbody>
</table>

Our report provides details on each initiative
## Preliminary/Suggested Prioritization of Initiatives

### Strategic Priorities
1. High volume of S/Ns
2. Establish high-volume transfer partner & account mgmt
3. Hire vet and 2 vet techs
4. DAS as independent department

### Medium-term Initiatives
1. Add more ASOs
2. ASOs collection – patrol shifts
3. Open access loose dog reports
4. Transport – Pilot & expand
5. S/N Collation - pledges
6. Enforcement of S/N
7. Open access to DAS data
8. Increased DAS funding

### Quick Wins
1. ASOs collection – efficiencies
2. Digital marketing
3. Increase adoption footprint
4. High-volume transfer
5. Surrender deflection – referrals

### Immediate Actions
1. Mission statement
2. Scorecard - implement
3. Community Education
4. Enforcement & effectiveness
5. Animal behavior training
6. Early childhood education
7. Animal Commission changes
8. Civil service

### Long-term Opportunities
1. Scorecard - implement
2. Community Education
3. Enforcement & effectiveness
4. Animal behavior training
5. Early childhood education
6. Animal Commission changes
7. Civil service

---

Source: BCG analysis

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We believe our recommendations can dramatically reduce loose dogs, loose dog bites, and increase positive outcomes

<table>
<thead>
<tr>
<th>Result</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer loose dog bites</td>
<td>Increasing field intake we will reduce the number of loose dogs</td>
</tr>
<tr>
<td></td>
<td>• Loose dogs accounted for 63% of all bites(^1) in 2015</td>
</tr>
<tr>
<td></td>
<td>Increasing S/N levels we will address highest risk dogs</td>
</tr>
<tr>
<td></td>
<td>• Intact male dogs account for 70-75% of all bites(^2)</td>
</tr>
<tr>
<td></td>
<td>Series of opportunities exist to increase positive outcomes</td>
</tr>
<tr>
<td></td>
<td>• e.g., Marketing, Transfer partnerships, Transport, Owner aid, etc.</td>
</tr>
<tr>
<td></td>
<td>By increasing S/N levels, supply of new pets to place declines</td>
</tr>
</tbody>
</table>

S/N is the only sustainable solution, while increased intake and positive outcomes balance short-term needs
Solutions require incremental surge of funding from Dallas government, philanthropies, and rescue partners

Estimated funding requirements to fully execute all recommendations

While ideal, incremental funding requirement is not all or nothing—some improvement possible with fewer resources

1. Assumes low-cost S/N available without restriction or qualification. Also assumes vets are paid salaries.; 2. Assumes means-testing for low-cost S/N—e.g., presentation of Medicare/Medicaid card, proof of free lunch for school-aged children, etc. Also assumes vets are paid per surgery; 3. At the time of this report, there were 8 ASOs and 2 field supervisor vacancies on the DAS organizational chart; 4. Cost associated with Recommendation 2, collection of loose dogs; 5. Cost associated with Recommendation 4.1 regarding dog population control and Recommendation 3 when there are additional dogs adopted out by DAS; 6. Cost associated with Recommendation 3, initiatives aimed as increasing LRR, excluding costs for spay and neuter and vetting additional adopted dogs; 7. Costs from additional DAS employees found in recommendations 5.1, 6.1, 7.1, and 7.2; 8. Cost associated with Recommendation 4.3

Note: This includes the higher estimate of the ranges on recommendations 3.4 and 3.6

Source: BCG analysis
### Detail: Funding supports FTEs, S/N surgeries, and other costs

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>FTE costs ($K)</th>
<th>S/N ($K)</th>
<th>Other costs ($K)</th>
<th>Total ($K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Collection focused ASO team</td>
<td>$94</td>
<td>-</td>
<td>-</td>
<td>$94</td>
</tr>
<tr>
<td>2.2 Increase current ASO intake</td>
<td>$168</td>
<td>-</td>
<td>-</td>
<td>$168</td>
</tr>
<tr>
<td>3.1 Digital marketing</td>
<td>$142</td>
<td>$192</td>
<td>$4</td>
<td>$338</td>
</tr>
<tr>
<td>3.2.1 Add'l adoption location</td>
<td>$267</td>
<td>$125</td>
<td>$33</td>
<td>$425</td>
</tr>
<tr>
<td>3.2.2 Extended adoption hours</td>
<td>$31</td>
<td>$50</td>
<td>-</td>
<td>$81</td>
</tr>
<tr>
<td>3.3.2 Relationship management of transfer partners</td>
<td>$51</td>
<td>-</td>
<td>-</td>
<td>$51</td>
</tr>
<tr>
<td>3.4 Transport program</td>
<td>$51</td>
<td>$192</td>
<td>$42</td>
<td>$285</td>
</tr>
<tr>
<td>3.5 Owner assistance program</td>
<td>$26</td>
<td>-</td>
<td>-</td>
<td>$26</td>
</tr>
<tr>
<td>3.6 Behavior training</td>
<td>-</td>
<td>$120</td>
<td>$650</td>
<td>$770</td>
</tr>
<tr>
<td>5.1 Open data access</td>
<td>$30</td>
<td>-</td>
<td>-</td>
<td>$30</td>
</tr>
<tr>
<td>6.1 Independent department</td>
<td>$310</td>
<td>-</td>
<td>-</td>
<td>$310</td>
</tr>
<tr>
<td>7.1 Org. alignment to DAS mission</td>
<td>$58</td>
<td>-</td>
<td>-</td>
<td>$58</td>
</tr>
<tr>
<td>7.2 Volunteer program</td>
<td>$51</td>
<td>-</td>
<td>-</td>
<td>$51</td>
</tr>
</tbody>
</table>

**Incremental DAS spend**

~$1,300  ~$700  ~$700  ~$2,700^2

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>FTE costs ($K)</th>
<th>S/N ($K)</th>
<th>Other costs ($K)</th>
<th>Total ($K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3 Childhood education</td>
<td>$396</td>
<td>-</td>
<td>-</td>
<td>$396</td>
</tr>
<tr>
<td>6.3 Project management</td>
<td>$158</td>
<td>-</td>
<td>-</td>
<td>$158</td>
</tr>
</tbody>
</table>

**Incremental city spend**

~$600  -  -  ~$600

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>FTE costs ($K)</th>
<th>S/N ($K)</th>
<th>Other costs ($K)</th>
<th>Total ($K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Spay and neuter surge</td>
<td>$175</td>
<td>$7,300</td>
<td>$50</td>
<td>$7,500</td>
</tr>
</tbody>
</table>

**Incremental community spend**

~$175  ~$7,300  ~$50  ~$7,500

**Combined total spend**

~$2,000  ~$7,900  ~$800  ~$10,700

---

1. Took the high end of the range. Low-end of cost range is $156k.; 2. Took the high end of cost range. Low end was $392k

Note: An additional $300,00 one time investment in DAS is also required for recommendations 2.1, 3.1

Source: BCG analysis
Agenda

Context

Key Findings

Recommendations

Next steps
Dallas' issues are solvable, but require community action

<table>
<thead>
<tr>
<th>City of Dallas</th>
<th>Philanthropies</th>
<th>DAS</th>
<th>Transfers and Rescues</th>
<th>Commission</th>
<th>Residents of Dallas</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approve funding increases to support additional ASOs, S/N surge, other initiatives</td>
<td>• Provide funding based on rigorously quantified and tracked plans (esp. S/N)</td>
<td>• Prioritize and execute initiatives for near-term impact</td>
<td>• Devote greater share of your intake to DAS in coming years until S/N effective</td>
<td>• Increase engagement and support, by becoming an advisory board with subcommittees and expertise that helps DAS solve problems</td>
<td>• Volunteer with animal organizations, especially specialized skills (photography)</td>
</tr>
<tr>
<td>• Make DAS a priority and accountable by creating a standalone department</td>
<td>• Demand collaboration across executing organizations</td>
<td>• Coordinate and collaborate with other organizations on key programs</td>
<td>• Coordinate in-community efforts – locations, times, data, results, etc.</td>
<td></td>
<td>• Encourage responsible ownership among your neighbors &amp; report violations</td>
</tr>
<tr>
<td>• Improve efficacy of enforcement – warrants/arrests, civil citations</td>
<td></td>
<td>• Exempt DAS from civil service hiring to accelerate filling positions</td>
<td></td>
<td></td>
<td>• Act as neighborhood advocate for S/N encouraging others to be in compliance</td>
</tr>
</tbody>
</table>
Suggested next steps: Critical to divide and conquer, monitor progress, and refine

Assign ownership

Start small

Track Progress

Recommend the community engage in a full-day summit to align on:
- Specific individual owners for each initiative
- Pledges from individuals or organizations that pledge to participate in a given initiative
- Prioritization and timeline to execute initiatives
- Metrics that will be used to track and measure success for each initiative

Recommend an entrepreneurial "start small" mentality:
- Establish the minimal viable version of a recommendation
  - E.g, 2 photographers developing a scalable process vs. 20 photographers immediately
- Once successfully implemented in its small-scale version, recommendations are easier to implement to fullest intent

Recommend regular and frequent progress reporting for each initiative

Reprioritize resources based on realized value and potential

Highlight "obstacles" that prevent success so others can fill gaps in funding, capabilities, equipment, and access – allowing initiatives to overcome obstacles
BCG will provide three deliverables for community use

**White-paper**
Document contains written explanation of:
- Project background
- Relevant context and facts
- BCG recommendations
- Supporting rationale

**Initiative detail**
Contains details on each recommended initiative:
- Background context
- Key assumptions
- Sizing of potential (intake, outcomes, etc)
- Cost to execute

**Working materials**
Additional analysis completed during project, including analysis not reflected in recommendations

**Not all materials validated by a second party**
Appendix
Rec. #1: Publicly adopt a mission statement balancing public safety and animal welfare

**Initiatives**

1.1 DAS should adopt a MISSION STATEMENT BALANCING PUBLIC SAFETY AND ANIMAL WELFARE

1.2 DAS should adopt a MISSION-CENTRIC SCORECARD with specific targets and regular progress updates

**We recommend DAS revise its mission statement and track its success**

**Today's mission statement**

"Dallas Animal Services and Adoption Center is dedicated to the humane treatment of animals in Dallas and educating others about responsible pet ownership. We reinforce these ideals every day by providing daily care for hundreds of animals in our shelter, assisting citizens who come to see us as well as out in the community. We respond to calls regarding animal welfare and concerns, conduct free Responsible Pet Ownership classes, hold offsite animal adoption events, and speak at and provide educational information at public safety fairs, environmental festivals, and neighborhood organizations."

**BCG recommended mission statement**

"Our mission is to ensure public safety, promote animal welfare, and contribute to a stable population of animals within the City of Dallas.

Successful execution of our mission depends on the efficient and data-driven use of resources as well as collaboration with partners in our community."

**Today's reporting is LRR centric (Infographic & Asilomar reports)**

**BCG recommended scorecard** across safety, LRR, S/N, engagement

---

1. Mission statement identified on “About” section of Dallas Animal Services website on August 15, 2016. Mission statement used in grant applications and internally at DAS is: To strengthen our community through outreach and enforcement efforts that preserves the human animal bond throughout the City of Dallas.

2. Scorecard to serve as guidance on kinds of metrics which should be tracked and reported on. Specific scorecard should be finalized by DAS.
Rec. #2: Increase field intake and increase related enforcement and education to prevent dogs from roaming

Initiatives

2.1 DAS should **FOCUS 10 ASOs** on field collection and patrol

2.2 - DAS should increase **ASO FIELD INTAKE**

2.3 - The Dallas community should **EDUCATE RESIDENTS** about the dangers of loose dogs and dog bites

2.4 – The City of Dallas should make civil and criminal citations **MORE EFFECTIVE**

2.5 DAS should **SHARE** loose dog service requests

More ASOs focused on collection along side enforcement and education will improve public safety

<table>
<thead>
<tr>
<th>From...</th>
<th>...To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited ASOs focus solely on patrol and intake</td>
<td>10 ASOs focused exclusively on proactive patrol &amp; collection resulting in +8k intake¹</td>
</tr>
<tr>
<td>253 dogs collected per ASO annually</td>
<td>356 dogs collected / ASO through operational improvements² resulting in +3.8k field intake</td>
</tr>
<tr>
<td>Small team of ASOs (CARE) and volunteers focus on proactive targeted comm'ty education</td>
<td>Community orgs. utilize DAS data to organize, train, and deploy outreach</td>
</tr>
<tr>
<td>~72 citations / ASO / year</td>
<td>Greater impact on compliance through patrol-focused ASOs and proposed efficiencies</td>
</tr>
</tbody>
</table>

Initiatives could result in incremental field collection of up to ~12k dogs, but to be limited to address public safety

---

¹ Intake includes potential for field RTO (return-to-owner) which can also result in citations or other actions to increase compliance;
² 2.356 is the average number of dogs collected per ASO per year in comparable benchmark cities

Source: DAS employee interviews; DAS Chameleon database; DAS citations June 2014 - May 2016
Rec. #3: Increase the number of positive outcomes for Dallas dogs, euthanizing only the sickest animals

### Initiatives

3.1 Enhance **DIGITAL MARKETING**

3.2 Increase **ADOPTION FOOTPRINT**
- Add EAC location
- Extend hours

3.3 **HIGH-VOLUME TRANSFER PARTNER & account mgmt**
- One partner with shelter for high-volume, rapid transfers
- Better tools, self-service for small rescues

3.4 **TRANSPORT PROGRAM**

3.5 **SURRENDER DEFLECTION**

3.6 **BEHAVIOR TRAINING**

3.7 **HIRE** 1 vet and 2 vet techs

### Array of initiatives will provide incremental positive outcomes for dogs

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Number of dogs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional dogs in need of positive outcome today to reach 90% LRR</td>
<td>5,500</td>
</tr>
<tr>
<td>Incremental Field intake to improve public safety (at peak)</td>
<td>8,700</td>
</tr>
<tr>
<td>Total incremental positive outcomes needed to reach 90% LRR (at peak)</td>
<td>14,200</td>
</tr>
<tr>
<td>Incremental field intake returned to owner before entering DAS (at peak)</td>
<td>174</td>
</tr>
<tr>
<td>Incremental positive outcomes estimated from BCG initiatives</td>
<td>11,640</td>
</tr>
<tr>
<td>Incremental Humane Euthanasia</td>
<td>870</td>
</tr>
<tr>
<td>Outstanding balance of positive outcomes to 90% LRR</td>
<td>1,516</td>
</tr>
</tbody>
</table>

1. Hiring additional ASOs expected to take several months. Increasing intake per ASO will be ongoing process where first improvements is not expected for > 6 months. Field intake likely to decline in 2-3 years once loose dog population under better control, decreasing need for additional positive outcomes.; 2. Assume that 2% of all incremental collected dogs are returned to owner in the field as they were in 2015; 3. Timeline for implementing recommendations to increase number of positive outcomes expected to be faster than timeline for increasing field intake.; Source: BCG Analysis
Rec. #4: Provide 46,000 free spay and neuter surgeries in southern Dallas each year for next three years

**Initiatives**

4.1 PROVIDE ~46K LOW-COST SPAY/NEUTER SURGERIES in southern Dallas for the next three years

4.2 Animal welfare organizations in Dallas should COORDINATE S/N EFFORTS ACROSS

4.3 City should establish ELEMENTARY SCHOOL EDUCATION PROGRAMS related to pet ownership

4.4 DAS should ENFORCE S/N ORDINANCE in coordination with outreach

---

**Estimated Intact Population in Southern Dallas**

1: Assumes starting intact population based on census population estimate and AVMA pet ownership rates, 6% roaming, 50/50 sex ratio, 1.16 litters a year, 7 puppies a litter, 75% birth survival rate, 10 year life expectancy, 2.8% of owned dogs breeding; Note: Assumes starting intact population of 96,603 dogs in Southern Dallas, 6% roaming, 50/50 sex ratio, 1.16 litters a year, 7 puppies a litter, 75% birth survival rate, 10 year life expectancy, 2.8% of owned dogs breeding; Source: AVMA; ASPCA; American Kennel Club; Pets for Life Canine Perinatal Mortality Study 2012; Birth and Death Rate Estimates of Cats and Dogs 2004; PetMD; Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994; BCG Analysis

---

**Dog population to grow at 15% with no community intervention**

**Current levels of S/N preventing growth, but not reducing intact population**
Rec. #5: Create a collaborative community of partners

Initiatives

5.1 DAS should provide the community **OPEN ACCESS TO OPERATING DATA** and automated reporting

5.2 The animal welfare **COMMUNITY OF DALLAS SHOULD SHARE THE WORKLOAD** of the strategic recommendations

5.3 Community should engage in an **SOLUTIONS-ORIENTED DIALOGUE**

Collaboration will be critical to achieving scope of recommendations

From...

- DAS "Watchdog" Facebook groups & frequent ORRs
- Many efforts, but lacking coordination
- Communication can be perceived as defensive

To...

- Open data for community to access with FTE support
- Aligned action against common plan with pledge of support from participants
- Conversation rooted in fact and solutions oriented

---

1. Public comment made by DAS social media coordinator
2. Hypothetical response to problem incorporating statistics from the 2016 Dallas Community Survey conducted by the ETC institute on behalf of the city.
Rec. #6: Make animal services a priority and strengthen accountability within the city government

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Governance changes will empower DAS to execute its mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 DAS should become an INDEPENDENT MUNICIPAL DEPARTMENT</td>
<td>From...</td>
</tr>
<tr>
<td>6.2 The City of Dallas should INCREASE FUNDING FOR DAS to support recommendations</td>
<td>Operating within Code, muddying accountability and adding layers-of-communication</td>
</tr>
<tr>
<td>6.3 The City of Dallas or DAS should HIRE A PROJECT MANAGER AND DATA ANALYST to oversee the implementation of recommendations</td>
<td>A budget ~10% lower than benchmark peers</td>
</tr>
<tr>
<td>6.4 The Dallas Animal Advisory COMMISSION SHOULD ESTABLISH NEW SUBCOMMITTEES</td>
<td>No point person to track progress across the community</td>
</tr>
<tr>
<td>6.5 DAS should be EXEMPT from civil service hiring</td>
<td>An advisory board with specific structure or mandate</td>
</tr>
<tr>
<td></td>
<td>Delays in hiring from Civil Service</td>
</tr>
</tbody>
</table>
Rec. #7: Ensure efficiency by measuring outcomes and increasing volunteers

Initiatives

7.1 DAS should **ALIGN ORG STRUCTURE** and employee performance against its mission

7.2 DAS should **INCREASE SCALE OF VOLUNTEER PROGRAM** with a greater variety of roles

Managing to metrics focused deployment of limited resources

- **From...**
  - Large set of recommendations

- **To...**
  - Individual ownership of each initiative

**Example**

Recommendation owners to be held accountable for recommendations related to daily functional activities

City of Dallas/Community shares with DAS

- Rec 2.1
- Rec 2.2
- Rec 2.3

- Rec 4.1
- Rec 4.2
- Rec 4.3

Today ~1.2 FTEs of volunteer time at DAS (since recent start)

Target of 10-20 FTEs of volunteer time across varied roles
## Deep-dive on strategic recommendations (I)

<table>
<thead>
<tr>
<th>Priority area</th>
<th>Recommendation and key assumptions</th>
<th>Impact</th>
<th>Cost</th>
<th>Cost/dog</th>
<th>Emp.</th>
<th>DAS partner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission</strong></td>
<td>DAS should adopt a mission statement balancing public safety and animal welfare</td>
<td>nq</td>
<td>nq</td>
<td>n/a</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>DAS should adopt a mission-centric scorecard with specific targets and regular progress updates</td>
<td>nq</td>
<td>nq</td>
<td>n/a</td>
<td>0(^1)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>Loose dogs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>DAS should focus 10 ASOs and 2 field supervisors on field collection and patrol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 trucks full equipped @$60k each = $240k</td>
<td></td>
<td>$240k+</td>
<td>$94k/yr</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>• DAS fills current open positions (8 ASOs and 2 supervisors) at no cost</td>
<td></td>
<td>6,000 intake/yr</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>• 2 additional ASO officers at $47k salary = ~$94k per year</td>
<td></td>
<td>$16</td>
<td>2</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>2.2</strong></td>
<td>DAS should increase ASO field intake</td>
<td></td>
<td>$168k/yr</td>
<td>$70</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>• Cost of 4 additional 311 operators or dispatchers @$42k = $168k per year</td>
<td></td>
<td>2,400 intake/yr</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>2.3</strong></td>
<td>The Dallas community should educate residents on both the dangers of allowing dogs to run loose and the ways to avoid dog bites</td>
<td>nq</td>
<td>nq</td>
<td>n/a</td>
<td>0</td>
<td>Comm’ty</td>
</tr>
<tr>
<td><strong>2.4</strong></td>
<td>The City of Dallas should work to make animal-related citations more effective</td>
<td>nq</td>
<td>nq</td>
<td>n/a</td>
<td>0</td>
<td>City of Dallas</td>
</tr>
<tr>
<td><strong>2.5</strong></td>
<td>DAS should share loose dog service requests with organizations that actively capture loose dogs</td>
<td>nq</td>
<td>nq</td>
<td>n/a</td>
<td>0</td>
<td>Comm’ty</td>
</tr>
<tr>
<td><strong>LRR</strong></td>
<td>DAS should enhance its digital marketing(^3) for both adoption and transfers:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.1</strong></td>
<td>• DAS IT system upgrades = $60k</td>
<td></td>
<td>$60k+</td>
<td>$106</td>
<td>4.8</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>• Cameras and laptops for improving profiles = $4k</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Incremental spay and neuter and vaccine supplies and labor for ~2,000 dogs @$96 = $192k per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Additional 2.8 employees to photograph dogs, write descriptions, upload information to websites etc. @$36k salary = $101k per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 additional staff to aid potential adopters navigate the kennels @$20,800 = $42k per year</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

1. The data analyst budgeted for recommendation 7.1 will maintain the reports regarding DAS missions and targets
2. Initiatives could result in incremental field collection of up to ~8.4k dogs, but expect that intake will be limited to address public safety issue posed by loose dogs
3. Digital marketing includes both content on and penetration of DAS website, Petfinder, Pet Harbor, and Facebook
Note: nq = not quantified; Salaries based on similar positions listed on Texas Tribune grossed up 20% to include benefits
Source: BCG analysis
### Deep-dive on strategic recommendations (II)

#### Priority area

<table>
<thead>
<tr>
<th>Recommendation and key assumptions</th>
<th>Impact</th>
<th>Cost</th>
<th>Cost/dog</th>
<th>Emp.</th>
<th>DAS partner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.2</strong> DAS should increase adoption footprint by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.1 – Expanding its retail presence via an additional adoption location</td>
<td>1,820 adoptions/yr</td>
<td>$506k/yr</td>
<td>n/a</td>
<td>3.2</td>
<td>-</td>
</tr>
<tr>
<td>• Same cost as existing EAC location (including 2 employees) – ~$300k per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Incremental spay and neuter and vaccine supplies for 1,300 dogs @ $96= ~$125k per year</td>
<td>1,300 adoptions/yr</td>
<td>$425k/yr</td>
<td>$327</td>
<td>2</td>
<td>Retail partner</td>
</tr>
<tr>
<td>3.2.2 – Expanding its retail presence via extended adoption hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Incremental spay and neuter costs for 520 dog adoption @ $96 = $50k per year</td>
<td>520 adoptions/yr</td>
<td>$81k/yr</td>
<td>$156</td>
<td>1.2</td>
<td>-</td>
</tr>
<tr>
<td>• Additional 12 adoption hours a week with 2 staff to sit at the adoption desk @ ~$15/hr = ~$19k per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Additional 12 hours a week for 2 staff to aid adopters as they walk around kennels @~$10/hr = ~$12k per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.3</strong> DAS should increase volume through its transfer program by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.1 – Establishing a &quot;transfer-on-intake&quot; program w/ a single high-volume partner</td>
<td>1,570 transfers/yr</td>
<td>$51k/yr</td>
<td>n/a</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1,000 transfers/yr</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>3.3.2 – Segmenting relationship mgmt of transfer partners by size and support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 1 Transfer Coordinator @ $51k per year</td>
<td>570 transfers/yr</td>
<td>$51k/yr</td>
<td>$89</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>3.4</strong> DAS should establish a pet transport program to facilitate out-of-state adoptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 1 program supervisor @ $51K/yr = $51k per year</td>
<td>900-2,000 adoptions/yr</td>
<td>$156k-$285k/yr</td>
<td>$143-$174</td>
<td>1</td>
<td>501(c)(3) partner</td>
</tr>
<tr>
<td>• Pet food provided for 0.9–2k dogs @ $21/two week hold period = $19k-42k/yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Incremental spay and neuter surgeries for 0.9–2k dogs @ $96 = $66k-192k/yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• DAS other transport costs paid by adopter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.5</strong> DAS should deflect owner surrenders through owner assistance programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• DAS labor to coordinate and implement owner assistance program</td>
<td>2,600 deflections/yr</td>
<td>$26k/yr</td>
<td>$10</td>
<td>0.5</td>
<td>501(c)(3) partners</td>
</tr>
<tr>
<td>• 0.5 employee@ $51K/year = $26k per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Costs for owner assistance that should be shared with 501(c)(3) partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 340 dog runs, 670 routine vet care tabs, 47 S/N surgeries,17 dog owners receive food assistance, 17 behavior courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The total cost of all deflections to support organizations represents ~1% of the total budget of animal welfare organizations that responded to a recent survey. As such, we assume that sufficient capacity exists within the community to address all 2,600 deflections without additional funding from DAS.

Note: nq = not quantified, Salaries based on similar positions listed on Texas Tribune grossed up 20% to include benefits

Source: BCG analysis
## Deep-dive on strategic recommendations (III)

<table>
<thead>
<tr>
<th>Priority area</th>
<th>Recommendation and key assumptions</th>
<th>Impact</th>
<th>Cost</th>
<th>Cost/dog</th>
<th>Emp.</th>
<th>DAS partner</th>
</tr>
</thead>
</table>
| 3 LRR (cont’d) | 3.6 DAS should provide enhanced behavior training to increase adoptability of dogs  
- 700-1,300 incremental spay and neuter surgeries @ $96- $68k-$122k per year  
- 15,430 behavior courses @ $21–$42 = $324-648k per year  
- Behavior classes can continue even after the dog has been adopted; 2. There is no additional FTE in this because the behavior courses are contracted out to existing professionals and organizations; 3. Cost and impact allocated to across LRR recommendations according to volume of dog adoptions; 4. 46,000 S/N surgeries to be delivered each year for three years before ramping down; 5. This project manager and data analyst should be dedicated to ensuring recommendations are effectively implemented; 6. Current data analyst is budgeted for ~$42 while a Manager II-Business has a salary of ~67k. The recommended salary differential would be a ~25k increase to budget  
Note:nq = not quantified, Salaries based on similar positions listed on Texas Tribune grossed up 20% to include benefits | 700-1300 adoptions/yr | $392k-$770k/yr | $556-$605 | 0² | - |
| 3.7 DAS should hire 1 veterinarian and 2 vet techs to perform spay and neuter surgeries and vaccinations to support the increase in dog adoptions  
- The current data analyst is budgeted for ~$42 while a Manager II-Business has a salary of ~67k. The recommended salary differential would be a ~25k increase to budget | nq³ | nq³ | n/a² | 3 | - |
| 4 Pop. control | 4.1 The Dallas community should provide ~46,000 free spay/neuter surgeries in southern Dallas for each of the next 3 years  
- $160 per surgery at Spay Days add'l 5,880 surgeries = ~$950k  
- $168 per surgery in mobile vans for add'l 37,500 surgeries = ~$6.3MM  
- 3 hotline associates @ $25k = $75k  
- Overhead @ $52k  
- 1 project manager @ $100k | 46k surgeries /yr² | Up to $7.5MM/yr | $163 | 4⁵ | 501(c)(3) partners + Comm’ty |
| 4.2 Animal welfare organizations in Dallas should coordinate S/N efforts | nq | 0 | n/a | 0 | Comm’ty |
| 4.3 The City of Dallas should establish elementary school education programs related to pet ownership  
- 6 teacher resource costs ~$66K/yr = $396k/yr | 6k reached/yr | $396k/yr | n/a | 12 | City of Dallas |
| 4.4 DAS should enforce S/N ordinances in coordination with outreach | nq | nq | n/a | 0 | - |
| 5 Comm’ty Collab. | 5.1 DAS should work with CIS and other city departments to provide open access to operating data and automated reporting  
- $30k increase in salary to elevate current budgeted Coordinator II: Data Analyst to a Manager II: Business to ensure proper skillset for position | nq | $30k/yr⁶ | n/a | 0 | City of Dallas |
| 5.2 The animal welfare community of Dallas should share the workload of the strategic recommendations | nq | nq | n/a | 0 | Comm’ty |
| 5.3 The animal welfare community of Dallas should engage in an inclusive, fact-based dialogue | nq | nq | n/a | 0 | Comm’ty |
## Deep-dive on strategic recommendations (IV)

<table>
<thead>
<tr>
<th>Priority area</th>
<th>Recommendation and key assumptions</th>
<th>Impact</th>
<th>Cost</th>
<th>Cost/ dog</th>
<th>Emp.</th>
<th>DAS partner</th>
</tr>
</thead>
</table>
| 6 Gov.        | DAS should move out from under the Department of Code Compliance and become an independent municipal department  
- Assuming DAS must make a 1:1 replacement of support services currently provided by Department of Code, it would cost $370k  
- Assuming DAS needs support services in line with BCG public sector and animal service organizations benchmarks, it would cost $250k | nq | $310k² /yr | n/a | 5 | City of Dallas |
|               | The City of Dallas should increase funding for Dallas Animal Services to support recommendations | nq | n/a³ | n/a | 0 | City of Dallas |
|               | The City of Dallas or DAS should hire a project manager and data analyst to oversee the implementation of recommendations  
- 1 project manager @ $100k per year  
- 1 analyst @ $58k per year | nq | $158k/yr | n/a | 2⁴ | City of Dallas |
| 7 Operating efficiency | The Animal Advisory Commission should establish new subcommittees to support DAS | nq | nq | n/a | 0 | City of Dallas |
|               | DAS should be exempt from the civil service hiring process | nq | nq | n/a | 0 | - |
|               | DAS should align its organizational structure and employee performance with its mission  
- 1 data analyst @ $58k per year for performance scorecard and reporting | nq | $58k/yr | n/a | 1 | - |
|               | DAS should increase the scale of its volunteer program with a greater variety of roles  
- 1 volunteer coordinator @51k per year | nq | $51k/yr | n/a | 1 | - |

1. Support services = HR, Communications, Finance, and IT  
2. Average of two cost sizing methodologies  
3. No additional costs to those listed  
4. This project manager and analyst are unique to those already listed. These two positions will be focused on implementing and tracking all of the recommendations across the city of Dallas/Note: nq = not quantified, Salaries based on similar positions listed on Texas Tribune grossed up 20% to include benefits  
Source: BCG Analysis
Recommendations can be prioritized based on cost efficiency

Loose Dog and LRR Recommendations: Dogs Impacted vs Cost per Dog Impacted

Note: Includes high range for recommendations 3.4 and 3.6
Source: Various and BCG Analysis. See full report and supporting materials for methodology, calculations, and exact sources.
Animal Control's perceived performance based on community input has decreased year over year

~30% decrease in city's Animal Control performance in the last 5 years

<table>
<thead>
<tr>
<th>Year</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>43</td>
</tr>
<tr>
<td>2013</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>36</td>
</tr>
<tr>
<td>2016</td>
<td>30</td>
</tr>
</tbody>
</table>

Dallas falls significantly behind when comparing to Texas peers

<table>
<thead>
<tr>
<th>City</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin 2012</td>
<td>64</td>
</tr>
<tr>
<td>San Antonio 2014</td>
<td>48</td>
</tr>
<tr>
<td>Dallas 2016</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: Not all cities perform community services or conduct them yearly. City of Austin Community Survey Findings (2012). City of San Antonio Community Survey (2014)
Source: 2014 City of Dallas Community Survey (n=1,523); 2016 City of Dallas Community Survey (n=11,512), BCG analysis
Loose dogs not identified as the leading problem in Dallas, but 46% of southern Dallas considers it a "major problem"

% of community considering a problem a "major problem" from 2016 Community Survey conducted by City of Dallas

Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8

Source: ETC Institute Dallas Community Survey 2016, BCG analysis
Length of stay in DAS differs by intake type and eventual outcome

Dogs received OTC stay fewer days than dogs received from field

Average Days in DAS

Dogs eventually adopted stay longest in DAS

Average Days in DAS

Note: Data for calendar year 2015. 'Field – Same Day RTO' includes dogs with primary intake type of 'Field' and any intake subtype and reunited with owner on the same day; 'Field – Pickup' includes dogs with primary intake type of 'Field' and intake subtypes of 'owner surrender', 'confined', or 'confiscated'; 'Field – Capture' includes dogs with primary intake type of 'Field' and intake subtype of 'stray'; 'OTC – Stray Turn-In' includes dogs with primary intake type of 'OTC' and intake subtype of 'stray'; 'OTC – Owner Surrender' includes dogs with primary intake type of 'OTC' and intake subtypes of 'owner surrender' or 'confiscated'

Source: DAS Chameleon database, BCG analysis
Relationship observed dog's health and outcome
Nevertheless, more 'Treatable-Rehab' dogs are euthanized than 'Untreatable' given scale

**% of TTM as of May 2016 Dog Intake (health category based on intake categorization)**

- **Healthy**: 47 (3%) healthy, 77% treatable, 2% treatable-rehabilitatable, 2% treatable-manageable, 1% other, 1% euthanized.
- **Treatable-Rehabilitatable**: 3,410 (30%) treatable-rehabilitatable, 2% treatable-rehabilitatable, 20% treatable-manageable, 2% treatable, 7% other, 2% euthanized.
- **Treatable-Manageable**: 1,609 (47%) treatable-manageable, 22% treatable-manageable, 20% treatable-rehabilitatable, 2% treatable, 9% other, 20% euthanized.
- **Unhealthy & Untreatable**: 2,298 (66%) unhealthy & untreatable, 10% other, 13% RTO, 8% transferred, 3% adopted, 3% euthanized.

**Totals**
- **Healthy**: 1,784
- **Treatable-Rehabilitatable**: 11,497
- **Treatable-Manageable**: 3,393
- **Unhealthy & Untreatable**: 3,485

**Note:** Other includes dead on arrival, died in shelter, missing, or no outcome categorization specified in data; Note: TTM = trailing twelve months; Asilomar health assessment taken upon intake to the shelter; Source: DAS Chameleon database, BCG analysis.
## Animal Welfare

<table>
<thead>
<tr>
<th>City</th>
<th>Mission Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas (public)</td>
<td>Dallas Animal Services and Adoption Center is dedicated to the humane treatment of animals in Dallas and educating others about responsible pet ownership. We reinforce these ideals every day by providing daily care for hundreds of animals in our shelter, assisting citizens who come to see us as well as out in the community. We respond to calls regarding animal welfare and concerns, conduct free Responsible Pet Ownership classes, hold offsite animal adoption events, and speak at and provide educational information at public safety fairs, environmental festivals, and neighborhood organizations.</td>
</tr>
<tr>
<td>Dallas (private)</td>
<td>To strengthen our community through outreach and enforcement efforts that preserve the human animal bond through the City of Dallas.</td>
</tr>
<tr>
<td>Miami</td>
<td>To save the lives of abandoned animals in our care, reunite lost pets with their owners, protect the people and pets in our community from health related issues and ensure the public's safety.</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>Jacksonville’s Animal Care and Protective Services (ACPS) provides animal control to the citizens in Jacksonville by fair enforcement and community education. ACPS also enhances the quality of life in our neighborhoods by offering quality pets for adoption at a reasonable cost. ACPS is dedicated to providing a high level of service to the citizens in Jacksonville and to saving the lives of all adoptable animals in our community.</td>
</tr>
<tr>
<td>Houston</td>
<td>Our mission is to promote and protect public health and animal care through sheltering, pet placement programs, pet ownership education and animal law enforcement.</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>To promote and protect the health, safety and welfare of animals and people.</td>
</tr>
<tr>
<td>San Antonio</td>
<td>Animal Care Services’ mission is to encourage responsible pet ownership by promoting and protecting the health, safety, and welfare of the residents and pets of San Antonio through education, enforcement, and community partnership.</td>
</tr>
<tr>
<td>Reno</td>
<td>Washoe County Regional Animal Services promotes responsible care of animals through education, proactive outreach, and regulation making Washoe County a safe community.</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>The mission of Clark County Animal Control is to promote public safety, rabies control and responsible pet ownership through education, service and enforcement.</td>
</tr>
</tbody>
</table>

## Public Safety

Source: Mission statements pulled from animal services websites in respective cities, BCG Analysis.
When considering animal services operations, there are multiple governance structures to consider

<table>
<thead>
<tr>
<th>Subdivision within a department</th>
<th>Standalone Department</th>
<th>Partially Privatized</th>
<th>Completely Privatized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operates all facets of animal services, but reports to the head of another department, creating a layer between animal services and city management</td>
<td>Operates all facets of animal services and reports directly to city management</td>
<td>City contracts part of its animal services operations to an organization, typically a nonprofit, that can operate animal services on behalf of the city</td>
<td>City contracts all animal services operations to an organization, typically a nonprofit, that can operate animal services on behalf of the city</td>
</tr>
</tbody>
</table>

- Dallas, TX
- Jacksonville, FL
- Houston, TX

- Los Angeles, CA
- San Antonio, TX
- San Diego, CA
- Austin, TX
- Miami, FL

- Las Vegas, NV
- Reno, NV
- Atlanta, GA

- Reno, NV (Animal control)
- Atlanta, GA (Animal control)

Note: above cities’ animal control functions are government operated

1. Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves; Note: If operations are partially privatized, the part of the organization that is not privatized can be a subdivision within a department or a standalone department within the city/county; Source: BCG analysis

New York, NY (although not considered a benchmark to Dallas)
Each structure has different pros and cons and impact on key areas

<table>
<thead>
<tr>
<th>Subdivision within a department</th>
<th>Independent department</th>
<th>Partially privatized (Shelter only)</th>
<th>Completely privatized (Field + Shelter)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resources and Talent</strong></td>
<td><strong>Communication and Coordination</strong></td>
<td><strong>Execution and Accountability</strong></td>
<td></td>
</tr>
<tr>
<td>✗ Hiring leadership and staff difficult due to lower profile &amp; complexity</td>
<td>✗ Lacks a &quot;seat at the table&quot; with senior city leadership</td>
<td>✗ Lower-level leadership role lacks authority to execute</td>
<td></td>
</tr>
<tr>
<td>✓ Can receive layover funds from parent department</td>
<td>✓ Greater control over messages and access</td>
<td>✓ Single accountability sharpens priorities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Demonstrates animal services as a priority</td>
<td>✓ Least likely to experience conflicts of interest</td>
<td></td>
</tr>
<tr>
<td><strong>Subdivision within a department</strong></td>
<td><strong>Independent department</strong></td>
<td><strong>Partially privatized (Shelter only)</strong></td>
<td><strong>Completely privatized (Field + Shelter)</strong></td>
</tr>
<tr>
<td></td>
<td>✓ Hiring easier due to higher profile</td>
<td>✓ Hiring easier due to partial separation from city</td>
<td>✓ Hiring easiest due to complete separation from city</td>
</tr>
<tr>
<td></td>
<td>✗ Competes with other departments for budget</td>
<td>✓ Fixed funding from city, but can receive donations</td>
<td>✓ Fixed funding from city, but can receive donations</td>
</tr>
<tr>
<td><strong>Subdivision within a department</strong></td>
<td><strong>Independent department</strong></td>
<td><strong>Partially privatized (Shelter only)</strong></td>
<td><strong>Completely privatized (Field + Shelter)</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Partial control over message, but removed from government</td>
<td>✓ Greater control of message, but removed from government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Greater freedom of action</td>
<td>✓ Free control of message, but removed from government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Lack of coordination between shelter and animal control</td>
<td>✓ Greatest freedom of action</td>
</tr>
<tr>
<td><strong>Subdivision within a department</strong></td>
<td><strong>Independent department</strong></td>
<td><strong>Partially privatized (Shelter only)</strong></td>
<td><strong>Completely privatized (Field + Shelter)</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Greater operating potential</td>
<td>✓ Greatest operating potential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate effort in standing-up new structure</td>
<td>Org lacks accountability to city, potential conflicts exists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No clear organization today to fill this need immediately</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Heavy setup effort</td>
</tr>
</tbody>
</table>

Note: Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves. Source: BCG analysis
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Thank you
Loose dogs in Dallas: Strategic Recommendations to Improve Public Safety and Animal Welfare

August 26, 2016
August 26, 2016

We are pleased to enclose The Boston Consulting Group’s (BCG’s) strategic recommendations for the city of Dallas, Dallas Animal Services (DAS), and the broader Dallas community. It has been a pleasure working closely with the Dallas community over the past three months, including members of Dallas Animal Services, City Council, the Dallas Animal Shelter Commission, individuals from local animal welfare organizations, and citizens.

During the course of this study, we have validated the seriousness of the loose dog problem in Dallas as it negatively affects the public safety of citizens and the well-being of dogs. Although this problem has plagued the city for many years, we believe that these strategic recommendations, if executed by a cohesive Dallas community, can make a material difference.

In the pages that follow, we provide more detail on our approach, diagnostic findings, recommendations, and proposed path forward.

We are grateful for the opportunity to work with both Dallas Animal Services and the larger Dallas community and look forward to seeing quality of life and animal welfare improve across the city of Dallas.

Sincerely,

**Dylan Bolden**
Senior Partner & Managing Director
Head of BCG Dallas Office
The Boston Consulting Group
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Executive summary

In June 2016, The Boston Consulting Group (BCG) was engaged to develop strategic recommendations for the city of Dallas to address the threat to public safety posed by loose dogs in the community and to continue to reduce euthanasia of dogs entering the DAS shelter.

BCG’s goal was to:

- Quantitatively understand the supply of dogs in Dallas
- Identify community priorities given varying constituent perspectives
- Identify best practices from other animal services organizations across the US
- Identify and prioritize levers to maximize impact on public safety and animal welfare
- Synthesize findings in a strategic plan for the community of Dallas to achieve its goals

To develop a comprehensive understanding of the situation, we employed a team of consultants for eleven weeks. Our recommendations are based on:

- Qualitative interviews with nearly 100 stakeholders in Dallas
- Quantitative analysis of all available data sources including the DAS database (Chameleon), 311 service requests, and 911 Record Management System (RMS) calls
- Primary research including a loose dog census, resident survey, and a survey of rescue/animal welfare organizations
- Review of third-party studies from national organizations and academic studies
- Benchmarking of animal services organizations in ten highly comparable cities across the US, including 30 qualitative interviews and desk research

We found that there are more than 100 animal welfare organizations in Dallas and its surrounding areas. These organizations both address animal-related public safety issues and provide support to animals and pet owners by operating pet food banks, fostering dogs, rescuing dogs from the street, and performing low-cost spay and neuter surgeries (to name a few). These organizations have considerable resources, expertise, and volunteers that currently support the community of Dallas.

Within the Dallas animal welfare community, Dallas Animal Services (DAS) plays an important role as the sole entity responsible for responding to animal-related service requests, and it is the only open admission shelter in the city of Dallas. In a given year, DAS reports more than 48,000 service requests, intake of over 20,000 dogs, and over 100,000 customer touchpoints. Over the last 5 years, the percentage of respondents who rated Dallas animal control as "excellent" or "good" in the City of Dallas Community Survey conducted by the ETC Institute has decreased by
30%. Additionally, respondents' satisfaction with Animal Control lags behind other cities surveyed by ETC, such as Austin and San Antonio.

Since 2011, DAS has made significant improvements across its shelter operations, field operations, partnerships, and organization that have helped to nearly doubled its live release rate for its sheltered dogs from ~30% to ~60% today. Notably, DAS has achieved this while being significantly underfunded relative to animal services in comparable cities. DAS accomplishments since 2011 include:

- Improved in-shelter animal health through vaccinate-on-intake policies, Asilomar health assessments, segregation by health, and an increase in DAS surgery volume
- Expanded partnerships through select programs (e.g. Dallas Companion Animal Project Spay Days, Big Fix for Big D, PetSmart Everyday Adoption Center) as well as overall growth in its placement with transfer partners
- Increased adoptions through photograph-on-intake policies and expanded customer service
- Began use of shelter IT system (Chameleon) and increased reporting of data to the public
- Nearly doubled the number of positive outcomes for its sheltered dogs, increasing its live release rate from ~30% to ~60% and ending euthanasia of healthy animals
- Introduced additional Animal Service Officer (ASO) training and certifications including animal cruelty investigation
- Enhanced ASO connectivity, call prioritization, and reporting structure
- Secured and deployed grant resources to fund additional resources

However, we also observed a number of urgent public safety issues facing Dallas residents:

- A BCG census estimated ~8,700 loose dogs in southern Dallas, which collectively pose a risk to public safety, as loose dogs account for ~60% of dog bites in Dallas
- DAS bite reports indicate dog bites have increased 15% annually between 2013 and 2015, with bites from loose-owned dogs growing faster at 23% per year
- DAS field intake has fallen ~4% annually since 2011 and DAS ASOs bring in fewer dogs per officer than comparable city’s ASOs
- The number of individuals who rate delivery of animal-related enforcement services by the city as "good" or "excellent" has fallen from 43% in 2011 to 30% in 2016 based on a city-wide survey vs. 48% and 63% in San Antonio and Austin respectively
- DAS issues approximately 12 citations per day, but 44% of all citations issued are not responded to by defendants, leaving a gap in enforcement

1 The percentage of respondents who answered that DAS was "excellent" or "good" decreased from 43% in 2011 to 30% in 2016.
We also observed opportunities for improvement regarding animal welfare:

- We estimate that ~85% of dogs in southern Dallas have not been spayed or neutered, which contributes to a high population of dogs and places a burden on the community to find homes for these animals (e.g., southern Dallas’ dog population is estimated to produce approximately ~32,500 new puppies annually)
- Despite the community's effort to perform ~6,000 spay and neuter surgeries annually, the high percentage of intact dogs suggests too few surgeries occur to control the population
- In 2015, the live release rate for the ~20,000 dogs entering DAS was 59%; DAS euthanized a total of 8,535 dogs, of which 4,033 were assessed as treatable-rehabilitatable and 1,756 were categorized as treatable-manageable, indicating room for continued improvement
- DAS lacks a formal and contractual partnership with a large-scale brick and mortar rescue organization, something that is typical (and reported to be critical) among comparable cities to fill gaps in available government funding
- Finally, the various animal welfare organizations operating in Dallas, taken as a whole, have limited central coordination or collaboration resulting in an overlap of mission and effort

Finally we observed opportunities for improvement regarding organization and communication:

- DAS's existing organizational structure as a subsidiary of the Department of Code Compliance limits its visibility to city leadership, muddles accountability, and lessens its perceived status as a city priority
- A large portion of stakeholders highlighted the existence of opposing factions in Dallas' animal welfare community and a history of public attacks across these groups that have prevented collaboration across the community
- Limited access to data, whether due to systems limitations, policy decisions or a failure to communicate effectively, has impeded trust and collaboration across the community

To help address these issues, we recommend seven strategic priorities designed to improve public safety, improve animal outcomes, increase spay and neuter efforts, and facilitate organizational change.
Based on our assessment, the most critical of our recommendations is providing a high volume of low-cost spay and neuter surgeries in southern Dallas through a three-year surge effort. This recommendation is the only solution that addresses both public safety (intact animals are more likely to roam and bite) as well as animal welfare (countless animals can be saved by preventing unnecessary population growth), while also creating change that is sustainable in the long term.

Because spay and neuter efforts do not yield immediate impact, we recommend additional initiatives to accelerate the rate at which positive change takes place. Among those initiatives are strategies to increase the number of loose dogs taken off the streets and to achieve more positive outcomes for dogs. These initiatives are supported by enablers to ensure they can be effectively implemented by the entire community of stakeholders.

While some of our recommendations include best practices, which should be carried out on an ongoing basis, others—such as the large increase in spay and neuter surgeries—represent temporary or "surge" initiatives that can be carried out in the near term, but scaled back over the long term.

While these recommendations can meaningfully improve both public safety and animal welfare in the city of Dallas, it is important to note that all seven must be carried out in parallel to
achieve the desired effect—unbalanced actions will have unintended consequences negatively impacting public safety or animal welfare.

When successfully implemented, these recommendations should serve to reduce the number of dog bites occurring in Dallas because fewer dogs will be loose and because spayed and neutered dogs are less likely to bite. We also anticipate these recommendations will increase the number of positive outcomes for dogs sheltered at DAS by creating or expanding programs for positive placement and by reducing the long-term supply of dogs to be placed (through spay and neuter efforts).

Successful implementation of this plan must also include a coordinated effort on behalf of the entire community as well as incremental funding from both government and private sources.

Exhibit 2| Funding necessary to support recommendations

---

1. Assumes low-cost S/N available without restriction or qualification. Also assumes vets are paid salaries. 2. Assumes means-testing for low-cost S/N—e.g., presentation of Medicare/Medicaid card, proof of free lunch for school-aged children, etc. Also assumes vets are paid per surgery. 3. At the time of this report, there were 8 ASOs and 2 field supervisor vacancies on the DAS organizational chart. 4. Cost associated with Recommendation 2, collection of loose dogs. 5. Cost associated with Recommendation 4 regarding dog population control and Recommendation 3 when there are additional dogs adopted out by DAS. 6. Cost associated with Recommendation 3: initial low-kill as increasing LRR, excluding costs for spay and neuter and setting additional adopted dogs. 7. Costs from additional DAS employees found in recommendations 5, 6, 7, 8 and 12. 8. Cost associated with Recommendation 4.3

Note: This includes the higher estimate of the ranges on recommendations 3.4 and 3.5

Source: BCG analysis

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In the pages that follow, we provide more detail on our approach, diagnostic findings, recommendations, and proposed path forward.

**Basis for BCG recommendations**

Between June 20 and August 19, 2016, BCG dedicated a team of consultants to analyze the public safety and animal welfare issues associated with loose dogs in Dallas.

To develop an understanding of animal services and public safety in Dallas, BCG completed local stakeholder interviews, analyzed relevant data sets, conducted its own census and surveys, studied efforts from comparable benchmark cities, and reviewed governmental and academic research.

Throughout the course of this project, BCG was aided considerably by the city of Dallas and Dallas Animal Services, who provided unfettered access to personnel and data.

In addition, nearly 100 private citizens in Dallas and 40 animal control and animal welfare professionals from across the country contributed their experiences and perspectives over the course of this project. Out of respect for their privacy we have not explicitly included their names in this report, but we owe them a debt of gratitude for their assistance.
Exhibit 3 | Actions taken to develop understanding

<table>
<thead>
<tr>
<th>Information Type</th>
<th>Actions Taken</th>
</tr>
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</table>
| Interviews with Stakeholders | 100+ stakeholder interviews completed including:
  - Government: Council Members, Animal Commissions, Code & DAS, DPD
  - Non-profits: Animal rescue organizations, funders/philanthropies
  - Citizens: Town halls and specific involved individuals
  - ~40 interviews with stakeholders from comparable benchmark cities including Atlanta, Austin, Jacksonville, Las Vegas, Los Angeles, Miami, Reno, San Antonio, and San Diego |
| Data Analysis | Detailed analysis of all relevant data sources:
  - DAS data & Government: Chameleon, bite reports, 311, 911, Sanitation
  - Community Data: Historical S/N activity
  - Public Data: Census data |
| Primary Research | Extensive primary research to collect new and unique information:
  - Census: Roaming dog census in North and southern Dallas
  - Ride-a-longs: DAS field day, Targeted Response Team and CARE
  - Surveys: Community, Rescue/welfare organization |
| Secondary Research | Gathered and reviewed large volume of available secondary research:
  - Industry: HSUS, ICAMP, WSPA, ASPCA

Context

In June 2016, The Boston Consulting Group (BCG) was engaged to develop recommendations to assess and improve two fundamental expectations regarding animals within the city of Dallas:

1) **Public safety**: An expectation that residents can peacefully enjoy the city without being endangered or disturbed by loose or uncontrolled animals
2) **Animal welfare**: An expectation that animals be treated with dignity and care and that the life of an animal will only be taken if no reasonable alternative exists

The scope of this document and BCG’s effort was limited to dogs, their impact on public safety, and their outcomes once admitted to DAS. While not specifically evaluated, some recommendations in this report may also prove relevant for cats.

Furthermore, while our primary focus has been the city of Dallas, it is our hope that these recommendations can, in some cases, be successfully applied to other cities facing similar challenges.
Dog population in Dallas

Dallas is home to approximately 350,000 dogs and 185,000 dog-owning households. Approximately 150,000 of these dogs reside in southern Dallas, where dog ownership on a per capita basis is higher than in northern Dallas.

The level of spay and neuter also varies substantially across the city. We estimate that ~85% of dogs in southern Dallas are intact compared to approximately 20% of dogs in northern Dallas.

Based on estimates of the dog population, spay and neuter levels, and reproduction rates, we expect approximately 36,000 puppies will be born in the coming year in the city of Dallas, of which approximately 32,500 will be born in southern Dallas. On its own, this would lead to an implied population growth rate of ~10% however as ~35,000 dogs will die from natural causes; the net increase in the Dallas dog population will likely be closer to 1%.

While on its own this 1% increase could be easily absorbed, the stark difference in spay and neuter levels between northern Dallas and southern Dallas complicates the dynamic. In northern Dallas, 16,000 more dogs are expected to die of natural causes than will be born. As a result, residents of northern Dallas must buy or adopt ~16,000 new dogs per year to replace pets that pass away. By contrast, in southern Dallas ~17,000 more dogs are expected to be born in 2017 than will die of natural causes. This means residents of southern Dallas must either take in or rehome ~17,000 new dogs to accommodate the net increase in the population due to breeding. Given the human population of southern Dallas is growing at 1.4% annually, this increase in the dog population—which amounts to ~10%—poses a significant challenge that could lead to a continued threat to both public safety and animal welfare.

---

2 According to the American Veterinary Medical Association (AVMA), Northern Dallas has 0.584 dogs per household. By averaging estimates from the AVMA (0.583 dogs/household) and Pets for Life (1.182 dogs/household), we estimate that southern Dallas has 0.883 dogs per household. Experian estimates that there are 333,700 households in northern Dallas and 173,598 households in southern Dallas (based on estimates from Q2 2015).

3 According to the AVMA, 36.5% of US households own a dog.

4 There are 173,598 households in southern Dallas and 0.883 dogs per household. There are 333,700 households in northern Dallas with 0.583 dogs/household.

5 As stated in "Birth and Death Rate Estimates of Cats and Dogs in US Households," birth rate assumes 1.16 litters per year, 7 puppies per litter, and a 75% birth survival rate, for an average of 6.09 puppies per year for each intact female. Sex ratio is assumed to be 50/50.

6 A ten-year life expectancy implies 10% of dogs die in a given year.

7 This is without any community interventions.
Exhibit 4 | Northern Dallas estimated dog population

Note: See compendium for more detail.
Source: Experian Current Year Estimates (Q2 2015) for population data, AVMA, PPL, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, BCG analysis

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Loose dogs in Dallas

Around the time of this project, local news reports highlighted the presence of loose dogs, dog bites, and dog attacks in Dallas, indicating that Dallas residents felt threatened by a loose dog crisis that was intensifying.

These headlines were, in part, corroborated by the 2016 Dallas Community Survey—conducted by the ETC institute—which found that 46% of southern Dallas residents felt "loose dogs" were a "major problem" compared to 16% in northern Dallas.
Furthermore, national studies indicate that intact animals (those not spayed or neutered) are more likely to roam, suggesting that low spay and neuter levels in southern Dallas likely contribute to a higher frequency of roaming dogs.\textsuperscript{vii}

To validate reports and estimate the total loose dog population, BCG conducted a census of loose dogs.

First, BCG conducted an open survey of Dallas residents to identify areas with the most or fewest loose dog sightings. Of the ~2,000 residents completing the survey, some respondents reported that they saw loose dogs in their neighborhood on a weekly or daily basis and felt these dogs to be a threat to their safety.\textsuperscript{viii} The survey results indicated a higher prevalence of loose dogs in southern Dallas, which allowed BCG to focus its census efforts.
Second, to quantify the community's reported sightings, BCG conducted a census of loose dogs to estimate the total loose dog population.

BCG travelled previously-defined, but random, routes through Dallas neighborhoods between 6:00 – 7:30am, counting loose dogs, and removing any double-counting of loose dogs through photographic comparisons.

In southern Dallas, the BCG team spotted 135 loose dogs along 176 miles of road driven, which suggests a population of ~8,700 loose dogs in southern Dallas based on two analytical methods defined and used by the World Health Organization (WHO) and the World Society for the Protection of Animals (WSPA). Due to a lack of observations (only one loose dog seen in northern Dallas along 59 miles driven), we have not estimated the loose dog population for northern Dallas.

---

8 In addition, our census observations suggest that the vast majority of observed loose dogs are owned, as most appeared well-fed and some had collars.
A second, independent effort conducted by the Southern Dallas Animal Initiative during the same period, estimated ~7,100 *loose dogs* in southern Dallas based on a reported 428 loose dog observations along 525 miles of road.

**Dog-related public safety**

**National trends**
The CDC has estimated that ~885,000 dog bites requiring medical care occur every year in the US.\textsuperscript{ix} Other national research suggests that ~70% dog bites in the US can be attributed to intact male dogs,\textsuperscript{x,xii} and the overwhelming majority of these dogs have an owner (88%).\textsuperscript{xii}

Furthermore, stray or *loose dogs* are responsible for 35-45% of dog bites in the US,\textsuperscript{xiii} while the rest can be attributed to known dogs in a confined setting (an owner, family member, or a friend/visitor being bitten in or near the dog’s home). Finally, victims of dog bites are likely to be the most vulnerable members of the community, either the very young (38%) or the elderly (30%).\textsuperscript{xiv}

**Dallas trends**
Dog bites, and specifically dog bites by *loose dogs*, have been covered in the local Dallas news during the summer of 2016, with headlines such as:

- "Dallas's Stray Dog Problem Gets Worse After Woman’s Death"\textsuperscript{xxv}
- "Dallas Postal Workers Worried about Increase in Loose Dog Attacks"\textsuperscript{xvi}

To separate headlines from actual trends, BCG evaluated calls to both 311 and 911 for dog attacks to determine whether these calls have increased over the last three years. While these data sources suggested an increase in bites, the data was found to be unreliable given substantial changes to reporting systems and taxonomy.

Instead of relying upon these indicators of public safety levels, BCG analyzed DAS bite records, as they provide the official record for the Texas Department of State Health Services on all animal bites in the city of Dallas. Historically, DAS bite records have been captured and recorded on physical paper cards. While DAS has begun the transition to digitize this data, BCG manually entered data of ~5,000 historical bite reports to understand the recent trajectory.

This analysis revealed that dog bites have increased between 2013 and 2015 at an annualized rate of 15%, and bites by *loose dogs* are growing faster at an annualized rate of 23%.
Loose dogs and loose owned dog bites predominate in southern Dallas. By mapping the available owner addresses of loose dogs that bit people between 2013 and 2016, it can be seen that the majority of owners are concentrated in southern and western Dallas.
In conversations with southern Dallas residents, many claimed to carry protection against loose dogs when walking in their neighborhoods (including bats, knives, guns, and pepper spray), and such behavior was observed by BCG consultants during the dog census.

**Dallas animal services shelter operations**

DAS collects dogs daily through its field operations and, because it is an open admission shelter, must also accept all dogs that residents of Dallas bring to its shelter. DAS is responsible for collecting animals across the city of Dallas ("the field") through its Animal Service Officers (ASOs). In addition to field intake, ASOs respond to animal-related complaints from 311, investigate possible rabies bites, enforce animal related ordinances, investigate animal cruelty, handle court-related activities, assist in disaster response, and administer euthanasia.
From 2011-2015, DAS had an annual intake of approximately 20,000 dogs, which equates to an average of approximately 55 dogs per day. This number fluctuates seasonally, peaking significantly in the summer, with some days approaching an intake of 150 dogs.

In 2015, 55% of intake came over the counter, or OTC (that is, dogs brought directly into DAS), and 45% came from the field (that is, dogs collected by DAS animal service officers). Specifically, intake was split among OTC – Owner Surrenders (~6,600, 32%), OTC – Stray Turn-In (~4,700, 23%), Field – Stray (~7,000, 34%), Field – Owner Surrender (~2,100, 10%), and Field – Same Day RTO (~400, 2%). Overall, dog intake has remained relatively flat since 2011.

The DAS shelter has approximately 500 kennels to house dogs. Of these kennels, ~120 are for adoption, ~200 are for general use, and ~180 are for restricted specific use (e.g., for dogs that are contagious, injured, quarantined, in protective custody, isolated, new moms, and puppies). During 2015, average kennel utilization across all dog kennels was ~70%, with kennel utilization for both general and adoption kennels at ~90%, and restricted dog kennel utilization at ~45%.

10 Dallas Animal Services’ Westmoreland location has approximately 650 kennels for all animals.
Usage above 90% can effectively be viewed as 100% utilization, as the average daily intake exceeds the average number of available kennels.

Dogs entering the DAS shelter for any reason, other than owner surrender, must be held by DAS for a mandatory three-day\(^{11}\) or ten-day\(^{12}\) legal hold. In 2015, 38% of dogs were not subject to a legal hold, 47% were subject to a three-day hold, and 15% were subject to a ten-day hold. On average, dogs stayed at DAS ~9.4 days total or ~5.5 days beyond the legal hold period. For dogs with a three-day hold, the average stay beyond the legal hold was 5.3 days. For dogs with a ten-day hold, the average stay beyond the legal hold was 2.2 days.\(^ {13}\)

At DAS, animal health is assessed upon intake using Asilomar Accords which were adopted in 2011. The Asilomar Accords are used nationwide by numerous animal shelters and rescues, though adjusted for a given community to reflect its unique circumstances. Today, 9% of dogs arriving at DAS are identified as "Healthy," 57% as "Treatable-Rehabilitatable," 17% as "Treatable-Manageable," and 17% as "Unhealthy and Untreatable."

---

\(^{11}\) Any animal that enters the shelter without a microchip or collar is subject to a three-day legal hold, not including the day of intake.

\(^{12}\) Any animal that enters the shelter with a microchip or collar is subject to a ten-day hold, not including the day of intake.

\(^{13}\) This excludes dogs that are euthanized or returned to owner on the day of intake.
In 2015, ~2,000 dogs (10% of intake) were returned by DAS to their owners, ~6,800 dogs (33% of intake) were placed through adoption, ~2,900 dogs (14% of intake) were transferred to partner/rescue organizations, ~500 were classified as "Other" (including ~250 dead-on-arrival), and ~8,500 dogs (41% of intake) were euthanized.
DAS has made significant improvements in its *live release rate* over the past five years, doubling the number of positive outcomes. It has done this by growing both adoptions and transfers. In 2015, DAS transferred dogs to ~140 partners. Ten of these partners were responsible for 70% of all dog transfers. Approximately 90 of DAS’s *transfer partners* pulled an average of 2 dogs each in 2015.
At the same time, Dallas lags many other major cities with comparable circumstances and/or intake volumes on positive placement.
Dallas Animal Services field operations

DAS is responsible for collecting animals across the city of Dallas ("the field") through its 33 ASOs.\(^\text{14}\) In addition to field intake, ASOs respond to animal-related requests from 311, investigate possible rabies bites, enforce animal-related ordinances, investigate animal cruelty, handle court-related activities, assist in disaster response, and administer euthanasia. ASOs employ various approaches to fulfill these responsibilities, including, but not limited to the following:

- Capture loose animals using poles, treats, and traps
- Impound dogs that are in dangerous environments
- Impound dangerous dogs
- Issue civil and criminal citations to enforce animal ordinances

\(^\text{14}\) This includes senior ASOs and ASOs but does not include the seven field supervisors/managers, the office assistant, the intake clerk, or the bite investigator, all of whom also operate in the field department.
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- Issue violations to warn and educate citizens on proper ordinances
- Educate citizens on pet ownership and city ordinances
- Investigate animal cruelty cases
- Manage rabies quarantine and reporting process
- Conduct bite investigations
- Assist police and fire department
- Support disaster response efforts

Our interviews indicate that DAS’ 33 ASOs spend a large portion of their time on manual, administrative processes: mapping and driving between locations in Dallas (35%), processing intake at the shelter (11%), and updating the Chameleon database on their activities (6%).

Each officer serves four 10-hour shifts each week. There are three types of shifts for ASOs:

1) **Reactive**: Approximately 80% of shifts are spent responding to 311 calls. ASOs drive to the addresses provided in 311 service requests in prioritized order. The result of these requests is typically dog capture, citations, and/or education.

2) **Proactive**: Approximately 10% of shifts are proactive education, targeted outreach, and proactive dog collection. This occurs primarily through Targeted response team sweeps and the CARE team efforts.

3) **Shelter**: Approximately 10% of shifts are spent in the shelter with ASOs recording bite data and administering euthanasia.

The following sections include additional detail on 311 requests, the CARE team, citations, and dog collection.

**311 requests**

From June 2015 to May 2016, DAS received over 48,000 requests from 311. Of all the 311 requests, ~30,000 were dispatched and responded to by ASOs. When an ASO responds to a request, he or she drives to the specified address and searches for the complaint. Sometimes, the source of a complaint cannot be located because there is no animal or person at the address and no follow-up information has been provided. If the source of the complaint can be located, the ASO will typically capture a dog, issue a citation, and/or educate the person on city animal ordinances.

ASOs work 10-hour shifts, starting as early as 7:00 am and ending as late as 11:00 pm. On average, ~80 requests are dispatched to ASOs each day, and ~45% of these are priority 1 or 2 requests regarding a human or animal in imminent danger. Given that there are 12 ASOs responding on any given day, ASOs respond to an average of 7 requests each shift.

Of the ~48,000 total requests received over the 12 months ending May 2016, ~19,000 (38%) were not dispatched to ASOs because they were categorized as the lowest priority. These non-
dispatched calls include, among other things, reports of non-dangerous, not-owned loose dogs in non-CARE areas. Non-dispatched calls are recorded and used to identify areas that need focused ASO resources, such as a CARE team. Where possible, letters are sent to the addresses of non-dispatched requests with information on city animal ordinances.

With the limited number of ASOs available to respond to calls at any point in time, it is not possible to respond to every loose dog request with the current level of resourcing, given the time required to drive between requests and the time required to locate fast moving dogs (many cannot be located at all). Moreover, priority calls where a human or animal is in imminent danger must remain the immediate priority of ASOs.

**Exhibit 15| Animal-related 311 requests between June 2015 – May 2016 in Dallas**

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Response timeline</th>
<th>Response goal</th>
<th>Examples</th>
<th>Volume June 2015 – May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immediately</td>
<td>45 min – 1 hour</td>
<td>Animals attacking humans or each other, humans attacking animals, public safety obstruction</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>Immediately after Level 1</td>
<td>1-2 hours</td>
<td>Critically injured animals, animals that will die if left in their current condition/environment, rabies vector species in living quarters</td>
<td>16%</td>
</tr>
<tr>
<td>3</td>
<td>Immediately after Level 2</td>
<td>2-3 hours</td>
<td>Urgent assists to police or fire</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>Once levels 1-3 cleared</td>
<td>3-4 hours</td>
<td>Animals on school grounds, aggressive packs of dogs, animal neglect, sick or injured</td>
<td>15%</td>
</tr>
<tr>
<td>5</td>
<td>Once Level 4 cleared</td>
<td>4-6 hours</td>
<td>Animal bite calls/quarantine, confined animals not in danger from the elements, wild animals in living quarters</td>
<td>15%</td>
</tr>
<tr>
<td>6</td>
<td>Once level 5 cleared</td>
<td>12 hours</td>
<td>Low-priority police assists, owner surrenders for disabled or senior citizens, loose owned dogs</td>
<td>15%</td>
</tr>
<tr>
<td>7</td>
<td>Case dependent</td>
<td>7-10 days</td>
<td>Follow ups</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>Within 7-30 days</td>
<td>7 days</td>
<td>Compliance calls, loose dogs in non CARE areas</td>
<td>38%</td>
</tr>
</tbody>
</table>

Note: This analysis was done on average response times based on when requests were “Closed” in the 311 system. Due to changes in reporting, these averages are approximate on ~44k of the total 48k requests.

Source: 311 request data, 311 Animal Service Request Types matrix from 311, “Follow-up to Dallas Animal Services Update” to Quality of Life Committee on 5/6/2016, BCG analysis.
CARE team\textsuperscript{xxi}

The CARE team (Community Animal Resource Effort) consists of 4 ASOs and 3 coordinators/managers that are responsible for the majority of DAS's proactive education. This team works four days a week conducting door-to-door outreach in one census tract over the course of one month. A census tract is an area roughly equivalent to a neighborhood with a population of 2,500-8,000 people. Census tracts are prioritized for the CARE team based on historical 311 animal-related service requests.

During the first half of a given shift, the CARE team sweeps the area for loose dogs and returns them to owners, where possible. (BCG was unable to determine the number of dogs that are collected during these sweeps.) For the second half of the shift, this team visits every household in the neighborhood to educate citizens on animal-related city ordinances and available low-cost animal resources (e.g., spay and neuter). Sometimes, the CARE team must visit a house multiple times before someone is home, especially given that many residents work during the time of the shifts. Two weeks after the initial visit, the CARE team returns to households with pets to determine if they are in compliance with animal-related ordinances. If they are not, ASOs issue citations.\textsuperscript{xxii,xxiii}

From April through July 19 of 2016, according to internal DAS records, the CARE team made contact with an average of 105 houses per day\textsuperscript{xxiv}. Prior to April 2016, derivations of the CARE team, such as the Targeted Area Initiative, were executed. As of mid August 2016, the CARE team began to use volunteers in its efforts.\textsuperscript{xxv} Although the volunteer role in this program has not been scaled yet, DAS plans to do so.

Citations

During the 24 months between June 2014 and May 2016, the number of citations issued by ASOs increased each month at a rate of 7%. In January through May of 2016, ASOs issued 1,807 citations, averaging approximately 12 citations per day in total, or 11 citations per month per ASO.\textsuperscript{xxvi} Approximately 2% of all citations issued during this time were civil citations, and the rest were criminal citations.
While it is not the responsibility of DAS to manage the payment of fines, an analysis of outcomes of DAS citations indicates that only 36% of all citation fines were paid in the 24 months following June 2014.xxvii Of all citations issued in 2015, approximately 44% remained in Initial Arraignment, which means that the defendant did not respond to the citation.xxviii

Dog collection

In 2015, ~74% (~7,000) of all field intake came from the capture of loose dogs, ~22% (2,100) came from dogs surrendered by owners in the field, and the remaining 4% (or 2% of total intake) were dogs captured and returned to their owners on the same day. Total field intake has decreased at a 4% annualized rate since 2011, field owner surrenders have decreased at 6%, and field collection of loose dogs have decreased at approximately 4%.xxix Dogs are typically captured by ASOs using dog poles. Occasionally, one of approximately 50 traps in DAS’s inventory is set and, as needed, dogs are retrieved with the assistance of tranquilizer darts.
ASO staffing levels

DAS has 33 active ASOs. When compared to organizations in peer cities, DAS has 45% more ASOs per million people, but each ASO collects approximately 20% fewer dogs than ASOs in peer cities do. Other measures of ASO productivity could include citations issued, education administered, and call volume addressed.

Exhibit 17| Number of DAS animal services officers

Note: Assumes that 33 ASOs with a field intake of 9,363 for CY 2016 in Dallas
Source: DAS Chameleon Database, Maricopa County Animal Services, Houston BARC, Fulton County Animal Services, Austin Animal Services, Jacksonville Animal Services, San Antonio Animal Services, Los Angeles Animal Services, Washoe County Regional Animal Services, US Census Bureau (2013), BCG analysis

15 DAS has self-reported an actual ASO base of 33. The FY16 budget has 37 ASOs. On the June 27, 2016 organization chart, there are 37 filled positions and 8 vacant ASO positions. For the purposes of this report, we assume that DAS has 33 active ASOs on staff.
Dallas Animal Services resources

As of June 27, 2016, DAS had 192 positions per its organizational chart. Of the 192 positions, 166 were filled and 26 were open or unfilled, including key positions for a shelter operations manager, a medical team manager, and a data analyst. Of the 166 filled positions, 102 were full-time and 64 were temporary employees (45 of which were day laborers).
Historically, Dallas Animal Services has been underfunded relative to its peers on a per capita basis. More recently, following multiple budget increases, Dallas Animal Services increased its budget to $10.2 million for fiscal year 2015-2016; however, it still lags its peers by ~$0.78 per person or nearly ~$1 million in aggregate.

In many comparable cities in the US, animal services departments effectively increase their municipal budgets by forming an explicit and contractual partnership with a major nonprofit organization. Animal services departments with such partnerships significantly reduce their expense burden by transferring activities and costs to their partners. In interviews with animal services and city professionals in peer cities, these types of partnerships were consistently cited as a critical success factor.

While it is impossible to quantify the exact financial advantage of such partnerships, below we illustrate the order of magnitude of their impact by adding the annual budgets of the partner organizations to the annual budget of the animal services department in peer cities. While we understand that the animal services departments do not benefit from 100% of the partners’ funding, the exhibit demonstrates that DAS’ lack of such a partnership represents a major financial deficit.
Dallas animal welfare organizations

In addition to DAS, there are over 100 organizations operating in the animal welfare landscape in Dallas. These organizations perform a variety of activities including:

- Placing animals with new owners through adoption
- Operating a network of foster homes
- Providing pet ownership education
- Rescuing strays from the streets
- Transporting animals to different cities and states
- Providing financial support to pet owners in need
- Advocating for animal-related legislative issues
- Providing low-cost behavioral training
- Performing discounted spay and neuter surgeries
- Operating a shelter for animals
- Performing humane investigations and emergency rescues
- Trapping, neutering, and releasing animals
- Hosting vaccination clinics
- Hosting microchip clinics
- Providing low-cost veterinary care
- Offering door-to-door education and spay and neuter information
- Operating pet food pantries and food banks

To better understand the landscape of these organizations, BCG issued a *Rescue and Animal Organization Survey* to animal-related groups in the Dallas area. This survey was conducted online, and "cold" emails and calls were made to more than 100 groups. Seventy two distinct organizations participated in the survey. From these respondents, we found that these organizations provide many resources to the Dallas area: survey respondents had an aggregate annual budget of over $28 million. Most are growing; 74% report that they are growing while only 6% report that they are shrinking.

According to the survey responses, these organizations overlap in their missions and activities. 89% of the surveyed organizations place animals with new owners through adoption, 77% operate a network of foster homes, and 76% provide pet ownership education.

An analysis of the 58 surveyed organizations that rescue dogs (provide shelter, foster, or transport for dogs) indicates that these organizations had *intake* of ~30,000 dogs in 2015 and could house around 4,000 dogs at any given time. DAS already leverages and partners with some of these rescue organizations. In 2015, DAS transferred dogs to over 100 distinct rescue organizations. According to the Rescue and Animal Organization Survey, 61% of respondents "agree" or "strongly agree" that DAS has improved over the last three years. However, the largest partners, responsible for ~60% of total rescue dog *intake*, source a small percentage of all of their dogs from DAS (2%)\(^\text{xxxi}\).
BCG Strategic Recommendations to Improve Public Safety and Animal Welfare in Dallas | 2016

Exhibit 21 | Reported dog intake from survey respondents

<table>
<thead>
<tr>
<th>Top 3 Rescues In Dallas</th>
<th>Other Rescues In Dallas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of rescue / transfer organizations</td>
<td>3</td>
<td>~55 (limited to survey)</td>
</tr>
<tr>
<td>Reported 2015 dog intake</td>
<td>20,373 (66%)</td>
<td>10,494 (34%)</td>
</tr>
<tr>
<td>Dog intake from DAS</td>
<td>386 (2%)</td>
<td>2,559 (24%)¹</td>
</tr>
<tr>
<td>% of DAS dog transfers</td>
<td>13%</td>
<td>87%</td>
</tr>
</tbody>
</table>

DAS has low share with Dallas' largest rescues
Top 3 Rescue organizations in Dallas pull only 2% of their annual intake from DAS

Notes: See compendium for more detailed assumptions.
Source: Rescue and Animal Organization survey (n=72), BCG analysis

Recommendations

Given the objective of improving both public safety and animal welfare, BCG recommends that the city of Dallas, Dallas Animal Services, animal welfare organizations, animal-oriented philanthropies, and the people of Dallas focus their efforts on seven recommendations:

1) Publicly adopt a mission statement balancing public safety and animal welfare
2) Increase field intake (up to 8,700 loose dogs) and increase related enforcement and education to prevent dogs from roaming
3) Increase the number of positive outcomes for Dallas dogs, euthanizing only the sickest animals
4) Provide 46,000 low-cost spay and neuter surgeries in southern Dallas each year for the next three years
5) Create a collaborative community of partners
6) Make animal services a priority and strengthen accountability within the city government
7) Ensure efficiency by measuring outcomes and increasing volunteers
When considering these recommendations, a conceptual framework of buckets and spouts can help to highlight how a given strategy affects our dual objectives of public safety and animal welfare.

**Exhibit 22| Dallas dogs conceptualized as buckets and flows**

The most effective solution is reducing the number of new dogs born into the system, which in turn reduces the pressure across every bucket and spout. As a result, our most critical recommendation is providing a high volume of low-cost spay and neuter surgeries in southern Dallas through a three-year surge effort. This recommendation is the only solution that addresses both public safety (intact animals are more likely to roam and bite) as well as animal welfare (countless animals can be saved by preventing unnecessary population growth), while also creating change that is sustainable.

Because spay and neuter efforts do not yield immediate impact, we recommend additional initiatives to accelerate the rate at which positive change takes place. Among those initiatives
are strategies to reduce the number of *loose dogs* on the streets and to create more positive outcomes for dogs.

While these recommendations can meaningfully improve both public safety and animal welfare in the city of Dallas, it is important to note that all seven must be carried out in parallel to achieve the desired effect—unbalanced actions may have unintended consequences that negatively impact public safety or animal welfare. For example, focusing exclusively on picking up *loose dogs* would likely result in higher levels of euthanasia in the short term and have little benefit to public safety in the long term as new dogs are born.

### Exhibit 23 | A coordinated effort required

| Isolated single actions compromise public safety or animal welfare, or lack sustainability |
|---|---|
| **Single Action** | **Direct or Unintended Consequence** |
| 1. Pick up all the loose dogs | 2. People replace pets given large supply of new dogs |
| 2. Encourage community to keep loose dogs off the street | 3. Euthanasia spikes from increased intake |
| 3. Build a bigger shelter | 4. If breeding continues, dog population overwhelms the most responsible of owners |
| 4. S/N all the dogs | 5. Intake fills shelter, returns to "business as usual" |
| 5. People replace pets given large supply of new dogs | 6. Owned pets still roam the streets |

While some of our recommendations include best practices, which should be carried out on an ongoing basis, others—such as the large increase in spay and neuter surgeries—represent temporary or "surge" initiatives that can be carried out in the near term, but scaled back over the long term.

When successfully implemented, these recommendations should serve to reduce the number of dog bites occurring in Dallas as a result of fewer dogs being loose and the fact that spayed and neutered dogs are less likely to bite. We also anticipate these recommendations will increase the number of positive outcomes for dogs sheltered at DAS by creating or expanding programs for
positive placement and by reducing the long-term supply of dogs to be placed through spay and neuter efforts.

Supporting these solution-oriented initiatives are recommended enablers to ensure these efforts are effectively implemented by the entire community of stakeholders.

Successful implementation of this plan requires a coordinated effort by the entire community as well as incremental funding from both government and private sources.

In the pages that follow, we provide a rationale for each recommendation, suggested ownership, supporting evidence, and estimated costs to implement.
Recommendation 1 – Publicly adopt a mission statement balancing public safety and animal welfare

Today, DAS's mission, as stated on their website, is largely focused on animal welfare.

Dallas Animal Services and Adoption Center is dedicated to the humane treatment of animals in Dallas and educating others about responsible pet ownership. We reinforce these ideals every day by providing daily care for hundreds of animals in our shelter, assisting citizens who come to see us as well as out in the community. We respond to calls regarding animal welfare and concerns, conduct free Responsible Pet Ownership classes, hold offsite animal adoption events, and speak at and provide educational information at public safety fairs, environmental festivals, and neighborhood organizations.

DAS also has a secondary mission statement that has not been publicly shared, which is also largely focused on animal welfare.

To strengthen our community through outreach and enforcement efforts that preserve the human animal bond through the city of Dallas

When comparing mission statements of comparable cities one can observe a range of statements that emphasize animal welfare, public safety, or a blend of the two, where DAS's mission statement(s) have a heavier focus on animal welfare than many other comparable organizations.
Given the dual objectives of stakeholders interviewed by BCG, public safety and animal welfare, we recommend a mission statement that balances these needs. Further, because a mission statement alone is not sufficient to gauge progress, we recommend specific metrics to track progress against this mission and measure success.

### 1.1 DAS should adopt a mission statement balancing public safety and animal welfare

**Rationale:** A mission statement is a tool that helps organizations set priorities, communicate intention, and set expectations for the public and partners.

We believe DAS's current mission statement lacks sufficient emphasis on public safety. Given the current needs of the Dallas community, we recommend that DAS adopt the following...
mission statement (or similar):

- Our mission is to ensure public safety, promote animal welfare, and contribute to a stable population of animals within the city of Dallas. Successful execution of our mission depends on the efficient and data-driven use of resources as well as collaboration with community partners.

1.2 DAS should adopt a mission-centric scorecard with specific targets and regular progress updates

**Rationale:** While a focused mission statement is useful to align stakeholder expectations and priorities, it is not sufficient to measure success. To succeed in its mission, we recommend DAS adopt the following mission-centric scorecard and targets (or a similar set of metrics).

A balanced scorecard should include metrics that measure public safety, positive outcomes, population control, partnership success, and operating efficiency.

A data analyst will be necessary to create and update the mission-centric scorecard. The cost for this employee is included in recommendation 7.1.
### Exhibit 25: Community scorecard can be used to track progress

<table>
<thead>
<tr>
<th>Objective</th>
<th>Goal (Metric)</th>
<th>Current Level</th>
<th>2017 Target</th>
<th>2019 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce number of Loose Dogs</td>
<td>Fewer loose/roaming dogs (to repeat loose dog census in 2017)</td>
<td>8,700</td>
<td>5,500</td>
<td>1,500</td>
</tr>
<tr>
<td></td>
<td>Fewer dog bite reports from loose and stray animals</td>
<td>1,676</td>
<td>1,500</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Fewer bite/animal-related emergency calls to 311 and 911</td>
<td>43,836</td>
<td>40,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Increase LRR</td>
<td>Improved LRR (Live Release Rate)</td>
<td>59%</td>
<td>69%</td>
<td>88%</td>
</tr>
<tr>
<td>Control Population through S/N</td>
<td>Higher rate of S/N among dogs in southern zip codes</td>
<td>15%</td>
<td>43%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>High volume of S/N surgeries delivered</td>
<td>5,000</td>
<td>28,000</td>
<td>46,000</td>
</tr>
<tr>
<td></td>
<td>Lower long term absolute intake from southern Dallas</td>
<td>13,466</td>
<td>22,166</td>
<td>10,000</td>
</tr>
<tr>
<td>Increase Collaboration</td>
<td>Increased partner satisfaction (to be surveyed)</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Increased number of volunteer hours</td>
<td>1.2 FTE</td>
<td>10 FTE</td>
<td>25 FTE</td>
</tr>
<tr>
<td>Improve Efficiency</td>
<td>Decrease in average length of stay</td>
<td>7.6 days</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Increased efficiency of animal service officers (dog intake per year)</td>
<td>286</td>
<td>350</td>
<td>450</td>
</tr>
</tbody>
</table>

Note: See compendium for more detail
Source: BCG, Dallas dog census, DAS dog bite reports, 311 service requests, 911 calls, DAS Charnelton database, Big Fix for Big D, Spay and neuter Network, Dallas Companion Animal Project, Fats for Life, Geocoding analysis, BCG Rescue and Animal Organization Survey (n=72), DAS volunteer hour excel file, BCG analysis

The Boston Consulting Group
**Recommendation 2 – Increase field intake (up to 8,700 loose dogs) and increase related enforcement and education to prevent dogs from roaming**

BCG’s second recommendation focuses on reducing the number of loose dogs on the streets of Dallas, with the goal of improving public safety and quality of life. Dallas residents have the right to peacefully enjoy the city without being endangered or disturbed by loose or uncontrolled animals.

Increasing field intake, in isolation, would likely result in higher levels of euthanasia at Dallas Animal Services, due to the relationship between shelter utilization and euthanasia. However, when implemented in parallel with recommendation 3 (opportunities to increase positive outcomes for dogs), the increased intake should not result in higher levels of euthanasia. We believe increased intake is necessary to balance both public safety and animal welfare.

It should also be noted that any success in picking up loose dogs would be short-lived unless accompanied by long-term improvements in spay and neuter levels (to bring future population growth under control) as outlined in recommendation 4. In short, if Dallas does not control population growth, there will always be more dogs to collect. Hence, recommendations 2, 3, and 4 must exist in harmony to balance public safety and animal welfare, and achieve sustainable results.

2.1 DAS should hire additional ASOs and focus 10 ASOs and 2 field supervisors on field collection and patrol

**Rationale:** Today, the majority of DAS ASOs are call-focused in that ~80% of their collective time is spent responding to priority 311 calls. These calls are necessary from an animal services and population health perspective; however, 311 calls are a largely unproductive means of collecting dogs. DAS typically has 12 to 14 ASOs16 working field shifts each day, excluding shifts in the shelter, with daily field intake of 25 dogs per day.

Based on expert interviews, a dedicated ASO unit that would proactively patrol a given area would be a more effective means of increased field intake of loose dogs.

We recommend DAS dedicate two teams of five ASOs to such a unit, which would be responsible for collecting loose dogs using the most effective methods appropriate, educating the community about ordinances, and referring those in need to available assistance.

For example, on a given day this unit might:

- Catch a loose dog using a standard ASO pole
- Trap or chemically capture a loose dog
- Issue citations for loose, unregistered, unvaccinated, or intact dogs

16 On any given day, DAS deploys two shifts of five ASOs responding to 311 requests, two ASOs from the CARE team, and two additional ASOs working in the field.
- Educate an owner about ordinances regarding loose, unregistered, unvaccinated, or intact dogs and refer them to resources to bring their animal into compliance
- Return a loose dog caught to its owner in the field with the appropriate citation and/or scheduled appointment to bring that animal into compliance
- Introduce themselves to actively involved neighbors who could become a direct source of information about loose animals and built trust in the community

Today, DAS executes **Targeted response team sweeps** weekly (typically on Wednesdays) in which it targets specific areas of the city with a team that patrols, collects, and issues citations over a few hours. It will be helpful to leverage this pre-existing practice for this recommendation, but increase the scale of that effort to full-time coverage. The first priority of this team should be to locate and collect *loose dogs* while door-to-door education efforts are secondary.

With the recommended dog **field collection** teams, DAS has the opportunity to collect an additional ~6,000 dogs each year. This estimated impact relies on several key assumptions. First, the dedicated force of ASOs would work in two teams of five, given that the team-based capture model is most effective for loose dog collection.\textsuperscript{xxiii} Second, each ASO team can collect approximately 15 dogs per team per day (three per ASO).\textsuperscript{xxiii} Third, each **intake**-dedicated ASO team would run sweeps four days per week, focusing, for example, on early morning (3:00 am – 9:00 am) and early evening (6:00 pm – 9:00 pm), when dogs are most active and when ASOs could engage with residents leaving for or coming home from work.\textsuperscript{xxiv} As seasonal shifts occur, it may be necessary to alter the sweep times to adapt to dog behavior.

The incremental cost incurred would be ~$240,000 for four additional fully-equipped trucks, at a cost of $60,000 each (one-time cost), and ~$94,000 in recurring labor costs each year for two additional ASOs.\textsuperscript{17} It also requires that DAS fill current open positions (as of the writing of this report, the DAS organizational chart showed that there were 8 open ASO positions and 2 open supervisor positions) and reallocate additional ASOs to this dedicated collection effort.

To speed the hiring process, it is recommended that DAS forgo the civil service hiring process (as noted in recommendation 6.5).

In the event that DAS is unable to hire additional ASOs for an extended period of time, it is recommended that DAS partner with local organizations that are active in loose dog capture (as noted in recommendation 2.5).

\textsuperscript{17} This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
2.2 DAS should increase ASO field intake

**Rationale:** On average, one DAS ASO brings in ~284 dogs a year, which is approximately 73 fewer than comparable animal control units. Cities with high intake per ASO include Phoenix (Maricopa County) and San Antonio, where annual dog intake per ASO is 551 and 500, respectively.

DAS could make several changes to increase ASO intake. By implementing the following tactics, it is believed that ASOs can increase their intake level to 357 dogs per ASO per year, which is the average field intake for ASOs from comparable cities.

1) **Improve 311 processes.** 311 dispatch and operators are a pain point for ASOs. Calls are sometimes miscategorized as high priority or lack sufficient information for ASOs to respond. Approximately 30% of all priority 1 requests cannot be responded to because by the time an ASO arrives at the address there is no person, no animal, or no follow up contact information. As one DAS ASO commented, “Sometimes, I get to a Priority 1 call for Attack in Progress, and when I get there, there is no human, no dog, and no contact information for the recorded address. That call was probably a loose dog and not an attack. It shouldn't have even been dispatched.”

If the 311 operator and dispatcher could more effectively capture data, categorize requests, and dispatch requests, ASOs’ responses to calls could be more efficient. This can be achieved by revising the 311 scripts, increasing coordination between 311 and DAS, and/or bringing the 311 operator and dispatcher in house. Approximately half of benchmark cities have their own animal control call centers and the other half utilize the city's or county's general call center.

The 311 operator/dispatcher needs to develop expertise in animal-related calls and continuously improve the 311 animal-related script in order to more accurately classify requests and capture the information necessary for effective ASO response. We recommend DAS bring a four-person 311 request team in house to improve the 311 process.

2) **Optimize 311 response mapping.** Approximately 6% of ASO time is spent mapping out routes on physical maps or on personal phones. (Historically, ASOs have been provided flip phones by DAS). 29% of time is spent driving between calls. By automating mapping, either on smartphones or through the mapping application in Chameleon, ASOs can minimize their time spent prioritizing calls, mapping routes, and driving, and instead focus more time on dog capture or community engagement. DAS has reported that it is in the process of sourcing smartphones, and we support these efforts.

3) **Eliminate manual record keeping.** Today, ASOs spend time recording 311 requests
and bite reports on paper even though ASOs also enter their activities and outcomes in the Chameleon database. By streamlining data entry and relying on Chameleon as the definitive source of data, ASOs can eliminate time spent on manual recordings. Completely digitized records will also eliminate complexity in reporting and retrieving data. DAS has reported that it is in the process of digitizing more information, and we support these efforts and encourage that they be accelerated. The success of this outcome relies, in part, on the efficacy of DAS’s technology systems.

4) **Upgrade field connectivity to Chameleon.** Chameleon software is used to dispatch officers and store all of their activity data. Often the computers in their trucks become dislodged from the docking station or disconnected from the Internet. One ASO reported “[We need] improved access to our primary operating system [Chameleon] while in the van. Most of the docking posts [in the vans] provide terrible connection to the system, causing numerous delays.” By improving field connectivity, DAS can eliminate ASO time spent waiting to upload notes or to determine their next 311 response.

5) **Improve fleet and equipment management.** Evidence suggests the fleet of DAS trucks has not been efficiently maintained, leaving trucks and equipment in disrepair. One DAS supervisor reported that the majority of trucks were overdue for maintenance and oil checks. As a result, on days when shifts overlap, there may not be enough trucks available for ASOs to drive. As one ASO noted, “Often vans are not working, poles are not working, and I have not been able to get new ones for quite some time.” If maintenance were done consistently on the trucks and equipment throughout the year, ASOs could increase the number of loose dogs captured.

6) **Encourage ASOs with recognition and metrics.** ASOs report feeling isolated from the rest of DAS staff. During staff meetings, field operations are reportedly excluded and ASO achievements in capturing dogs or issuing citations are not recognized. In order to better motivate and include ASOs in the operations, DAS should introduce metrics and recognition around dog capture and citations.

7) **Require consistent schedules from ASOs.** According to the DAS employee interviews, ASOs are able to miss work for extended periods of time without any consequences. One ASO pointed out that there are some officers “who refuse to work or come to work.” While we cannot verify this assertion, a larger share of ASOs vs. other DAS positions reported that poor individual performance is tolerated. DAS should ensure that ASOs maintain consistent schedules, especially during times when calls are most active.

Management at DAS has already initiated several changes to improve ASOs’ field intake. For example, more equipment, such as blowguns, has been ordered. New trucks with LED lights for night shifts have been budgeted and the efficacy of night shifts has been evaluated. Truck
inspections have been scheduled. In addition, DAS field supervisors have recently adjusted the ASO schedule to be two ten-hour shifts, ensuring that there are overlapping shifts during the times when there is the highest volume of 311 requests (Tuesday-Thursday from 1-5pm).

To be more in line with other cities, DAS should aim to increase field intake to 357 dogs per ASO per year, or an additional ~2,400 annual field intake, given the current number of ASOs (33) and current annual field intake. The estimated cost would be ~$168,000, which would cover salaries ($42,000) for two 311 dispatchers and two 311 operators. If DAS chooses to improve the 311 request process without bringing operators and dispatchers in house, it should use the $168,000 to support other efforts that would increase ASO efficiency.

### 2.3 The Dallas community should educate residents on both the dangers of allowing dogs to run loose and the ways to avoid dog bites

**Rationale:** Today, community education efforts in Dallas are facilitated by the DAS CARE team and other volunteer organizations.

Currently, the CARE team that works 4 shifts a week, with the help of volunteers, the team visits 105 houses a day. This model is not a scalable solution to address the 173,598 households in southern Dallas. In fact, at the current rate it would require ~17 years for the DAS CARE team to reach each southern Dallas household twice. In order to reach each southern Dallas household twice within two years, the community needs ~8.5 times more manpower than the current CARE team today.

To reach the population in a timely manner, it is imperative that community organizations and volunteers take responsibility for community education efforts.

In the future, education efforts should emphasize the negative impact that loose dogs have on the community (to encourage residents to restrain or confine their dogs). The community should also be educated on ways to avoid dog bites (including proper handling of pets and appropriate responses to loose dogs).

The goals of the education program should be to reduce the number of loose dogs on streets and increase community awareness of how to interact with dogs in a safe manner. There will not be any costs associated with this effort based on the assumption that the community will execute these responsibilities.

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19 This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
20 CARE team data from April – July 2016.
21 Pets for Life in southern Dallas suggests two touches per household.
2.4 The city of Dallas should make animal-related citations more effective

**Rationale:** If used effectively, citations encourage compliance with local animal ordinances. As one manager of animal services in a benchmark city claimed, “There is never a silver bullet, but our ‘animal-citation’ program is the best thing we have done.”

In order to ensure that citations are effective, they need to be easily issued and appropriately followed through.

Today, there are two types of animal citations: criminal and civil. *Criminal citations* can result in jail or warrants, while civil can result in a collection agency and bad credit.

Today, it is difficult to issue citations in Dallas, whether criminal or civil, for several reasons.

First, ASOs spend the majority of their time responding to 311 requests, and therefore have limited opportunity to patrol areas and proactively issue citations. 311 calls infrequently result in a citation because by the time an ASO arrives at the specified address, there are no people or dogs to be found—and an ASO must witness a violation in order to issue a citation.

If a citizen reports a dog confined in a car, for example, an ASO cannot issue a citation unless he or she witnesses the confined dog.

Second, appearing in court to defend *criminal citations* is time consuming (98% of all citations issued are *criminal citations*). On average, each officer spends one entire day each month in court, during which he or she could be responding to 311 calls or proactively patrolling a given neighborhood.

Third, issuing *civil citations* takes a large amount of time. In 2012, DAS helped to initiate the change to allow ASOs to write *civil citations*, in part because *civil citations* do not require an ASO to attend court hearings. In order to issue a *civil citation*, an ASO must have a concrete court date to write on the citation, which can only be generated by the *docket*. Because the *docket* is shared by the entire Department of Code Compliance and can only be accessed by one person at a time, it can take more than an hour to receive a court date and complete a *civil citation*. As one DAS supervisor commented, “A few weeks ago, I was on the phone with an officer for two hours while I tried to enter the *docket*.”

Aside from the inefficiencies in giving citations, there are also issues with follow through. When citations are issued, they are rarely paid. Only 38% of all fines were paid in 2015. Most defendants simply do not respond to citations; 44% of all citations issued in 2015 were stuck in “initial arraignment,” meaning the defendant did not respond to the citation.

While BCG did not have the necessary information to assess the number of repeat offenders, we support the execution of warrants against defendants with the highest number of outstanding citations.

To improve the process of issuing citations, the city of Dallas can take action in three areas.

- Increase the amount of time that officers patrol neighborhoods to issue citations more proactively
- Transition from issuing *criminal citations* to *civil citations* to minimize ASO time spent in court. In 2016, DAS ASOs started to implement *civil citations* more regularly
although still as a small percentage of total issued citations.

- Invest in IT to create one docket for animal services, thereby minimizing the time needed to issue a citation (as of the writing of this report, DAS reported that they had initiated this change)

We also recommend the city of Dallas consider changing the citation court process to increase compliance with city animal ordinances and increase responsiveness to citations. Potential suggestions include:

- Including fines in a resident’s water bill
- Creating a dedicated animal court (as in San Antonio)
- Actively issuing warrants when fines go unpaid

We have not estimated a cost for these potential changes, but the primary cost drivers would be system enhancements to revise the docket and additional time spent by marshals and court personnel.

2.5. DAS should share loose dog service requests with organizations that actively capture loose dogs

**Rationale:** DAS receives ~48,000 311 requests yearly, ~12,000 (24%) of which are loose dog calls that are not dispatched to ASOs. At the same time, multiple private street rescue teams exist in Dallas, which based on BCG’s Rescue and Animal Organization survey, rescued a reported ~6,000 dogs directly from the street in 2015.

We recommend that DAS share information about non-dispatched loose dog calls in real-time with street rescue organizations to augment DAS’s field staff. This communication could be automated with a description of the dog, its location, and when it was last seen.

It should be noted that a clear memorandum of understanding would likely be necessary with these organizations and that all captured animals should be brought to DAS for the stray hold period.

Given volume of ~30 non-dispatched calls per day, this communication could be managed by DAS employees (e.g., field dispatch) until an automated solution is put in place. Accordingly, this initiative will incur no additional costs in the immediate future. We have not sized this opportunity which would be impacted by partner participation, speed of responding to loose dog sightings, and success rate of catching dogs. Implementing this recommendation would require a change in DAS’s technological capabilities and its current approach on active disclosure of data to the public, which we address in recommendation 5.1 below.
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**Recommendation 3 – Increase the number of positive outcomes for Dallas dogs, euthanizing only the sickest animals**

DAS collects dogs daily through its field operations and, because it is an *open admission* shelter, must also accept every dog that residents of Dallas bring to its shelter. If all dog kennels are in use, DAS is forced to euthanize dogs in order to make space for new dogs that enter the shelter each day.\(^{22}\)

By speeding up dog adoptions and transfers (e.g., reducing the average length of stay), DAS can free up kennel space and reduce its euthanasia rates.

The following initiatives will place thousands of dogs into positive outcomes and continue to increase DAS's *live release rate* for dogs which has already grown from ~30% in 2011 to ~60% in 2015.

These initiatives play a critical role in offsetting any temporary spike in field *intake* (recommendation 2) until a successful spay and neuter program (recommendation 4) results in lower *intake*.

\(^{22}\) The same is true of cats and other animals. It should be noted, however, that dog and cat kennels are not typically interchangeable.
3.1 DAS should enhance its digital marketing for both adoptions and transfers

**Rationale:** Digital marketing is an important tool that can be used by shelters to increase adoptions and transfers. Marketing materials showcase dogs available for adoption and highlight their unique characteristics. As one director of a successful city shelter commented, "All principles of retail marketing apply to adoptions."

Effective marketing, especially online pet profiles (photographs and descriptions of dogs), can significantly impact outcomes. One study found that high-quality online profiles can increase speed to adoption by ~40% compared to animals that have low-quality pictures or descriptions. Another study found that high-quality photos alone can lead to a ~63% decrease in the median days to adoption for a shelter dog.

DAS currently underutilizes digital marketing in two ways.

- DAS's online content is not at its maximum scale or potential. Many pet profiles have poor photos (or missing photos) and do not include unique descriptions for each dog.
• DAS does not fully take advantage of external websites that can expose rescue organizations and adopters to its dogs, including Petfinder, Pet Harbor, and Facebook. Currently, not all dogs are searchable on Petfinder and only ~10%\(^{\text{aix}}\) of dogs are posted to the Dallas Dogs In Need of Transfer Facebook page, a page maintained by a DAS volunteer. In addition, DAS’s website does not feature pet profiles.

We recommend DAS feature high-quality photographs and unique descriptions in its pet profiles and make better use of complementary websites.

By improving its pet profiles (especially by taking good photographs and posting them on more websites), DAS has the potential to increase positive outcomes by ~3,200 assuming that improved profiles increase positive outcomes by 20\(^{\circ} \) and dogs posted to Facebook have an LRR 28% higher than those that aren’t.

To achieve this aggregate ~3,200 positive outcomes, a ~$60,000 initial investment is necessary for an IT system upgrade. Anecdotally, the internet and computers at DAS are prohibitively slow. An additional ~$338,000 in recurring costs will also be required to cover:

• Additional spay and neuter surgeries and vaccinations (all adopted dogs receive spay and neuter surgery and vaccinations) at $96 per adopted dog (~$192,000)\(^{23}\)
• The ~2.8 employees needed to create pet profiles by taking good photographs, writing good descriptions, and posting them to the necessary websites (~$101,000)\(^{24}\)
• The two staff that will give additional customer service to adopters as they visit the kennels (~$42,000)\(^{25}\)
• The equipment needed to improve dog profiles, such as cameras and laptops (~$4,000)

3.2 DAS should increase adoption footprint

DAS should tailor its adoption program to meet consumer needs and preferences. Accordingly, DAS should ensure that its locations and hours of operation provide sufficient adoption opportunities within the community.

There are several opportunities for DAS to enhance its retail effectiveness.

\(^{23}\) The $96 includes $28 for veterinary labor and $68 for consumables, such as supplies. The cost to DAS for a spay/neuter surgery will differ from the cost needed to provide a low-cost spay/neuter surgery to the community.

\(^{24}\) This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.

\(^{25}\) This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
3.2.1 Expanding its retail presence via an additional adoption location

**Rationale:** Today, in partnership with PetSmart Charities, DAS manages an “Everyday Adoption Center” (EAC), a retail store located in a North Dallas PetSmart. This facility has 18 kennels available for dog adoption (compared with 118 kennels at the main DAS facility in Westmoreland). Though it is just 15% of the size, the EAC is responsible for 25% of all DAS adoptions.

There are many reasons why the EAC is successful. The EAC facility was purposefully designed for retail adoption by a leading national retailer, and it features spacious open kennels, multiple viewing areas, and a socialization room for potential adopters to connect with dogs. The EAC site is also located in northern Dallas—an area that needs to "import" dogs due to higher levels of spay and neuter surgeries and lower in-community birth rates.

Expanding DAS's retail presence by opening another adoption location, in partnership with PetSmart or another organization, could significantly boost DAS's adoption rate. Because a new adoption location may not be as effective as the current EAC facility (which facilitates 1,736 dog adoptions per year), we conservatively estimated 75% of current volume. Even at 75% of current performance, a new adoption location could result in a projected ~1,300 dog adoptions per year.

Assuming the existing partnership through DAS and PetSmart Charities could be replicated either with a PetSmart or another retail partner, the cost of operating an additional adoption facility would average ~$425,000 per year. This cost includes labor necessary for operation, as well as $96 cost to prepare each of the 1,300 dogs for adoption (e.g., spay and neuter surgery and vaccines). The construction costs of the additional facility would be incurred by a retail partner, as is in line with the cost structure of the current EAC site.

3.2.2 Expanding its retail presence via extended adoption hours

**Rationale:** DAS currently operates its Westmoreland Adoption Center for 50 hours each week, Monday through Saturday, 11:00am - 6:30pm, and Sunday 12:00pm - 5:00pm. In 2015, DAS facilitated 6,406 animal adoptions with these hours of operation. Through analysis of the adoption hours and adoption volume of other animal services agencies across the US, we found that approximately four animals are adopted for each additional hour that an adoption center is open.

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26 The $96 includes $28 for veterinary labor and $68 for consumables, such as supplies.
27 Excluding adoptions from the EAC facility.
28 This analysis included a regression of adoption hours on animals adopted from other animal service agencies.
Based on this analysis, DAS could realize an additional ~520 dog adoptions each year by keeping the adoption center open for an additional 12 hours each week (an additional 2 hours each day). This analysis conservatively assumes that the additional hours of operation would only be 25% as productive as the four dogs per hour average, which means one dog would be adopted for every extra hour that DAS stays open.

By extending the adoption center’s operating hours, DAS would incur a cost of ~$81,000 per year, due to increased labor cost of four hourly-employees to cover the adoption desk and help adopters visit the kennels, as well as the cost for spay and neuter surgeries and vetting for incremental dogs adopted ($96\textsuperscript{29,lvii}$).

\textsuperscript{29} The $96 includes $28 for veterinary labor and $68 for consumables, such as supplies.
3.3 DAS should increase volume through its transfer program

Rescue organizations are vital partners for a city shelter to maintain a high LRR. In many cities, shelters depend on rescue organizations, or transfer partners, to place a considerable amount of dogs into new homes. As one director of animal services advised, “befriend rescue groups. You have to make them your partners.” DAS can better leverage the resources and capacity of rescue partners to transfer more dogs and increase LRR rates.

Both DAS transfer records from Chameleon and BCG’s Rescue and Animal Organization Survey confirm the rescue organization landscape is concentrated in Dallas. For example, 10 partners were responsible for 70% of all DAS transfers in 2015 while 100+ were responsible for the remaining 30%. In the greater Dallas-Fort Worth area, three large rescue organizations are responsible for the majority of dog intake, but these same organizations only pull 2% of their dogs from DAS. Refer to Exhibits 13 and 21 for more detail.

The following initiatives identify opportunities to enhance transfer partnerships and better leverage the capacity that they have to offer, especially the capacity of the larger partners

3.3.1 Establishing a "transfer-on-intake" program with a single high-volume partner

**Rationale:** In benchmark interviews with other cities, a key success factor needed to increase LRR was a high-volume rescue partner. As one animal services agency director commented, “We would never have the same [LRR] rate that we do if we weren't for our rescue partners.”

In addition, many municipal shelters have found that immediately transferring animals on intake to a partner helps to ensure that adoptable animals remain healthy, while also freeing up capacity. One large transfer said, “We would prefer to have the animals before they ever have to enter a municipal shelter.”

Such immediate transfers have a drastic impact on average length of stay, reducing it to zero days for the affected population of dogs.

Therefore, the potential exists for DAS to develop its own "transfer-on-intake" program with a high-volume partner. This partner would commit to pulling a minimum number of dogs annually (e.g., 1,000 – 3,000). In return, the partner would typically be allowed to tag and immediately pull any dog it chooses, before the dog technically enters the DAS shelter. The legal hold would still apply to these dogs, as 10% of all DAS dogs are eventually returned to their owner (40% of all microchipped loose dogs are returned and 6% of unchipped loose dogs are returned). The partner’s shelters would coordinate with DAS to track legal holds and circulate the location of dogs in the event that an owner is looking for his or her dog. Each dog can still be photographed on intake and uploaded into the Chameleon database, making it easier for owners to locate lost pets. Finally, such rapid transfers would typically qualify as an intake and transfer, benefiting any LRR reporting by DAS.

By developing a "transfer-on-intake" program with a high-volume partner, DAS could transfer
an additional ~1,000 dogs per year before the dogs enter the DAS shelter, while still contributing positively to DAS's LRR. This estimate is based on existing partnerships across comparable cities.

This program could be established at no additional cost to DAS. There would be minimal work added to the transfer's current responsibilities (e.g., communicating with large transfers). The cost of transportation to the partner's shelter is typically incurred by the transfer.

### 3.3.2 Segmenting transfers by size and support

**Rationale:** While rescue organizations have an altruistic mission, the number of animals they take from a given shelter and the number of animals they subsequently place in homes can be increased through proper management of these partnerships. Relationships between the rescue organizations (also referred to as transfers) and DAS are managed by DAS's transfer.

Today, 90% of the transfer's day is spent answering questions from transfers about dogs, or tagging and pulling dogs on behalf of partners. As a result, there is little time to proactively cultivate relationships with partners.

According to respondents from the Rescue and Animal Organization Survey, DAS has already established solid relationships with transfers. 67% of survey respondents agreed that DAS is "helpful and supportive of their work," and multiple respondents pointed to the transfer as someone who is "amazing" and "good to work with."

However, there is still room for improvement. Although 50% of rescue partners "strongly agree" or "agree" that they are satisfied with DAS, 26% "strongly disagree" or "disagree." Improved relationships between DAS and its transfers has a tangible benefit in that the most satisfied partners pull a larger percentage of dogs from DAS (versus other city shelters). If DAS can better support its transfers and increase satisfaction, it can increase the number of dogs transferred.

To increase satisfaction, DAS should first hire an additional transfer who is responsible for proactive relationship management. This coordinator should focus at least half of his or her time on developing relationships and addressing the needs of the ~15 largest partners as they have the potential to pull the majority of DAS transfers. The relationships with larger partners will require the transfer to tailor DAS services to each partner's individual needs (e.g., expediting their pulling process, answering questions on dogs immediately).

The additional transfer should spend the remaining time developing relationships with the 100+ small partners and addressing common needs. Rather than tailor services to each partner, DAS can improve these relationships overall by streamlining processes and holding monthly meetings where all partners can be heard.

One change in particular that can streamline communication with smaller transfers is
automating tagging. Today, a transfer can tag, or claim, a dog by directly emailing the DAS transfer. The coordinator checks whether the dog is still at the shelter, alerts the adoption desk, and ensures that the dog is entered in Chameleon. The process of tagging and pulling dogs takes up ~50% of the transfer's time today. It's time consuming and also more likely for human error. Mistakes and inefficiencies in the tagging process can undermine relations with transfers and with the public. If an email is missed, or a tag is entered incorrectly, a dog may be euthanized before the mistake is discovered.

DAS can automate the tag by enabling transfers to tag immediately and online through the Chameleon database. This would eliminate error, eliminate transfer time spent on manual tasks, and increase satisfaction of transfers. 44% of all respondents from the Rescue and Animal Organization Survey said they would be more likely to transfer dogs from DAS if the process for tagging/reserving dogs was improved.

If DAS can better support its transfers, it will increase partner satisfaction and increase the number of dogs transferred from DAS by an estimated 570 each year. An additional transfer will be necessary to build these relationships and will require approximately $51,000 in annual salary. There is not an incremental spay and neuter cost associated with transfers.

3.4 DAS should establish a pet transport program to facilitate out-of-state adoptions

**Rationale:** Pet transport, the process of transporting pets from one city to another, connects adopters in areas with a dearth of animals (many northern cities) with shelters in areas with excess animals (many southern cities like Dallas). Roughly 12,000-14,000 dogs and cats are transported by major pet transport companies each year, primarily through ground transportation (e.g., trucks, cars, vans).

Today, DAS does not operate a systematic out-of-state transport program; however, their peers do participate in pet transport programs. The Houston BARC foundation, for example, partners with a Houston nonprofit to transport pets each week from Houston to Colorado. BARC's initial agreement was to transport at least 50 animals to Colorado each week (~2,500 annually). Miami Animal Services also operates an out-of-state pet transport program, transporting nearly 20 animals out-of-state every week (~1,000 annually).

Establishing an out-of-state dog transport program would require DAS to hire one additional program supervisor focused on transport coordination. It would also require DAS to either establish, or partner with, a foster home network in the Dallas area. The foster network is a necessary program requirement because interstate pet transport regulations dictate that dogs must to have a two-week stay out of the shelter prior to transport.

By developing a structured transport program, DAS can achieve an additional ~900-2,000 adoptions each year. The impact of the transport program depends upon the scale of the foster network. An established network of ~100 foster homes, each fostering one dog at a time
with two-week turnover throughout the year (20 “turns” each year) would support up to ~2,000 transported dogs. However, a less robust network of 60 fosters, each fostering two dogs at a time and participating in 15 “turns” throughout the year, would support a more conservative ~900 transported dogs.

A structured transport program would cost approximately $156,000 - $285,000 each year. This includes the cost of hiring an additional transport coordinator (approximately $51,000 salary),\(^{30}\) two weeks of dog food during foster care (~$21 for total cost of ~$19,000 - $42,000),\(^{31}\) and incremental medical costs associated with spay and neuter surgeries and vetti ng for adopted dogs (~$96 each for a total of ~$86,000 - $192,000).\(^{32,311}\) As is common in other cities, volunteers can be used to help the transport coordinator manage program logistics.

### 3.5 DAS should deflect owner surrenders through owner assistance programs

**Rationale:** Deflection programs, such as the ASPCA’s “Project Safety Net,” encourage owners to keep their dogs instead of surrendering them to the shelter. This keeps dogs from ever entering the shelter, freeing kennel capacity. Given that DAS has a limited number of dog kennels, there is a direct correlation between kennel capacity and euthanasia rates.

In a survey of owners surrendering their pets to DAS, the most common reasons for surrendering an animal were: not having a yard suitable for a dog (24%), lack of time to care for a dog (24%), and not having enough money to care for a dog (21%).\(^{311}\) A deflection program can provide support to Dallas dog owners, enabling them to keep their animals, reduce the strain on the shelter intake system, and increase the overall rate of positive dog outcomes.

Survey responses also revealed that approximately 37% of all surrendered dogs could be deflected if owner aid were available.\(^{311}\) Specifically, 12% of owners would keep their dog if provided with resources for a temporary home for their pet, 9% would keep their dog if provided resources to cover routine veterinary care costs, 7% would keep their dog if provided with pet behavior training, and 5% would keep their dog if provided with support for a dog run or fence.

Based on the statements of Dallas residents responding to the survey, a program to support owners has the potential to keep up to ~2,600 dogs from entering the shelter each year (based on 2015 volume). The cost of instituting a surrender deflection program is expected to be ~$26,000\(^{311}\) per year which includes the salary for an additional 0.5 DAS employee to coordinate the program and connect owners with community resources.

It is assumed that assistance with resources, such as dog runs, pet food, or veterinary care, can

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\(^{30}\)This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer and then applying an extra 20% to that salary to account for benefits.

\(^{31}\)By comparison, caring for a dog at DAS costs ~$15/day and takes up kennel space, which can contribute to euthanasia when space for new animals is unavailable.

\(^{32}\)The $96 includes $28 for veterinary labor and $68 for consumables, such as supplies.
be provided by existing animal welfare organizations already providing these services to the community. For example, an owner intending to surrender a dog due to the price of dog food could be directed to the North Texas Pet Food Pantry, which offers dog food to those in need.

3.6 DAS should provide enhanced behavior training to increase adoptability of dogs

**Rationale:** Studies show dogs that receive behavior training are 1.4 times more likely to be adopted than dogs that do not.\(^{33,lvii}\) DAS does not currently have a dog behavior program.

There is an opportunity for DAS to institute behavior training courses for a subset of its dog population in order to increase adoption volume. Based on interviews with other shelters and senior DAS management, we recommend that DAS consider both treatable-rehabilitatable (TR) and treatable-manageable (TM) dogs as candidates for these programs. Based on 2015 numbers, this would amount to approximately 15,400 dogs eligible for behavior training.

Providing behavior training to 15,400 dogs would result in 700-1,300 additional dogs adopted each year. According to Chameleon records, behavior was cited as the reason for euthanasia in 50% of euthanized TR and TM dogs.\(^{34}\) We also assume that training courses would make these dogs 1.4 times more likely to be adopted. Dogs will start training immediately in the shelter. Once they are adopted out, they will be given vouchers to continue their training.

Providing behavior training to this group of ~15,400 TR and TM dogs would incur a cost of ~$392,000 - $770,000 each year. The cost for spay and neuter surgeries and vetting for 700-1300 additional dogs would be ~$96 per dog.\(^{35, lviii}\) Behavior training would comprise ~75% of the total cost to implement.

3.7 DAS should hire one veterinarian and two vet techs to perform spay and neuter surgeries and vaccinations to support the increase in dog adoptions

**Rationale:** DAS is legally required to spay and neuter and vaccinate all of its dogs adopted by the public, and recommendation 3 will lead to a substantial increase in adoptions (up to ~7,100). To keep up with demand, DAS will need to hire an additional veterinarian and two

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\(^{33}\) As stated in "The Effects of Training and Environmental Alterations on Adoption Success of Shelter Dogs," there is a 77% adoption rate for trained dogs vs. 56% adoption rate for untrained dogs.

\(^{35}\) The $96 includes $28 for veterinary labor and $68 for consumables, such as supplies.
veterinary technicians to perform these surgeries each year.

Assuming this team can perform at maximum ~8,000 surgeries each year, the total cost would be $200,000, with the veterinarian receiving a salary of $100,000 and each veterinary technician receiving a salary of $50,000.

These labor costs ($28 per surgery), along with consumable costs ($68 per surgery), have been allocated to the individual initiatives to cover all incremental spay and neuter surgeries and vetting required in recommendation 3 ($96 per surgery).

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36 Recommendation 3 will result in an additional ~7,100 dog adoptions. We allocated a $200,000 salary to cover these 7,100 surgeries, which amounts to approximately $28 per surgery.
Recommendation 4 – Provide 46,000 low-cost spay and neuter surgeries in southern Dallas each year for next three years

Population control is critical to achieve a long-term, sustainable solution for the city of Dallas, where today approximately 36,000 puppies are born annually. In cities that have achieved high spay and neuter levels, shelter intake tends to fall over time, reducing shelter utilization and increasing the LRR. Population control also serves to protect public safety, given that intact male dogs account for 70-75% of bites.\textsuperscript{lxii}

4.1 The Dallas community should provide 46,000 low-cost spay and neuter surgeries in southern Dallas for each of the next three years

| Rationale: | Today, only \(~15\%\) of dogs in southern Dallas are believed to be spayed or neutered.\textsuperscript{lxii} With such low spay and neuter levels, and dogs' ability to reproduce quickly, the southern Dallas dog population could, in theory, double to \(~300,000\) dogs over the next 10 years if no other intervention occurred. Some of the largest consumer barriers to spay and neuter surgeries are price\textsuperscript{lxiii} and access. Today, \(~40\%\) of southern Dallas residents live in poverty,\textsuperscript{37} and the average \(~\$150\) cost of spaying or neutering a pet would likely strain a family's finances. Similarly, \(~74\%\) of pets in southern Dallas have never gone to a veterinarian for a check-up or treatment.\textsuperscript{lxiv} To overcome low spay and neuter levels, a series of non-profits in Dallas have delivered \(~6,000\) low-cost spay and neuter surgeries annually within southern Dallas over the past few years. These organizations include DAS, the Spay Neuter Network, the Dallas Companion Animal Project, Pets for Life, the SPCA, and were funded, in part, by the Big Fix for Big D. Separately, DAS has delivered an incremental \(~3,500\) free spay and neuter surgeries annually through the adopted dogs it has placed into southern Dallas.\textsuperscript{lxv} Because "access" or "convenience" is a typical barrier to having one's pet spayed or neutered, these organizations have used both brick-and-mortar locations (where transport is provided) as well as mobile units. Based on BCG projections, the historical volume of low-cost spay and neuter surgeries deployed has slowed the population growth of intact dogs in Dallas, but the dog population is still rising each year. To control the dog population in southern Dallas, it will require a surge effort of 46,000 low-cost spay and neuter surgeries each year for the next three years (equivalent to 35 surgeries per thousand residents). |

\textsuperscript{37} We used asset poverty as a proxy for the poverty line, which is when families cannot support their households at poverty level for three months if they lose their income.
Other cities that have been successful in high-volume spay and neuter programs include San Antonio, Texas, with 58,000 surgeries yearly (41 surgeries per thousand residents) and Jacksonville, Florida, with 39,000 surgeries yearly (46 surgeries per thousand residents).

To succeed with a high-volume spay and neuter campaign, DAS must collaborate with community partners, provide door-to-door marketing in targeted neighborhoods, ensure compliance with ordinances, and provide access to staff that specializes in high-volume spay and neuter surgery.

The overall cost of executing 46,000 spay and neuter surgeries annually is ~$7.5 million, or ~$160-$168 per surgery depending on if it is through brick and mortar or a mobile van.

This amount could be reduced by an estimated ~$900,000 to a total of $6.6 million by requiring means testing, where people who can afford spay and neuter surgery pay a partial fee for the procedure. Medicaid or other government assistance cards can be used as the primary method for Dallas residents to qualify for funding. The risk in requiring means testing is a lower participation rate.

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38 This assumes a cost of $30 per surgery, if the resident is above poverty level.
The cost of the program could also be reduced by an additional estimated $2 million to a total of ~$4.6 million by using salaried veterinarians vs. a pay-per-surgery fee structure on top of means testing, if available in the area. A pay-per-surgery approach can be expedient, given the limited supply of high-quality and high-speed surgeons available to provide such programs.

4.2 Animal welfare organizations in Dallas should coordinate spay and neuter efforts

**Rationale:** Today, no single organization in Dallas is capable of delivering 46,000 spay and neuter surgeries annually. To successfully deliver these surgeries, organizations across the community will need to divide the workload by agreeing to individual targets, coordinating delivery across the city as part of an integrated plan, and sharing data to track progress and prioritize efforts.

To begin this process, interested organizations should hold a summit to determine the gaps between what exists today and what is needed to deliver 46,000 surgeries. Armed with this information, these organizations should form a coalition with a common brand, mission, and a well-defined operating agreement or memorandum of understanding, including a detailed account of individual commitments to deliver a specific number of spay and neuter surgeries.

Next, this coalition should agree on an initial set of zip codes to target, defining clear goals, end points and a schedule or timelines to achieve these. Having this set of goals, end points, and a well-defined timeline will give funders the confidence they need to provide any missing resources.

As a starting point, BCG recommends delivering the following number of surgeries in these southern Dallas zip codes.

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39 In place of zip codes, the coalition could also focus on census tracts or any other means of subdividing Dallas into discrete plots of land.
To deliver the required number of surgeries, coalition members will need to engage in extensive door-to-door canvassing to promote upcoming spay and neuter clinics and identify potential community advocates or leaders.

One effective approach is to develop and scale a program similar to San Antonio’s Comprehensive Neighborhood Sweeps Initiative. As part of this program, a new targeted neighborhood would be selected each month in a designated zip code. A team of trained volunteers would attempt to speak with each neighborhood resident on two occasions about the importance and availability of low-cost spay and neuter surgeries. Volunteers could also be supported by the DAS CARE team who would supplement education with enforcement.

While the DAS Care team has already begun this work, door-to-door canvassing is very time-intensive and will therefore require a much larger force of volunteers; at its present pace, it...
will take ~17 years for the four-person CARE team to effectively reach each household twice in southern Dallas.\(^{40}\)

During canvassing, detailed data should be collected on a household basis to prioritize follow-up visits. This might include the address, dog ownership, spay or neuter status, historical litters, loose dog sightings, etc. Today, multiple organizations that perform door-to-door outreach already collect this information; however, collection should be standardized and shared across organizations to improve the efficiency of follow-up outreach.

Target neighborhoods within the designated zip code should be canvassed until the coalition achieves its objectives (e.g., by delivering surgeries or increasing spay and neuter levels). Once these objectives have been achieved, the coalition should select a new zip code and begin the effort again.

During this process, zip codes should be constantly reprioritized based on any and all available data, and community advocates should be engaged to ensure that any continuing needs for spay and neuter surgeries in these neighborhoods are met.

4.3 The city of Dallas should establish elementary school education programs related to pet ownership

**Rationale:** Changing fundamental cultural habits can take an entire generation or more, as has been seen with recycling and seatbelt use.

Today, Dallas has no education programs to teach children about responsible pet ownership, which makes it unlikely that tomorrow’s pet owners will behave differently in the future.

Conversely, other US cities have been successful in implementing school-based animal education programs targeted at young children. Santa Fe, New Mexico, for example, is home to one of the nation’s leading animal education programs. Animal Protection of New Mexico (APNM) and Santa Fe Public Schools jointly developed a program called "The Animal Connection" in order to deliver animal education in schools. Started in 2011, this program delivers expert instruction in animal care and instills positive behaviors around pet ownership to elementary school children.\(^{lxvi}\) The instruction is delivered by dedicated teachers, with assistance from APNM ASOs and shelter animals, and it engages students through both interactive exercises and fact-based discussions.

Dallas has the opportunity to develop its own animal education program focused on children enrolled in Pre-K through 8th grade. Rather than developing its own curriculum, the Dallas Independent School District (DISD) could leverage existing curriculum from New Mexico. In addition to providing education to students and preparing the next generation of responsible

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\(^{40}\) There are 173,598 households in southern Dallas and Pets for Life suggests two touches per household are required before a resident agrees to spay or neuter an intact animal. This assumes the CARE team visits approximately 105 houses per month (which was the average for CARE teams between April – July 2016).
pet owners, this curriculum could also be used as an opportunity to deliver material to students on low-cost spay and neuter programs that they or their parents could immediately benefit from.

DISD has 152 primary schools\textsuperscript{41} with \textasciitilde 118,000 students.\textsuperscript{lxxvii} By hiring six full-time teachers to deliver this program, DISD could reach \textasciitilde 6,000 students each year ensuring each student is able to receive each lesson at least once.

Assuming a fully-loaded salary of $66,000 for each of the six teachers, the total cost for this program would be $396,000\textsuperscript{42} per year.\textsuperscript{43} This recommendation is a long-term option that will require lead time in order to fund, implement, and see results.

4.4 DAS should enforce spay and neuter ordinances in coordination with outreach

**Rationale:** ASOs can promote spay and neuter outreach to residents that are not in compliance, while enforcing spay and neuter ordinances. Today, ASOs do issue citations regarding spay and neutering, and at the same time, disseminate flyers regarding available low-cost spay and neuter options.

From June 2014 – May 2016, 406 spay and neuter citations were issued and 199 received no response (49%). That equates to one spay and neuter citation being acknowledged every three days. ASOs should more actively enforce spay and neuter ordinances, but also balance their messages by offering support (as is current practice). If a dog owner is not in compliance, ASOs can educate the owner on the mandatory requirement for and the benefits of sterilization, provide the owner with low-cost spay and neuter options, and offer the opportunity for the owner to become compliant within a certain timeframe before issuing a citation.

This approach has been successful in San Antonio’s Comprehensive Neighborhood Sweeps Initiative. The first week of outreach focuses on education. ASOs give warnings to ordinance violators and provide information on how to become compliant. In the second week, free vaccination clinics are provided. In the third week, citations are issued to violators.

\textsuperscript{41} Pre K – 8th grade.
\textsuperscript{42} This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
\textsuperscript{43} As a point of clarification, this cost would be incremental to the DISD budget and would not be paid for out of the DAS budget.
Recommendation 5 – Create a collaborative community of partners

We believe that Dallas’ loose dog and animal welfare challenges cannot be overcome without collaboration across the community.

Today, many organizations operate independently. There is no common plan or a common data set against which Dallas can measure community results. Our interviews highlighted a dissonance and negative dialogue amongst some animal welfare organizations that prohibit groups from collaborating.

We believe that if the city of Dallas is going to address its animal-related challenges, it must unite animal organizations and advocates in a collaborative community that includes increased data sharing, coordination of resources, and a greater level of trust and courtesy across organizations.

Data is critical to measuring impact and progress, evaluating the effectiveness of a given approach, and re-prioritizing future efforts. It can also provide transparency across organizations that create a greater sense of trust, understanding, and proof of value. Coordination of resources will be critical as no single organization in Dallas will be adequate to meet the breadth or scale of these responsibilities independently. And finally, trust will be critical to stay committed to the mission and strengthen organizational relationships.

5.1 DAS should work with CIS and other city departments to provide open access to operating data and automated reporting

**Rationale:** Data transparency is beneficial to citizens, private organizations, and governments. Open data creates trust and collaboration between governments and citizens, promotes greater innovation by providing the data sets necessary for innovation, provides access to critical information, and offers transparency and visibility to the public. Open data policies can provide these same benefits to DAS and its animal welfare community.

Today, DAS does not publish its Chameleon database online, beyond a set of monthly reports. As a result, citizens must file Open Record Requests (ORRs) in order to access more detailed DAS data. DAS responds to approximately 160 ORRs per year, some of which are specific to Chameleon. This requires time and effort from DAS in order to organize and respond to the ORRs, and these requests also prove frustrating to citizens who want ready access to DAS data. In addition to ORRs, residents often reach out to DAS to confirm the status of a specific animal, which requires manual effort on behalf of DAS employees.

By partnering with Communication Information Services (CIS) and other relevant city departments, DAS can open its data to the public by leveraging the existing Dallas Open Data Portal. Precedence for this model exists in other Texas cities. Austin, for example, makes its data available to the public, offering full datasets, standardized tables, and interactive maps.

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44 This is the projected volume for ORRs in 2016.
By providing open access to its data, DAS would enable residents to directly access the information they need from the online database. We believe open DAS data is an important tool to engage and promote greater transparency across the entire community.

The DAS database analyst can lead open data implementation. This position is open and funded, though it has not yet been filled. The database analyst would be responsible for making the Chameleon data available online, managing the connection between Chameleon and CIS, and assisting individuals in working with DAS data.

Because DAS will need a data analyst with experience in SQL and database management, the current budgeted Coordinator II: Data Analyst position at ~$42,000 is not likely to attract the right level of talent. This position should be elevated to a Manager II: Business position at ~$67,00045 in order to secure the right skill set (requiring a ~$25,000 increase in salary which translates to a $30,000 increase in budget, considering benefits).

5.2 The animal welfare community of Dallas should share the workload of the strategic recommendations

Rationale: By coordinating efforts, the community can work together to tackle the strategic recommendations and reach its goals more quickly (especially for spay and neuter initiatives).

There are over 150 animal-related organizations in and around Dallas. These organizations range from low-cost spay and neuter clinics to foster organizations that temporarily house animals until they can be adopted, among many other functions. While each of these organizations does valuable work, there is significant overlap and a lack of coordination. Resources are not strategically orchestrated, where better coordination could increase efficacy.

In the words of one animal control department manager in a benchmark city, "The shelter didn’t create the problem. It was created to fix the problem, but it can't do it alone." The director of a large animal nonprofit agreed: "Collective impact is the key to success.” Indeed, collective efforts are often rewarded with temporary funds and grant money. For instance, funding for “Big Fix for Big D” was contingent on the commitment and participation of community partners. Best Friends Animal Society has also given grants to rescue organizations that collaborate with partners.46

To leverage the resources and expertise of existing organizations, Dallas animal welfare organizations should identify common goals and clearly define responsibilities, pledging to a piece of a larger plan. By recognizing specialized strengths and experience, Dallas can increase

45 This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
fundraising success for the overall animal welfare community.

To increase collaboration, we recommend hosting a preliminary workshop that allows organizations to make specific commitments that would be tracked by an overall project manager budgeted for in recommendation 6.3.

5.3 The animal welfare community of Dallas should engage in an inclusive, fact-based dialogue

**Rationale:** As BCG completed nearly 100 interviews of relevant stakeholders in Dallas, a large portion of interviewees highlighted the existence of opposing factions in Dallas’ animal welfare community and a history of public attacks across these groups and towards specific individuals or organizations.

Because we believe that our plan will not be successful without community support and collaboration, we recommend that the community attempt to engage in fact-based and solutions-oriented dialogue. Historically, examples of unproductive discourse can be attributed to many members of the community, including individuals, DAS employees/temps, members of non-profit organizations, and members of the Animal Shelter Commission.

While a cessation of negative opinion and discourse cannot be guaranteed across the public at large, we request the public at large to be solutions-minded and recommend DAS leverage standardized responses and hold its own employees to a higher standard for online conduct.

To demonstrate our perspective, we have identified common situations that have historically produced dialogue that we do not believe to be solution-oriented and serves to erode the relationship between DAS and the community.

<table>
<thead>
<tr>
<th>Representative context</th>
<th>Alternative (recommended) response</th>
</tr>
</thead>
</table>
| When DAS was accused of being "evil" for euthanizing a dog | "At DAS our goal is to not euthanize any animal that could be placed. We haven’t achieved that goal yet, but we are making progress every day through expanded adoptions and transfers. Just like you, we don’t like seeing any animals euthanized. To find out how you can help go to [link]"
| Regarding DAS euthanizing animals | "When our facilities at DAS are full and we do not have transfers available to take the animals, we have the very difficult responsibility of deciding which animals are euthanized. We do this through a standard and defined process which you can view here [link]. In the future we hope that no animals..."
Regarding a private individual reporting to have saved many animals

\[ \text{"At DAS we know we can't save every animal. Your actions are helping the animals in our city. Thank you."} \]

Regarding anti-DAS conversations

\[ \text{"Your opinion is important to DAS. We'd like to understand what policies and or procedures we could improve to better serve the community in the future"} \]

Regarding loose dogs in Dallas

\[ \text{"DAS has an obligation to the residents of Dallas. We take your safety seriously and are doing [A, B, C] to address these concerns."} \]

The community, which includes animal welfare advocates, the public, and DAS, can build trust by fostering a fact-based, solutions-oriented dialogue.

DAS should proactively address mistakes or concerns from residents head-on, explain its policies directly (and often), and communicate its achievements (such as its increased adoption rate) as well as its strategic goals. Animal welfare organizations and advocates should reciprocate.

In addition, DAS should refine its social media policy to be similar to that of the Dallas Police Department to ensure that all employees are projecting a similar message, even when speaking under their personal accounts.

The DPD Section 214.04 reads, "Employees are free to express themselves as private citizens on social media sites to the degree that their speech and/or language does not impair working relationships of the Department, impede the performance of their duties, impair discipline and harmony among coworkers, or negatively affect the public perception of the Department."[xxx]

There should be no additional cost to creating an open, fact-based dialogue, as the effort can be led by the social media coordinator or, if DAS becomes an independent municipal department (recommendation 6.1), by an additional communications/public information officer.
Recommendation 6 – Make animal services a priority and strengthen accountability within the city government

The structure of an organization first, defines the environment in which its people and processes are organized and second, defines the individuals that participate in the decision-making process.

With respect to Dallas Animal Services, its organizational structure as a subsidiary of the Department of Code Compliance impacts its visibility (e.g., reduced access to Council), muddles accountability (e.g., more layers of management), and lessens its perceived status (e.g., of lower priority than Code).

Organizational design also encompasses advisory boards, a similar function to today's Animal Shelter Commission. In a typical private or nonprofit landscape, such organizations play an important role in providing both advice and oversight or accountability to the larger organization.

To increase the efficacy of Dallas Animal Services, we recommend several changes to its current organizational structure.

6.1 DAS should move out from under the Department of Code Compliance and become an independent municipal department

**Rationale:** Today, DAS is a municipal organization underneath the Department of Code Compliance which itself reports into the Assistant City Manager responsible for Dallas's "quality of life" portfolio of departments.  

Through the course of BCG's stakeholder interviews, individuals pointed out that DAS's organizational placement within the Department of Code Compliance impacts three areas:

- Resources and Talent
- Communication and Coordination
- Execution and Accountability

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46 This includes the Department of Code Compliance, Dallas Public Libraries, the Office of Cultural Affairs, and Sanitation.
Exhibit 30| Pros & cons of existing DAS organization structure

<table>
<thead>
<tr>
<th>Resources and Talent</th>
<th>Communication and Coordination</th>
<th>Execution and Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Hiring leadership and staff difficult due to lower profile &amp; complexity</td>
<td>X Lacks a &quot;seat at the table&quot; with Dallas's senior city leadership</td>
<td>X Lower-level leadership role (Sr. Program Manager) lacks authority to operate effectively</td>
</tr>
<tr>
<td>✓ Can receive layover funds from parent department</td>
<td>✓ Perceived to not prioritize animal welfare given placement underneath another organization</td>
<td>✓ Multiple layers of mgmt cloud accountability</td>
</tr>
</tbody>
</table>

Existing structure:
Subdivision within a department

Note: Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves. See compendium for more detailed assumptions. Source: BCG analysis

In response to these issues, BCG evaluated four organizational models:

- **Subdivision within a department (status quo):** Dallas Animal Services could make no changes to its existing organizational model and continue to operate within the city's Department of Code Compliance
- **Independent department:** Dallas Animal Services could become an independent department and report directly to an Assistant City Manager
- **Partially privatized:** Dallas Animal Services could privatize its shelter operations while leaving field operations under the Department of Code Compliance or an Assistant City Manager
- **Completely privatized:** Dallas Animal Services could privatize all or part of its operations

We assessed these models against the same three criteria: Resources and Talent, Communication & Coordination, and Execution & Accountability, and identified a mix of
advantages and disadvantages for each model.

Exhibit 31 | Pros & cons of various governance structures

<table>
<thead>
<tr>
<th>Subdivision within a department</th>
<th>Resources and Talent</th>
<th>Communication and Coordination</th>
<th>Execution and Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent department</td>
<td>Hiring easier due to higher profile</td>
<td>Greater control over message, but removed from government</td>
<td>Greater operating potential</td>
</tr>
<tr>
<td>Partially privatized (Shelter only)</td>
<td>Hiring easier due to partial separation from city, Fixed funding from city, but can receive donations</td>
<td>Partial control over message, but removed from government, Greater freedom of action, Lack of coordination between shelter and animal control</td>
<td>Moderate effort in standing-up new structure</td>
</tr>
<tr>
<td>Completely privatized (Field + Shelter)</td>
<td>Hiring easiest due to complete separation from city, Fixed funding from city, but can receive donations</td>
<td>Free control of message, but removed from government, Greatest freedom of action</td>
<td>Greatest operating potential, Org lacks accountability to city, potential conflicts exists</td>
</tr>
</tbody>
</table>

Note: Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves. See compendium for more detailed assumptions. Source: BCG analysis.

While a recommendation for "complete privatization" would have provided an organization with the greatest freedom to hire, communicate, and operate, there were three key risks that prevented us from recommending this organizational and governance structure:

- First, under a Completely Privatized structure the Dallas government could lose control of its Animal Services. For example, the organization could choose to stop all field intake with only the threat of losing funding. The Dallas government would not have a viable secondary option in the interim.
- Secondly, there were no clear nonprofit partners that we believe would actively seek to assume both field and shelter operations. While these may exist, they were not brought to our attention.
- Third, the effort to transition to a full privatized model represents a high level of effort which in our opinion could be better applied to addressing public safety and animal welfare.
Partial privatization would create a model in which the city focuses almost exclusively on public safety and the partnering non-profit would assume all responsibility for intake of collected animals and animal welfare. Such a model exists in two comparable cities/counties: Nevada Humane Society for Washoe County (Reno) and The Animal Foundation of Clark County (Las Vegas). This model:

- Allows the city to focus all of its resources entirely on public safety (field operations)
- Provides the non-profit organization greater access to fundraising, hiring, and ease of operations.

Ultimately we felt that the effort in implementing partial privatization was not necessary given alternatives available:

- A similar impact on live release rate could be achieved through establishing a contractual relationship with a high-volume transfer, as opposed to ceding the existing shelter operations to that organization.
- The effort to transition to a full privatized model represents a moderate level of effort, which, in our opinion, could be better applied to addressing public safety and animal welfare.

When speaking with leaders in the animal welfare community across the country, many believed animal services needs to be an independent department. One interviewee noted, "Animal services needs to be a priority…[you] cannot put it inside another department and say it’s a priority"

There are many benefits to becoming an independent department. Hiring is easier due to the organization’s higher profile within the city. Communication and coordination with stakeholders is more effective thanks to greater control over messaging. And delivery of services is improved due to a single point of accountability, which sharpens management priorities and limits conflicts of interest.

Therefore, it is our recommendation that DAS become an independent department that delivers both field and shelter-related services.

As an independent department, DAS will likely need to add additional personnel in finance, human resources, communications, and IT. The cost for these new positions was estimated at $310,000 based on current transfer costs incurred by DAS, general public sector benchmarks, and comparison to other animal services departments.

Whether the newly independent DAS department should continue to exist within the "quality of life" portfolio or become part of the "public safety" portfolio, which includes DPD, was not evaluated.
6.2 The city of Dallas should increase funding for Dallas Animal Services to support recommendations

**Rationale:** Historically, Dallas Animal Services has been underfunded relative to its peers on a per capita basis. More recently, and following multiple budget increases, Dallas Animal Services' budget still lags its peers for fiscal year 2015-2016, but only by ~$0.78 per person or nearly ~$1 million in aggregate.

In many comparable cities in the US, animal services departments effectively augment their municipal budgets by forming explicit and contractual partnerships with a major nonprofit organization. Animal Services departments that achieve this significantly increase their potential funding, where Dallas lags peers with such arrangements by nearly $8 million annually on a per person adjusted basis.

In total, BCG recommendations will require long-term incremental funding to DAS of ~$2.7 million, a three-year surge of funding for spay and neuter totaling ~$7.5 million per year, and additional city spending of ~$0.4 million and ~$0.2 million for animal-related early childhood education and a two-person project management team, respectively. (Refer to Exhibit 2 for details on necessary funding.) While the project management team is an urgent, short-term recommendation, the childhood education recommendation is a long term option that will require lead time in order to fund, implement, and see results.

We recommend that the city of Dallas approve DAS budget increases in the incoming fiscal year by ~$1.2 million (in excess of the current proposed $1.5 million budget increase) to a total of $12.9 million.

By doing so, the city will both enable DAS to execute this sweeping set of recommendations and also demonstrate its commitment to the community of private funders that will also be necessary to succeed in this mission.

At the same time, we encourage the city government to insist on clear metrics for success (recommendation 1.2) that will demonstrate the value of an investment.

6.3 The city of Dallas or DAS should hire a project manager and data analyst to oversee the implementation of recommendations

**Rationale:** Due to the large scope of these recommendations, a project manager should oversee projects, track success, and identify potential opportunities to reprioritize as necessary. Project managers effectively manage time, budget, and overall scope. They should also build a project plan, guide implementation of recommendations, and track progress.

In addition to the project manager, the data analyst will be responsible for tracking progress...
and generating automatic or weekly reports to ensure initiatives are successfully on track. The project manager will escalate potential issues, ensure alignment, and eliminate any barriers to implementation. The yearly cost for a project manager is ~$100,000, and the yearly cost for a data analyst is $58,000.47

6.4 The Animal Advisory Commission should establish new subcommittees to support DAS

**Rationale:** Most for-profit and non-profit organizations have boards that actively support and contribute to the success of the overall organization. In the nonprofit world, these boards are made up of civic-minded, highly engaged individuals who work on behalf of their organization to identify and solve complex issues. To engage in effective problem solving, most boards have subcommittees that focus on specific topic areas.48

When speaking with animal officials in benchmark interviews,48 the split between municipalities that did and did not have an animal advisory board was roughly 50/50. In municipalities that did have an animal advisory board, interviewees often struggled to work with their boards in a way that created value. As one animal services official said, "The productivity of the board varies dramatically with its members. I can't always count on the board to help."

Currently, Dallas City Code, Section 2-157 mandates that the city of Dallas must have an Animal Advisory Commission to support DAS. This commission has 15 members, each appointed by members of the city council. By law, the commission must include one licensed veterinarian, one city or county official, one member who operates an animal shelter, and one member from an animal welfare organization. Unlike most nonprofit boards, the current animal advisory commission has no specific subcommittees or mandate around which to organize. The city council should appoint members that have the skills and experience to create positive change for the Dallas community.

To better serve the community, as well as DAS, we recommend that the Dallas Animal Advisory Commission be restructured to create relevant subcommittees, reform membership rules, and strengthen its contributions to DAS and the community.

**Animal Advisory Commission Subcommittees and Membership**

We recommend the formation of five subcommittees responsible for public safety, shelter

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47 This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.

48 Benchmark cities include Atlanta, Austin, Houston, Jacksonville, Las Vegas, Los Angeles, Miami, Reno, San Antonio, and San Diego.
management, animal cruelty, public relations, and external relations. Each subcommittee would consist of three members. This member limit represents standard practice and is meant to ensure productivity and foster innovative ideas and suggestions based on each member’s specific background. To support DAS, members will be responsible for assisting or advising in the development of policies and procedures relating to their subcommittee’s focus area.

The Public Safety subcommittee would provide advice on issues relating to the population of loose dogs, the number of dog bites, and the efficacy of field intake programs.

The Shelter Management subcommittee would provide advice on issues affecting data collection and reporting, euthanization decision processes, adoptions, transfers, and the foster program.

The Animal Cruelty subcommittee would advise DAS on the animal cruelty investigation process, including education strategies, and enforcement procedures.

The Public Relations committee would offer guidance on the effectiveness of DAS' communication with the public, including standard policies and procedures related to social media, marketing materials, strategies for major events and day-to-day operations, and crisis and emergency management.

The External Relations subcommittee would advise DAS on its relationships with philanthropic organizations, major adoption partners, and other allied organizations (such as the proposed spay and neuter coalition).

To ensure the commission has the required skills to appropriately staff each subcommittee, we further recommend that the commission include at least one member each with a background in law enforcement or public safety, technology or data science, law or legislation, communications and business development, or corporate strategy.
Individually effective boards carefully consider conflict of interest and support diverse ideas and opinions.\textsuperscript{19} Minimizing conflict of interest helps ensure ethical decision-making among board members. Diversity can aid in problem solving because people with different backgrounds will offer a variety of perspectives. While the city of Dallas has a conflict of interest policy, we suggest the commission adopt policies that promote diversity of opinion.

Specifically, to promote diversity of opinion within the commission, the Animal Advisory Commission should implement a membership rule ensuring that no more than three commission members are affiliated with one another through an employer, nonprofit board, social club, or other organization.

To strengthen the independence of the commission, we also recommend that current DAS employees be prohibited from sitting on the commission as members—a policy which was in place prior to 2014.
6.5 DAS should be exempt from the civil service hiring process

**Rationale:** Today, DAS hires employees through the civil service process. Anecdotally, it can take up to nine months to fill a position, and good candidates often find employment elsewhere. This difficulty contributes to the challenges DAS has filling all open positions (14% of its positions unfilled).

While the civil service provides worker protections and prevents political appointments, the hiring process at DAS needs to be improved if the recommendations on this report are to be put in place.

If DAS were to receive a civil service exemption for hiring (e.g., job postings, resume screening, and interviewing) it would streamline the hiring process, allow the organization to attract top talent, decrease the time to fill open positions, and allow DAS to hire candidates with specialized training. This exemption would not erode protections for new or existing employees as it would impact only the process of filling an open position.

If DAS becomes an independent department (recommendation 6.1), this could be implemented without incremental cost as additional human resources personnel are already budgeted for. If DAS is not an independent department, an additional employee may be needed to manage the hiring process.
Recommendation 7 – Ensure efficiency by measuring outcomes and increasing volunteers

Over time, any organization should strive to do more with the same level of resources – or the same amount of output with fewer resources. Improving in this manner typically results from delegation and performance tracking, where work is divided up across an organization and individuals or teams are measured and managed according to specific performance metrics. Alternatively, organizations can become more efficient by tapping into cheaper pools of resources, e.g., volunteers.

In this set of initiatives, we recommend that DAS delegate initiatives across its organizational structure, where the balance of non-DAS led initiatives would be assumed by other organizations (as specified in recommendation 5.2).

Additionally, we recommend DAS expand its existing volunteer program, both in the number of volunteer hours and volunteer tasks, to increase the efficiency of shelter operations and free up resources for other tasks.

7.1 DAS should align its organizational structure and employee performance with its mission

Rationale: In our opinion, it is not feasible for a single individual within DAS to effectively oversee and manage implementation of all of BCG’s recommended actions. Accordingly, each recommendation should be assigned a specific owner to oversee its implementation and long-term success. Certain DAS roles are a natural fit for some of the recommendations, while others initiatives require coordinated efforts across DAS, the city of Dallas, and animal welfare organizations.
Each owner should be assigned specific metrics to track performance of that initiative in order to measure process and promote continuous improvement. It’s a cardinal management principle: when performance is measured, performance improves. When performance is measured and reported, the rate of improvement accelerates.

By tracking additional metrics, DAS can understand what works and what doesn’t, ensure the right behaviors and efforts are rewarded, and share best practices. There are several important metrics that DAS can use to track progress (some of which are already being tracked). To track these metrics, DAS will need to secure a dedicated analyst who is well-versed in SQL and understands the full capabilities of Chameleon. This initiative will require an additional data analyst at $58,000⁴⁹ to track and report on employee performance. This analyst will also be responsible for the mission scorecard detailed in recommendation 1.2.

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⁴⁹ This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
7.2 DAS should increase the scale of its volunteer program with a greater variety of roles

**Rationale:** Volunteers can help DAS improve its operating efficiency and build even stronger bonds within the community.

In October 2015, DAS hired a volunteer coordinator—with grant funding—to develop this capability. DAS has outlined numerous tasks volunteers are allowed to participate in, including, but not limited to:

- Helping at the dog or cat adoption desk (freeing up shelter staff to perform duties)
- Helping with the lost and found desk
- Transporting dogs to transfer/rescue partners
- Helping administer medical treatment (for veterinary volunteers and students only)
Photographing dogs for adoption website

Volunteers are asked to commit to at least four hours per month. From October 2015 through June 2016, DAS has accrued approximately 1,800 volunteer hours, excluding EAC volunteers. On an annualized basis, this represents the equivalent of ~1.2 full-time employees. In January 2016, which drew the greatest number of volunteer hours, DAS volunteers donated 360 hours, representing the equivalent of ~2.3 employees for the month.

Relative to other animal shelters, DAS lags in the number of full-time employee equivalents from volunteer hours.

**Exhibit 35| DAS volunteers provide the equivalent of 1.2 full-time employees**

Based on the higher number of volunteer hours other shelters have been able to realize, coupled with the low cost of managing volunteers (relative to temp labor), we recommend the volunteer coordinator devote 100% capacity to increasing volunteer hours. This coordinator should leverage all possible avenues to recruit volunteers, including corporate volunteer programs, Boy/Girl Scouts, Facebook page supporters, local colleges, etc.
DAS could increase the number of volunteers by publicizing the numerous volunteer roles it has already created as well as adding some new ones such as:

- Fostering animals who remain in stray hold but are good candidates for adoption
- Creating reports and analyzing *Chameleon* data

While the volunteer program currently does assist the shelter in other ways, the program is not as robust as it is in other peer cities. By building on current momentum, DAS can create a volunteer program that materially impacts its operation and builds a strong base of supporters among the community. Following the expiration of the grant, the cost of this initiative will be $51,000\(^{50}\) per year for a full-time volunteer coordinator.

\(^{50}\) This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.
Next steps

Successful implementation of these recommendations will require coordinated efforts across many stakeholders in the community. As Dallas initiates the plan, it should keep in mind several key principles for execution.

Get started through ownership: All stakeholders in the city of Dallas, from city government to individual citizens, play an important role in addressing the loose dog population. In our estimation, the greatest risk associated with our recommendations is the potential for stagnation. To create momentum and ensure success, the animal welfare community will need to focus its resources on recommendations on the short term until the long term solutions, such as spay and neuter and education, take hold. Each stakeholder must play a distinct and coordinated role.

Exhibit 36| Recommendations require community action

| City of Dallas | • Approve funding increases to support additional ASOs, S/N surge, other initiatives  
| | • Make DAS a priority and accountable by creating an independent department  
| | • Improve efficacy of enforcement – warrants/arrests, civil citations  
| Philanthropies | • Provide funding based on rigorously quantified and tracked plans (esp. S/N)  
| | • Encourage collaboration across executing organizations  
| DAS | • Prioritize and execute initiatives for near-term impact  
| | • Coordinate and collaborate with other organizations on key recommendations  
| Animal welfare organizations | • Devote greater share of resources (e.g., dog intake) in coming years to Dallas until S/N effective  
| | • Coordinate efforts for S/N, community outreach, and other recommendations to optimize available resources  
| Commission | • Increase engagement and support, by becoming an advisory board with subcommittees and expertise that helps DAS solve problems  
| Residents of Dallas | • Volunteer with animal organizations, especially specialized skills (photography)  
| | • Report violations & encourage responsible ownership among neighbors  
| | • Act as neighborhood advocates for S/N, encouraging others to be compliance

To take the first step in this journey, we recommend that the community engage in a summit to align on:

- Specific owners for each initiative
● Individuals or organizations that pledge to participate in a given initiative
● Metrics that will be used to track and measure success for each initiative

**Prioritize:** In our estimation, some initiatives are easier to accomplish than others. We would encourage a phased approach to the implementation of this plan, starting first with "Immediate Actions" and "Quick Wins" and moving on to "Medium-term initiatives," while building a plan to address "Long-term Opportunities" and "Strategic Priorities."

**Exhibit 37 | Recommendation prioritization**

<table>
<thead>
<tr>
<th>Strategic Priorities</th>
<th>Medium-term Initiatives</th>
<th>Quick Wins</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 High volume of S/Ns</td>
<td>2.1 Add more ASOs</td>
<td>2.2 ASOs collection – efficiencies</td>
</tr>
<tr>
<td>3.3 Establish high-volume transfer partner &amp; account mgmt</td>
<td>2.2 ASOs collection – patrol shifts</td>
<td>3.1 Digital marketing</td>
</tr>
<tr>
<td>3.7 Hire vet and 2 vet techs</td>
<td>2.5 Open access loose dog reports</td>
<td>3.2 Increase adoption footprint</td>
</tr>
<tr>
<td>6.1 DAS as independent department</td>
<td>3.4 Transport – Pilot &amp; expand</td>
<td>3.5 High-volume transfer</td>
</tr>
<tr>
<td>6.2 Open access to DAS data</td>
<td>4.2 S/N Collation - pledges</td>
<td>3.5 Surrender deflection – referrals</td>
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<tr>
<td>6.2 Increased DAS funding</td>
<td>4.4 Enforcement of S/N</td>
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<thead>
<tr>
<th>Long-term Opportunities</th>
<th>Immediate Actions</th>
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<tbody>
<tr>
<td>1.2 Scorecard - implement</td>
<td>1.1 Mission statement</td>
</tr>
<tr>
<td>2.3 Community Education</td>
<td>1.2 Scorecard - align on success</td>
</tr>
<tr>
<td>2.4 Enforcement &amp; effectiveness</td>
<td>5.1 Improved dialogue</td>
</tr>
<tr>
<td>3.6 Animal behavior training</td>
<td>5.3 Shared workload – pledges</td>
</tr>
<tr>
<td>4.3 Early childhood education</td>
<td>6.3 Appoint project manager</td>
</tr>
<tr>
<td>6.4 Animal Commission changes</td>
<td>7.1 Alignment employees to plan</td>
</tr>
<tr>
<td>6.5 Civil service</td>
<td>7.2 Inc. volunteers – Job desc.</td>
</tr>
</tbody>
</table>

**Start small:** Once ownership and participation is aligned, we encourage a "start small" mentality, identifying the minimal viable version of a recommendation vs. preparing for the full-scale rollout. For example:

● Instead of having a high-quality photograph of every dog on every day, could we begin by having five volunteers each photograph one day per week and define a process to minimize the effort to load pictures into Chameleon?
• Instead of having a robust foster network of 100 homes to support a full-scale transport program, could we establish two fosters to understand the transport process and network with adopters in northern cities?

• Instead of a team of five ASOs, could we assign two ASOs to an early morning shift and empower them to use the right tools to increase intake?

Once successfully implemented in its small-scale version, a recommendation is easier to implement to its fullest intent. In addition, the small-scale version can be started quickly, ensuring momentum for the entire plan.

Separately, we recommend that DAS identify the specific actions or recommendations that can be executed independently—without outside coordination or increased funding (e.g., improve dog photographs on Petfinder, build up the volunteer program, establish a program to deflect owner surrenders, and extend adoption hours).

**Track progress:** As certain initiatives are implemented, the potential value may be higher or lower than expected. By frequently tracking and reporting progress, resources can be properly allocated to the highest performing opportunities.

**Highlight obstacles:** As the community works through these initiatives, there will certainly be challenges. We encourage individuals and organizations to quickly highlight "obstacles" that prevent them from success within their own organizations or across organizations. This transparency can help others fill gaps in funding, capabilities, equipment, and access – allowing initiatives to overcome obstacles.

To succeed, the Dallas community must have a bias for action. We believe ownership, prioritization, starting small, tracking progress, and highlighting obstacles will contribute to the successful implementation of these recommendations.

## Conclusion

The city of Dallas is facing both a challenge and an opportunity. The challenge of improving quality of life for Dallas residents by addressing loose or uncontrolled dogs, and the opportunity to rescue animals and treat them with dignity and care. We believe that any solutions pursued by the city should strike a balance to address both needs: public safety and animal welfare.

In total, BCG’s seven recommendations strike this balance, enabling city leaders to remove greater numbers of *loose dogs* from the streets and control the dog population over the long term, while simultaneously improving outcomes for Dallas dogs.

While some of these recommendations can be implemented by Dallas Animal Services, the majority will require a coordinated effort by a broad group of stakeholders, including city leadership, the animal welfare community, and Dallas residents. These actions must be implemented in an orchestrated manner to achieve optimal results and avoid unintended consequences. Stakeholders will need to meet regularly, communicate openly, and measure progress over time.
With a clear strategy, and a sustained focus on balancing public safety and animal welfare, we are confident that the recommendations outlined in this report will improve quality of life for Dallas residents and dogs.
**Glossary of terms**

**Chameleon:** A software and technology system/database for animal control agencies, humane societies, SPCAs, and other animal sheltering organizations to manage data

**Civil citations:** A class of citations that does not require the defendant (or the issuing ASO) to be present in court to be found guilty of the citation. These citations cannot result in a sentence but can be followed up by a collection agency.

**Community interventions:** Refers to return to owners, adoptions, transfers, and spay and neuter surgeries

**Criminal citations:** A class of citations that requires the defendant and issuing ASO to be present in court to defend or contest the citation. These citations can result in sentences, warrants, and jail time.

**Docket:** A digital portal that supervisors can access in order to assign a court date for a civil citation

**Field capture:** When an animal service officer captures a loose animal in the field that is not confined

**Field collection:** When an ASO collects an animal in the field, including capture of loose dogs, collection of confined animals, and owner surrenders

**Field return to owner:** Refers to the process when an animal service officer brings an animal back to its owner

**Intake:** Used to describe the amount of animals entering the municipal shelter or 501(c)(3)

**Live release rate (LRR):** The percent of dogs entering a shelter that are not euthanized

**Loose dogs:** Any dog not under direct control or not prevented from roaming

**Open admission shelter:** Often referred to as “open intake” shelter, these shelters never turn away an animal regardless of health, age, breed, or temperament

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**Owner surrender:** When an individual makes the decision to give up a pet due to financial hardship, moving, behavior issues, etc.

**Petfinder:** A national online portal where adoptable dogs, including DAS dogs, can be browsed by the public. The DAS inventory of adoptable dogs is automatically updated daily via Chameleon.

**Pet Harbor:** A national online website where all dogs from city shelters can be browsed by those who lost dogs and/or those who want to adopt. This website is operated by Chameleon so DAS’s dog inventory is updated automatically every hour.

**Positive placement:** A term referring to all pets who are adopted, rescued, transferred to another shelter, or returned to owners after being lost.

**Pulling a dog:** When a transfer physically picks up a dog from a shelter, claiming ownership of said dog.

**Return to owner (RTO):** Animals that are successfully returned to their owners after being lost.

**Stray dogs:** Dogs without owners.

**Stray turn in:** Refers to a citizen bringing an animal that does not belong to them to the municipal shelter or 501(c)(3) organization.

**Tagging a dog:** When a transfer puts a hold on a dog to be picked-up within 24 hours.

**Targeted response team sweeps:** When one team of ASOs sweeps a census track or targeted area that has a lot of 311 requests mapped to it. These often occur on Wednesdays when all ASOs work.

**Transfer:** A dog that is taken from DAS and fostered or housed in a shelter until it can be adopted by a new owner.

**Transfer partner:** A rescue groups that takes dogs from DAS and other municipal shelters to house in another shelter or with a foster until the dogs are adopted by a new owner.

**Transfer coordinator:** The one FTE at DAS who has the responsibility for communicating with and pulling dogs for rescue partners.
BCG Strategic Recommendations to Improve Public Safety and Animal Welfare in Dallas | 2016

BCG team

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Project management</th>
<th>Consulting team</th>
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</thead>
<tbody>
<tr>
<td>Dylan Bolden</td>
<td>Stephen Edison</td>
<td>Roman Berhe</td>
</tr>
<tr>
<td>Dallas</td>
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<tr>
<td>Keith Melker</td>
<td>Ramiro Palma</td>
<td>Anna Lassiter</td>
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<td>Dallas</td>
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<tr>
<td>Michael Sherman</td>
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<td>Adam Hanselman</td>
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<tr>
<td>Dallas</td>
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<td>Dallas</td>
</tr>
</tbody>
</table>

Endnotes

i 2011 City of Dallas Community Survey and 2016 City of Dallas Community Survey, both conducted by the ETC Institute on behalf of the City of Dallas.

ii 2011 City of Dallas Community Survey and 2016 City of Dallas Community Survey, both conducted by the ETC Institute on behalf of the City of Dallas.

iii 2014 City of San Antonio Community Survey and 2014 City of Austin Community Survey, both conducted by the ETC institute.

iv Based on observed spay and neuter levels of the 2015 DAS shelter, field intake, local expert interviews, and secondary in-community data sets.


vi 2016 City of Dallas Community Survey, conducted by the ETC Institute on behalf of the City of Dallas.


viii BCG Dallas Community Survey, conducted in June 2015.


DAS employee interviews.


311 call volume from June 2015 - May 2016; DAS 311 Request Priority Matrix.

DAS 311 Request Priority Matrix.

Interviews with DAS supervisors and ASO CARE team ride-alongs.

Interviews with DAS supervisors.

ASO CARE team ride-alongs.

This assumes the team worked four days a week for four weeks each month.

CARE team data from April – July 2016.

Dallas municipal court data from June 2014 - May 2016.

Dallas municipal court data from June 2014-May 2016 (n=5,059).

Dallas municipal court data from June 2014-May 2016 (n=5,059).

These growth rates are all determined from DAS Chameleon data and include data from 2011 to May 2016.

DAS organization chart as of Jun4 27, 2016.

DAS Chameleon database and Rescue and Animal Organization Survey conducted by BCG in July 2016

Interview with DAS Field Services employees.

Interview with DAS Field Services employees.


311 service request data.

Benchmark interviews. See appendix for detailed information on each city benchmark.

DAS employee interviews.

ASO ride-alongs.

DAS employee interviews.

DAS employee interviews.

Interview with general manager of animal services in a comparable city.

ASO ride-alongs.

Interview with DAS ASO supervisor.

Dallas municipal court data between June 2014 and May 2016.

311 service request data.


Interview with volunteer who maintains the Facebook page, Dallas Dogs In Need of Transfer.

This is an approximation based on expert interviews with other animal shelters.

DAS Chameleon Database.

This is based on forecasted population growth in northern Dallas.

DAS Chameleon Database.

Expert interviews with low-cost spay and neuter providers.

DAS Chameleon Database.

Interview with DAS transfer coordinator, May 22, 2016.

Rescue and Animal Organization Survey conducted by BCG in July 2016 (n=72).

This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.

Expert interview with owner of a pet transportation company.

BARC Foundation website.

Expert interviews with low-cost spay and neuter providers.

DAS Owner Surrender Survey (n=84), Q: "Why are you surrendering your pet to DAS today?"

DAS Owner Surrender Survey (n=84), Q: "If any of the following were available to you, would you choose to keep this animal?"

This was determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits.


Expert interviews with low-cost spay and neuter providers.

Interviews with DAS supervisors, August 17, 2016.


This figure is based on DAS intake, observations, and expert interviews with animal welfare groups active in community.

PetSmart Charities 2011 survey.

Data from Pets for Life work in southern Dallas.

DAS Chameleon database.


Interview with rescue organization.

Dallas Police Department General Order, Section 214.


DAS volunteer manual and interviews with DAS supervisors.
Loose Dogs in Dallas: Strategic recommendations to improve public safety and animal welfare in Dallas
Initiative detail

August 2016
Context

In June 2016, BCG was engaged on behalf of the city of Dallas to evaluate opportunities to improve public safety, while safeguarding and improving animal welfare. BCG’s assignment was to:

- Quantitatively understand the supply of dogs in Dallas
- Identify community priorities given varying constituent perspectives
- Identify best practices from other animal services organizations across the US
- Identify and prioritize levers to maximize impact on public safety and animal welfare
- Synthesize findings in a strategic plan for the community of Dallas to achieve its goals

To develop a comprehensive understanding of the situation, we employed a team of consultants for eleven weeks. Our recommendations are based on:

- Qualitative interviews with nearly 100 stakeholders in Dallas
- Quantitative analysis of all available data sources including the DAS database (Chameleon), 311 service requests, and 911 Record Management System (RMS) calls
- Primary research including a loose dog census, resident survey, and a survey of rescue/animal welfare organizations
- Review of third-party studies from national organizations and academic studies
- Benchmarking of animal services organizations in ten highly comparable cities across the US, including 30 qualitative interviews and desk research to understand best-practices

BCG scope was constrained by:

- Focus on dog population only (vs. all animals) given link to public safety
- Not inclusive of process or recommendations surrounding animal cruelty investigation
- BCG efforts focused on improving the current situation, not assessing prior events unless critical to path forward

1. Live Release Rate from shelter; 2. Despite focus on dogs, most recommendations related to increasing live release rate expected to have significant positive impact on cats and other animals entering DAS.
BCG completed three deliverables:

**In this document**

### White-paper

Document contains written explanation of:
- Project background
- Relevant context and facts
- BCG recommendations
- Supporting rationale

### Initiative detail

Contains details on each recommended initiative:
- Background context
- Key assumptions
- Sizing of potential (intake, outcomes, etc)
- Cost to execute

### Working materials

Additional analysis completed during project, including analysis not reflected in recommendations

*Not all materials validated by a second party*
### BCG recommends seven actions for Dallas

High level recommendations must be taken as a whole—cherry picking will not work

<table>
<thead>
<tr>
<th>Priority</th>
<th>Recommendation</th>
</tr>
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<tbody>
<tr>
<td>Mission</td>
<td>1. Publicly adopt a mission statement balancing public safety and animal welfare</td>
</tr>
<tr>
<td>Initiatives</td>
<td>2. Increase field intake (up to 8,700 loose dogs) and increase related enforcement and education to prevent dogs from roaming</td>
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<td></td>
<td>3. Increase the number of positive outcomes for Dallas dogs, euthanizing only the sickest animals</td>
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<td>4. Provide approximately 46,000 low-cost spay and neuter surgeries in southern Dallas each year for the next three years</td>
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<tr>
<td>Enablers</td>
<td>5. Create a collaborative community of partners</td>
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<td></td>
<td>6. Make animal services a priority and strengthen accountability within the city government</td>
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<td></td>
<td>7. Ensure efficiency by measuring outcomes and increasing volunteers</td>
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</table>
28 specific initiatives provide guidance on how to achieve high-level recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Specific Initiatives</th>
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<tbody>
<tr>
<td><strong>1</strong> Mission</td>
<td>1.1 Balanced mission statement</td>
</tr>
<tr>
<td><strong>2</strong> Loose dogs</td>
<td>2.1 Add more ASOs</td>
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<tr>
<td><strong>3</strong> LRR</td>
<td>3.1 Digital marketing</td>
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<tr>
<td><strong>4</strong> S/N</td>
<td>4.1 High volume of S/Ns</td>
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<td><strong>5</strong> Collaboration</td>
<td>5.1 Open access to DAS data</td>
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<tr>
<td><strong>6</strong> Accountability</td>
<td>6.1 DAS as independent department</td>
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<tr>
<td><strong>7</strong> Efficiency</td>
<td>7.1 DAS employee alignment to plan &amp; metrics</td>
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Recommendations can be prioritized and phased in over time based on estimated effort and impact

### Preliminary/Suggested Prioritization of Initiatives

#### Strategic Priorities

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<td>4.1</td>
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<td>3.3</td>
<td>Establish high-volume transfer partner &amp; account mgmt</td>
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<td>6.1</td>
<td>DAS as independent department</td>
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#### Medium-term Initiatives

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<td>2.1</td>
<td>Add more ASOs</td>
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<td>2.2</td>
<td>ASOs collection – <em>patrol shifts</em></td>
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<td>2.5</td>
<td>Open access loose dog reports</td>
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<td>3.4</td>
<td>Transport – <em>Pilot &amp; expand</em></td>
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<td>4.2</td>
<td>S/N Collation - <em>pledges</em></td>
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<td>4.4</td>
<td>Enforcement of S/N</td>
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<td>5.2</td>
<td>Open access to DAS data</td>
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<td>6.2</td>
<td>Increased DAS funding</td>
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#### Quick Wins

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<tr>
<td>2.2</td>
<td>ASOs collection – <em>efficiencies</em></td>
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<tr>
<td>3.1</td>
<td>Digital marketing</td>
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<td>3.2</td>
<td>Increase adoption footprint</td>
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<td>3.3</td>
<td>High-volume transfer</td>
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<td>3.5</td>
<td>Surrender deflection – <em>referrals</em></td>
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#### Immediate Actions

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<tbody>
<tr>
<td>1.1</td>
<td>Mission statement</td>
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<td>1.2</td>
<td>Scorecard - <em>align on success</em></td>
</tr>
<tr>
<td>5.1</td>
<td>Improved dialogue</td>
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<td>5.3</td>
<td>Shared workload – <em>pledges</em></td>
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<td>6.3</td>
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<td>7.2</td>
<td>Inc. volunteers – <em>Job desc.</em></td>
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Source: BCG analysis

20160826_BCG_DallasDog_InitiativeDetail_vPublic.pptx

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Recommendations can be prioritized based on cost efficiency

Loose Dog and LRR Recommendations: Dogs Impacted vs Cost per Dog Impacted

- **4.1 Low-cost S/N surgeries** (46,000, $163)
- **2.1 Hire more ASOs** (6,000, $16)
- **3.1 Digital Marketing** (3,200, $132)
- **3.4 Pet transport**
- **2.2 Increase ASO field intake** (3,800, $32)
- **3.2.1 Additional EAC location** (1,300, $298)
- **3.2.2 Extend adoption hours** (520, $127)
- **3.3.1 "Transfer-on-intake"** (1,000, $0)
- **3.3.2 Account management of rescues** (570, $74)
- **3.5 Deflect owner surrenders** (2,600, $9)

**Notes:**
- Includes high range for recommendations 3.4 and 3.6
- Source: Various and BCG Analysis. See full report and supporting materials for methodology, calculations, and exact sources.
## Recommendations require incremental $10.7MM funding

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>FTE costs</th>
<th>S/N</th>
<th>Other costs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Collection focused ASO team</td>
<td>$94,000</td>
<td>$0</td>
<td>$0</td>
<td>$94,000</td>
</tr>
<tr>
<td>2.2 Increase current ASO intake</td>
<td>$168,000</td>
<td>$0</td>
<td>$0</td>
<td>$168,000</td>
</tr>
<tr>
<td>3.1 Digital marketing</td>
<td>$142,000</td>
<td>$192,000</td>
<td>$4,000</td>
<td>$338,000</td>
</tr>
<tr>
<td>3.2.1 Add'l adoption location</td>
<td>$267,000</td>
<td>$125,000</td>
<td>$33,000</td>
<td>$425,000</td>
</tr>
<tr>
<td>3.2.2 Extended adoption hours</td>
<td>$31,000</td>
<td>$50,000</td>
<td>$0</td>
<td>$81,000</td>
</tr>
<tr>
<td>3.3.2 Relationship management of transfer partners</td>
<td>$51,000</td>
<td>$0</td>
<td>$0</td>
<td>$51,000</td>
</tr>
<tr>
<td>3.4 Transport program</td>
<td>$51,000</td>
<td>$192,000</td>
<td>$42,000</td>
<td>$285,000</td>
</tr>
<tr>
<td>3.5 Owner assistance program</td>
<td>$26,000</td>
<td>$0</td>
<td>$0</td>
<td>$26,000</td>
</tr>
<tr>
<td>3.6 Behavior training</td>
<td>$0</td>
<td>$122,304</td>
<td>$648,060</td>
<td>$770,364</td>
</tr>
<tr>
<td>5.1 Open data access</td>
<td>$30,000</td>
<td>$0</td>
<td>$0</td>
<td>$30,000</td>
</tr>
<tr>
<td>6.1 Independent department</td>
<td>$310,000</td>
<td>$0</td>
<td>$0</td>
<td>$310,000</td>
</tr>
<tr>
<td>7.1 Org. alignment to DAS mission</td>
<td>$58,000</td>
<td>$0</td>
<td>$0</td>
<td>$58,000</td>
</tr>
<tr>
<td>7.2 Volunteer program</td>
<td>$51,000</td>
<td>$0</td>
<td>$0</td>
<td>$51,000</td>
</tr>
</tbody>
</table>

**Incremental DAS spend**

~$1,300,000  ~$700,000  ~$700,000  ~$2,700,000

**Incremental city spend**

~$600,000  ~$0  ~$0  ~$600,000

**Incremental community spend**

~$175,000  ~$7,200,000  ~$50,000  ~$7,500,000

**Combined total spend**

~$2,000,000  ~$7,900,000  ~$800,000  ~$10,700,000

---

1. Took the high end of the range. Low-end of cost range is $156k.; 2. Took the high end of cost range. Low end was $392k.
Note: An additional $300,000 one-time investment in DAS is also required for recommendations 2.1, 3.1
Source: BCG analysis

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Agenda

Recommendation 1: Publicly adopt a mission statement balancing public safety and animal welfare
Overview: DAS should adopt a mission statement balancing public safety and animal welfare

Summary of research and findings

- **Context:** Today, Dallas Animal Services' publicly stated mission is largely focused on animal welfare and doesn't encompass all of DAS's responsibilities
- **Key takeaway:** Changing the mission statement can focus organizational priorities and provide a universal direction for the organization to work towards
- **Overall recommendation:** DAS should incorporate language emphasizing public safety and animal welfare into its' mission statement

Recommendation

Integrate language balancing public safety and animal welfare into publicly stated mission such as:

- Our mission is to ensure public safety, promote animal welfare, and contribute to a stable population of animals within the City of Dallas. Successful execution of our mission depends on the efficient and data-driven use of resources as well as collaboration with partners in our community

Rationale

- Mission statements publicly define the organization's priorities
- DAS's mission only focuses on animal welfare, not on public safety
- As DAS performs recommendations, a revised mission statement can help members of the community and DAS employees align on priorities

Source: BCG analysis
Overview: DAS should adopt a mission-centric scorecard with specific targets and regular progress updates

Summary of research and findings

- **Context:** Currently, DAS has limited metrics tailored to its mission statement
- **Key takeaway:** By aligning specific goals with parts of its mission, DAS can structure its work around measurable goals
- **Overall recommendation:** Dallas Animal Services should adopt a scorecard with measurable goals relating to public safety, live release rate, animal population growth, partnerships and collaboration, and operational efficiency

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission scorecard should have specific targets relating to:</td>
<td>• A focused mission is not sufficient to ensure success</td>
</tr>
</tbody>
</table>
| • Public safety  
  – Loose dogs  
  – Bites  
  – Field intake | • Measurable goals allow for greater and limit confusion in regards to what DAS is working towards |
| • Live release rate (LRR)  
  – No. positive outcomes | |
| • Population growth  
  – Spay and neuter rates by zip code  
  – Total spay and neuter surgeries  
  – DAS intake by zip | |
| • Partnerships  
  – Transfer partner intake  
  – Transfer partner satisfaction | |
| • Operational efficiency  
  – Cost per outcome | |

Note: BCG analysis
# A scorecard focuses effort and creates transparency

<table>
<thead>
<tr>
<th>Objective</th>
<th>Goal (Metric)</th>
<th>Current Level</th>
<th>2017 Target</th>
<th>2019 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce number of Loose Dogs</td>
<td>Fewer loose/roaming dogs (to repeat loose dog census in 2017)</td>
<td>8,700^1</td>
<td>5,500</td>
<td>1,500</td>
</tr>
<tr>
<td></td>
<td>Fewer dog bite reports from loose and stray animals</td>
<td>1,676^2</td>
<td>1,500</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Fewer bite/animal-related emergency calls to 311 and 911</td>
<td>43,836^3</td>
<td>40,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Increase LRR</td>
<td>Improved LRR (Live Release Rate)</td>
<td>59%^4</td>
<td>69%</td>
<td>86%</td>
</tr>
<tr>
<td>Control Population through S/N</td>
<td>Higher rate of S/N among dogs in southern zip codes</td>
<td>15%^5</td>
<td>43%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>High volume of S/N surgeries delivered</td>
<td>5,000^6</td>
<td>28,000</td>
<td>46,000</td>
</tr>
<tr>
<td></td>
<td>Lower long term absolute intake from southern Dallas</td>
<td>13,466^7</td>
<td>22,166</td>
<td>10,000</td>
</tr>
<tr>
<td>Increase Collaboration</td>
<td>Increased partner satisfaction</td>
<td>50%^8</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Increased number of volunteer hours</td>
<td>1.2 FTE^9</td>
<td>10 FTE</td>
<td>25 FTE</td>
</tr>
<tr>
<td>Improve Efficiency</td>
<td>Decrease in average length of stay</td>
<td>7.6 days^10</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Increased efficiency of animal service officers (dog intake per year)</td>
<td>286^11</td>
<td>350</td>
<td>450</td>
</tr>
</tbody>
</table>

1. BCG Dallas dog census and BCG analysis. Targets based on increased intake from additional ASOs and improving intake by making changes to operations (Recommendation 2.1); 2. DAS bite reports. Targets based on 20% reduction in loose dogs; 3. 311 service requests and 911 calls. Targets based on reduction in loose dog; 4. DAS Chameleon database, CY 2015. Target based on intake increases starting at 11,790 positive outcomes and 8,535 negative outcomes (DAS Chameleon database); 2016 negative outcomes constant to 2015. Gradual ramp of positive outcomes with full potential realized in 2018; 5. Based on 2015 DAS intake and S/N status in DAS Chameleon database at the time of intake; 6. Surgeries completed by SNN, SPCA, DAS (through BFBD), DCAP, PFL specific to southern Dallas. Some surgeries completed through BFBD. Assumes gradual ramp up to 46,000 surgeries; 7. DAS Chameleon database, geocoding analysis, and BCG analysis. In short term will see slight increase in intake, however, once population growth is managed through spay and neuters will see a decrease; 8. Rescue & Animal Organization Survey BCG (n=72); 9. DAS volunteer hour excel file; 10. DAS Chameleon database, includes dogs that are euthanized or returned-to-owner on same day as intake. Targets based on enhanced digital marketing and increase in adoptions and transfers (Recommendation 3); 11. 2015 field intake and assumes 33 working ASOs across entire year. Targets based on increasing intake to match peer cities (Recommendation 2); Source: BCG analysis
Agenda

Recommendation 2: Increase field intake (up to 8,700 loose dogs) and increase related enforcement and education to prevent dogs from roaming
Overview: DAS should hire additional ASOs and focus 10 ASOs and 2 field supervisors on field collection and patrol

Summary of research and findings

- **Context:** Today, the majority of DAS ASOs are call focused, spending 90% of their time responding to priority 311 calls. ~60% of loose dog requests are not dispatched unless they can be mapped to the CARE target areas.
- **Key takeaway:** Filling budgeted open positions (8 ASOs and 2 supervisors) and hiring an additional 2 ASOs focused on field intake would increase total projected dog intake by ~6,000 each year.
- **Overall recommendation:** Invest in hiring and equipping a dedicate team of 10 intake-focused ASOs.

---

**Estimated Impact**

**Methodology**
- Estimate the potential number of dogs captured per day by an intake-focused ASO team.
- Extrapolate total potential capture based on number of ASO teams.

**Key Assumptions**
- Estimated 15 dogs captured each day by an intake focused team of 5 ASOs (10 ASOs distributed into two teams of 5 for dog intake efficiency).

Incremental ~6,000 dogs captured / year

---

**Resource Requirements**

**Methodology**
- Determine the total cost of ASO officers and trucks.

**Key Assumptions**
- Cost of an ASO officer = ~$47k per year
- Cost of an ASO truck = ~$60k

Upfront cost: ~240k
Recurring cost: ~$94k / year

---

1. Calculated only against variable yearly cost, does not include fees for dog intake and housing; Note: Sources and assumptions listed in detail on each relevant backup slide.
**Estimated impact:** Having 10 additional intake-focused ASOs could result in ~6k incremental dogs captured yearly

<table>
<thead>
<tr>
<th>Key assumptions</th>
<th>Impact dependent upon ASO staffing levels and dog capture rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number ASOs per team</td>
<td>5</td>
</tr>
<tr>
<td>Number incremental ASOs</td>
<td>10</td>
</tr>
<tr>
<td>Number incremental ASO teams</td>
<td>2</td>
</tr>
<tr>
<td>Dog intake per team per day</td>
<td>15</td>
</tr>
<tr>
<td>Number shifts per week</td>
<td>4</td>
</tr>
<tr>
<td>Number weeks per year</td>
<td>50</td>
</tr>
</tbody>
</table>

Impact dependent upon ASO staffing levels and dog capture rates:
- 2 teams
- 15 dogs per team per shift
- 200 shifts per team per year
- ~6,000 incremental dogs per year

**Note:** ASOs separated into teams in order to increase dog capture efficiency

1. Estimated capture potential of an intake-focused ASO team; 2. Assuming 4 shifts each week for each team, 50 weeks working in the year; Note: Open budgeted positions to be filled as well which include 8 ASOs and 2 supervisors; Source: DAS Chameleon Database, Expert Interviews, BCG analysis.
### Resource requirements: Having 10 additional intake-focused ASOs would incur \~$94k yearly cost

#### Key assumptions

<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental number ASOs</td>
<td>2</td>
</tr>
<tr>
<td>Cost per ASO per year</td>
<td>$47,000¹</td>
</tr>
<tr>
<td>Cost per ASO truck</td>
<td>$60,000</td>
</tr>
<tr>
<td>Number of trucks per team</td>
<td>2²</td>
</tr>
</tbody>
</table>

#### Resource requirements dependent upon ASO and truck cost

- **Truck Cost (Fixed)**: $240,000
- **ASO Cost (Variable)**: $94,000
- **Total Year 1 (Fixed + Variable)**: $334,000

**Incremental cost of \~$94k per year**

1. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; 2. Only 1 truck needed per team at a time, 1 truck kept for backup and ad-hoc sweeps; Source: DAS Chameleon Database, Texas Tribune, BCG analysis
Overview: DAS should increase ASO field intake

Summary of research and findings

- **Context:** DAS field intake per ASO per year is 20% below peer cities
- **Key takeaway:** By increasing field intake to meet the average of peer cities, DAS can increase field intake by ~2,400 annually
- **Overall recommendation:** Eliminate low value work, provide better equipment, and make ASO processes more efficient to increase field intake

Estimated Impact

**Methodology**
- Identify field intake for comparable peer cities to determine the average intake per ASO per year
- Determine the difference between DAS ASO intake and the average ASO intake
- Calculate incremental dogs if DAS were to improve dog collection per ASO to the average

**Key Assumptions**
- Avg. dog field intake per DAS ASO per year is 284
- Avg. dog field intake per ASO per year in peer cities is 357
- DAS is capable of increasing ASO collection to the average level of its peers

Incremental ~2,400 field intake / year

Estimated costs

**Methodology**
- Estimate the salary of an incremental FTEs necessary
- Estimate the variable costs necessary to implement changes amongst the current DAS ASOs

**Key Assumptions**
- 4 additional 311 operators/dispatchers have salary of $42k

Incremental cost of $168,000 / year

Note: Sources and assumptions listed in detail on each relevant backup slide
Estimated impact: Making changes can increase annual field intake by ~2,400 dogs

**Assumptions**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 field intake(^1)</td>
<td>9,363</td>
</tr>
<tr>
<td>Number of ASOs(^2)</td>
<td>33</td>
</tr>
<tr>
<td>Avg. intake/ASO</td>
<td>284/yr.</td>
</tr>
</tbody>
</table>

DAS can increase dog collection to the level of ASOs from peer cities through a combination of changes including, but not limited to:

1. Improving 311 processes
2. Optimizing 311 response mapping
3. Eliminating manual record keeping
4. Upgrading field connectivity to Chameleon
5. Improving fleet and equipment management
6. Encouraging ASOs with recognition and metrics
7. Requiring consistent schedules for ASO officers

**DAS field intake lags 20% behind peers at 284/ASO/year**

**Possible to increase avg. intake to 357/ASO/year**

**Dog Intake Per ASO Per Year\(^3\)**

<table>
<thead>
<tr>
<th>City</th>
<th>Dog Intake Per ASO Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa County (Phoenix)</td>
<td>551</td>
</tr>
<tr>
<td>San Antonio</td>
<td>500</td>
</tr>
<tr>
<td>Clark County (Las Vegas)</td>
<td>453</td>
</tr>
<tr>
<td>Washoe County (Reno)</td>
<td>412</td>
</tr>
<tr>
<td>Fulton County (Atlanta)</td>
<td>315</td>
</tr>
<tr>
<td>Dallas</td>
<td>284</td>
</tr>
<tr>
<td>County of San Diego</td>
<td>216</td>
</tr>
<tr>
<td>Austin</td>
<td>210</td>
</tr>
<tr>
<td>Houston</td>
<td>191</td>
</tr>
</tbody>
</table>

**DAS Dog Intake Per ASO Per Year**

- **Current state**: 284
- **Future state**: 357 (+73 incremental dogs)

1. Includes field RTOs, field pickup, and field capture; 2. 33 self reported ASOs and Senior ASOs in organization; 3. Determined dog intake per ASO per year through interviews and official reports; Source: DAS budget; DAS Chameleon database; DAS ridealongs; DAS field manager interviews; Interviews with animal control units from different cities; BCG analysis

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2.2

Resource requirements: Increasing ASO productivity would cost ~$168,000 a year

Assumptions

Salary for 311 dispatcher and operator $42,000\(^1\)

Incremental costs to support productivity

Recurring costs ($/yr.)

 Incremental cost of ~$168k per year

1. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; Source: DAS employee interviews, Texas Tribune; BCG analysis
Compared to peers, DAS has higher ASO staffing levels and lower ASO field intake

DAS has 45% more ASOs per million people than benchmarks...

...but, DAS field collection lags by 20%

Note: Assumes that 33 DAS ASOs with a field intake of 9,363 for CY 2015; Source: DAS Chameleon Database; Maricopa County Yearly Report (2016); Clark County Animal Control, County of San Diego Animal Services, Houston BARC, Fulton County Animal Services, Austin Animal Services, Jacksonville Animal Services, San Antonio Animal Services, Los Angeles Animal Services, Washoe County Regional Animal Services. Population from US Census Data (2013); BCG analysis.
Overview: Dallas community should educate residents about the dangers of loose dogs and ways to avoid bites

Summary of research and findings

- **Context**: CARE team and volunteer organizations conduct community outreach that includes educational and outreach component, but today lacks scale to reach all of southern Dallas quickly
- **Key takeaway**: By educating people on dangers of loose dogs, Dallas can reduce loose-owned dogs
- **Overall recommendation**: Dangers of loose dogs and how to avoid dog bites should be incorporated in current outreach efforts in order to educate the community

Recommendation / Rationale

Incorporate dangers of loose dogs and ways to avoid dog bites when encountering a dog in existing education efforts

- DAS CARE team and volunteer organizations to continue community education efforts
  - Build on education efforts currently in place for spay/neuter
- Education materials to be created regarding:
  - Potential hazards of loose dogs on community
  - Dangers of loose dogs

Presence of loose owned dogs is, in part, a function of human behavior

Goal is to:

- Increase community awareness
- Reduce loose-owned dogs on streets

Rationale – Current solution not scalable

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Dallas households</td>
<td>173,598</td>
</tr>
<tr>
<td>CARE team HH/day</td>
<td>105</td>
</tr>
<tr>
<td>Days worked/week</td>
<td>4</td>
</tr>
<tr>
<td>Weeks/month</td>
<td>4</td>
</tr>
<tr>
<td>CARE team HH/month</td>
<td>1,674</td>
</tr>
<tr>
<td>Months to reach all HHs once</td>
<td>104</td>
</tr>
<tr>
<td>Years to reach all HHs once</td>
<td>8.6</td>
</tr>
<tr>
<td>Years to reach all HHs twice¹</td>
<td>17.3</td>
</tr>
</tbody>
</table>

*Note: In order to reach each southern Dallas household twice within two years, community needs ~8.5 times more manpower of the current CARE team today*

---

1. Pets for Life in southern Dallas suggests two touches per household; Source: Experian Current Year Estimates (Q2 2015) for population data; CARE team data from April – July 2016; PFL; WHO-WSPA dog population management 1990; BCG analysis

---

2.3
Overview: The City of Dallas should make animal-related citations more effective

Summary of research and findings

**Context:** Today, citations are difficult to issue and have ineffective follow through with 46% of all citations not responded to by defendants

**Key takeaway:** If citations are easier to issue and have stronger follow through, there may be more compliance to Dallas city animal ordinances (and fewer loose dogs)

**Overall recommendation:** DAS should increase amount of times ASOs patrol, transition from issuing criminal to civil citations, and invest in IT processes in order to issue citations more efficiently

Recommendation

**Make issuing the citation more efficient**
- Reserve some ASOs time to patrol freely, issuing citations as they go
- Transition some criminal citations to civil citations so that the ASO does not need to appear in court as often
- Create a DAS only docket to speed up the process for issuing civil citations

**Consider investing in changes to citation follow-through to make compliance more likely**
- Include citations on city utility bills
- Waive fines if compliance is demonstrated
- Create a court specifically for animals

Rationale

**Today, the process to issue citations is time consuming**
- Citations are difficult to issue while responding to 311 requests because often a 311 request does not warrant a citation
- Criminal citations require an ASO to be in attendance at court which takes up one day per ASO per month
- Civil citations take up to an hour to issue because the docket is crowded and inaccessible

**After citations are issued, they are not fully followed through**
- 44% of citations are not responded to by the defendant

Source: Citation data from municipal courts 05/2014 – 05/2016; Interviews with DAS field supervisors; BCG analysis
In last 24 months, DAS issued citations growing at ~7% monthly, however 44% did not receive a response.

Monthly citations growing 7% monthly

44% of citations issued in 2015 were not responded to

3,488 citations over TTM

38% of citation fines were paid

1. For citations that had multiple outcomes classifications, included the outcome with the highest violation number with the assumption that that is the most recent outcome; 2. Maximum amount citation fines due was $466,589.73, maximum total paid was $177,861.37. In addition, some citations indicate that a defendant has not responded, but a citation has been paid; Note: TTM = trailing twelve months; Source: Citation data from municipal courts 05/2014 – 05/2016; BCG analysis
Overview: DAS should share loose dog service requests with organizations that actively capture loose dogs

Summary of research and findings

- **Context:** DAS receives 48,000 calls yearly, ~12,000 (24%) were loose dog calls that were not dispatched
- **Key takeaway:** Sharing information warns the public and provides information that street rescue teams can use.
- **Overall recommendation:** DAS should share information for loose dog calls with organizations that actively capture loose dogs

Recommendation

**Information to be shared includes:**
- Description of dog
- Location
- Time stamp

Information can be shared through email, text message, or social media platforms

Rationale

- In 2015, there were ~12,000 calls for loose dogs that were not dispatched
- Rescue and animal organizations in Dallas self-reported 6,000 dogs rescued from street in 2015
- ASOs are not dispatched for loose dog calls
- Warns public on loose dogs in neighborhoods
- Empowers street rescue teams with information they can use

1. Rescue and Animal Organization survey (n=72); Source: BCG’s July 2016 Rescue and Animal Organization survey, BCG analysis
Agenda

Recommendation 3: Increase the number of positive outcomes for Dallas dogs, euthanizing only the sickest animals
Overview: DAS should enhance its digital marketing for both adoptions and transfers

Summary of research and findings

- **Context:** Today, digital marketing is an underutilized resource. The DAS website is not consumer centric. Pet profiles on PetHarbor and Petfinder are sparse. 2,000 dogs are posted to Facebook out of 20k intake
- **Key takeaway:** By improving digital marketing can increase positive outcomes by ~3,200
- **Overall recommendation:** Improve digital content by enhancing pet profiles (e.g., better photos and descriptions of dogs, better DAS website); Increase penetration of available websites such as Facebook, Petfinder, and Pet Harbor

**Estimated Impact**

**Methodology**
- For impact of improved online content (e.g., better photos and descriptions of pets online)
  - Estimate the lift that would result from improving the DAS dog profiles and DAS website and apply it to adoptions and transfers from 2015
- For impact of increased website utilization
  - Determine differences in LRR rate between dogs posted on Facebook and those not posted and apply lift to additional dogs posted on Facebook

**Key Assumptions**
- Better pet profiles can increase positive outcome 20%
- Facebook posts can increase LRR by 5 - 20 pps

**Estimated costs**

**Methodology**
- Estimate recurring labor costs
- Estimate investments needed to enhance digital content including the purchase of cameras and tablets to capture and post better pet profiles and a DAS web design

**Key Assumptions**
- 15 minutes to improve a dog profile; 10 minutes to post and update one dog on Facebook
- $60k for a DAS IT system upgrade
- $4k for cameras and laptops to improve profiles
- Incremental cost for S/N and vetting = $96
- Staff to photograph dogs = $36k yearly
- Staff to aid adopters = $20.8k yearly

Incremental ~3,200 adoptions/transfers

Upfront costs: ~$60,000
Recurring costs: ~$338,000

1. 5 pps is conservative estimate; Note: Sources and assumptions listed in detail on each relevant backup slide
Estimated impact: Optimizing digital marketing can increase positive outcomes by ~3,200 dogs annually

Assumptions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogs Adopted in 2015</td>
<td>8,866</td>
</tr>
<tr>
<td>Dogs transferred in 2015</td>
<td>2,913</td>
</tr>
<tr>
<td>Lift from improved digital content</td>
<td>20%</td>
</tr>
<tr>
<td>LRR for dogs posted to Facebook</td>
<td>83%</td>
</tr>
<tr>
<td>LRR for dogs not posted to Facebook</td>
<td>55%</td>
</tr>
<tr>
<td>Incremental dogs posted to Facebook</td>
<td>7,500</td>
</tr>
<tr>
<td>Rate at which Facebook lift decreases per 2,000 dogs posted</td>
<td>-5 pps</td>
</tr>
</tbody>
</table>

Table: Annual positive outcomes

<table>
<thead>
<tr>
<th></th>
<th>Adoptions</th>
<th>Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current LRR</td>
<td>6,866</td>
<td>2,913</td>
</tr>
<tr>
<td>Additional LRR</td>
<td>1,373</td>
<td>583</td>
</tr>
</tbody>
</table>

Projected LRR for posted dog (%)

- Facebook increase
- Current LRR

Graph: Impact of Facebook decreases with additional dogs posted

- ~2,000 additional positive outcomes

1. Approximated from expert interviews with other animal shelters, BCG experience and the articles "An Evaluation of the role the internet site Pet Finder plays in cat adoptions" by Workman and Hoffman and "Speed of Dog Adoption: Impact of Online Photo Traits" from the Journal of Applied Animal Welfare; 2. Includes all dogs who were adopted, transferred, or euthanized with intake dates between 6/1/2015 and 5/31/2016; 3. Includes all dogs who were adopted, transferred, or euthanized and were also posted on Facebook between 6/1/2015 and 5/31/2016; 4. Number of dogs euthanized but not posted on Facebook in the last 12 months 6/1/2015 and 5/31/2016 is ~7,000, and additional dogs will be brought in; 5. Additional positive outcomes can be achieved by posting more dogs to Petfinder and Pet Harbor, however, to be conservative, did not include in this estimate; Source: DAS Chameleon database; Records of Dallas Dogs In Need of Transfer; Scholarly articles; BCG analysis
### Resource requirements: Optimizing digital marketing should cost ~$60k upfront and $338k annually

#### Assumptions

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes to create a good dog profile</td>
<td>15 min</td>
</tr>
<tr>
<td>Annual number of profiles</td>
<td>18.5k</td>
</tr>
<tr>
<td>Time needed to create better profiles</td>
<td>4,625 hrs</td>
</tr>
<tr>
<td>Minutes to post and update one dog on Facebook</td>
<td>10 min</td>
</tr>
<tr>
<td>Additional dogs posted to Facebook/other websites</td>
<td>7.5k</td>
</tr>
<tr>
<td>Time needed to post on Facebook</td>
<td>1,250 hrs</td>
</tr>
<tr>
<td>Employees needed to photograph</td>
<td>2.8</td>
</tr>
<tr>
<td>Employees needed to help adopters</td>
<td>2</td>
</tr>
<tr>
<td>Number of incremental adoptions</td>
<td>1,400</td>
</tr>
<tr>
<td>Incremental cost for S/N and vetting</td>
<td>$96</td>
</tr>
</tbody>
</table>

1. Based on averages from volunteers that currently photograph dogs; 2. Based on interviews with DAS employees; 3. 2015 intake was 20,807, and 88% of these dogs were transferred, adopted, or euthanized (~18.5k); 4. Total euthanized dogs not on Facebook in 2015 = ~7,500; 5. Based on assumptions from previous slide; 6. Assumes one FTE works 2,080 hours a year and makes $36k; 7. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; 8. Assumes 2,000 dogs are adopted; 9. Assumes one FTE makes $20,800 yearly; 10. Estimated incremental cost of adoption, inclusive of S/N and vaccine costs; Source: Interviews with DAS employees and volunteers, Chameleon, representative, database automator employees, Texas Tribune; BCG analysis

#### Costs for optimizing digital marketing programs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upfront investment</strong></td>
<td></td>
</tr>
<tr>
<td>DAS IT system upgrade</td>
<td>~$60,000</td>
</tr>
<tr>
<td><strong>Recurring costs</strong></td>
<td></td>
</tr>
<tr>
<td>3 tablets to take pictures and write dog descriptions</td>
<td>~$3,000</td>
</tr>
<tr>
<td>1 laptop to email or upload any information to Chameleon</td>
<td>~$1,000</td>
</tr>
<tr>
<td>2.8 employees to create better pet profiles and post on Facebook</td>
<td>~$129,000</td>
</tr>
<tr>
<td>Cost of spaying and neutering and vetting adopted dogs</td>
<td>~$192,000</td>
</tr>
<tr>
<td>2 employees to aid potential adopters navigate kennels</td>
<td>~42,000</td>
</tr>
<tr>
<td>Total</td>
<td>~$338,000</td>
</tr>
</tbody>
</table>
Current state of DAS digital adoption

Link to pictures of pets are buried at the end of the webpage

Descriptions sparse, pictures poor

---

Source: DAS website; DAS Pet Harbor page; DAS Petfinder page; BCG analysis
Potential to customize Pet Harbor profiles and use as adoption homepage

Meet Jack!

Jack is a big, young, exuberant hound mix! He loves to get his exercise, either chewing on a toy or romping in the yard or going for a long walk. One of his favorite toys is a jolly ball - he rolls it around with his paws.

Jack is very friendly, but doesn't realize that most people don't want to be greeted by being jumped up on. With a big boy like Jack, jumping up is a lot for kids, so he is looking for a home with sturdy teens and adults. His previous owner never trained him to walk properly on the leash, so as ... Click my picture to read more about me.

APOLLO - ID#A008059

My name is APOLLO.

I am a neutered male, white and black Terrier mix.

The shelter staff think I am about 2 years and 1 month old.

I have been at the shelter since Dec 22, 2015.

This information was refreshed 54 minutes ago and may not represent all of the animals at the Animal Rescue Fund of the Hamptons.

Shelter Staff made the following comments about this animal:

BORN: 8/2014
SEX: Neutered Male
COLOR: White & Black
BREED: Terrier
WEIGHT: 76 lbs

CAME TO ARF: Owner Surrender
PERSONALITY: Apollo was surrendered to us when his owners were no longer able to care for him. He is an energetic boy who would benefit from obedience training. He needs an experienced owner in an adult only home.

Source: Public links to adoptions for Animal Rescue League of Boston, ARF Hamptons, and Nebraska Humane Society; BCG analysis
Dallas Dogs in Need of Transfer (DDINT) on Facebook was established by a single volunteer...

Features dogs in need of transfer by a rescue org. (~10% of total DAS dog intake)
- Need special care for health or behavior
- Healthy in the shelter for 10+ days

One volunteer maintains site during 18 hrs/week
- Aligns priority list of dogs with transfer coordinator
- Photographs each dog individually (3-10 minutes)
- Takes notes on dog
- Uploads photos and information at home
- Responds to posts

Rescue groups tag each other, generating interest

Source: Dallas Dogs In Need of Transfer Facebook page; BCG analysis
... and DDINT increases likelihood of a positive outcome

Predicted that posting incr. positive outcome by up to 4x$^1$

- A medium, treatable manageable, multi-colored mastiff is **4.6x** more likely to have a positive outcome if on Facebook

- A black, treatable rehabilitatable puppy setter/retriever is **4.4x** more likely to have a positive outcome if on Facebook

Indeed, dogs posted on Facebook have higher LRR

<table>
<thead>
<tr>
<th>Type of dog</th>
<th>Dogs posted</th>
<th>Dogs not posted</th>
</tr>
</thead>
<tbody>
<tr>
<td>All dogs</td>
<td>83</td>
<td>55</td>
</tr>
<tr>
<td>Black dogs</td>
<td>79</td>
<td>56</td>
</tr>
<tr>
<td>Mastiffs</td>
<td>69</td>
<td>34</td>
</tr>
<tr>
<td>Large dogs</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td>Unhealthy, untreated</td>
<td>52</td>
<td>8</td>
</tr>
<tr>
<td>Large, black, mastiffs</td>
<td>43</td>
<td>20</td>
</tr>
</tbody>
</table>

LRR for dogs available for adoption or transfer$^2$ (%)

1. Ran binary logistic regression on transfer/adoption. Included all DAS dog intake from 6/1/2015-5/31/2016. Included color, breed, size, Facebook posted dummy variable, and health condition. Naegleikerk R-square of .3-.35; 2. Includes all dogs who were adopted, transferred, or euthanized between 6/1/2015 an 5/31/2016; Source: DAS Chameleon database; BCG analysis; DDINT data; BCG analysis
Overview: Expanding its retail presence via an additional adoption location

Summary of research and findings

- **Context:** EAC site in North Dallas operated through partnership with PetSmart Charities. Though EAC site has ~85% fewer dog adoption kennels than Westmoreland, it accounts for ~25% of all DAS dog adoptions
- **Key takeaway:** DAS can increase its number of adopted dogs by ~1,300 per year, while incurring a relatively small cost of ~$425k yearly
- **Overall recommendation:** Work with a retail partner (e.g. PetSmart charities, Petco, etc.) to extend partnership to include additional retail site in North Dallas

Estimated Impact

**Methodology**
- Analyze current EAC adoption performance by looking at adoptions per kennel per year
- Project out yearly performance of new EAC site as conservative percentage of current EAC performance

**Key Assumptions**
- EAC % of yearly DAS adoptions (2015) = 25%
- Number EAC adoption kennels = 18
- EAC adoptions per kennel per year = ~95

Incremental ~1,300 dogs adopted / year

Resource Requirements

**Methodology**
- Analyze current EAC location cost structure
- Model new adoption site on current EAC cost base

**Key Assumptions**
- Structure of new retail partnership = Same as existing
- Staffing/resourcing of new = Same as existing
- Primary cost structure for additional location includes: full time salary, full time benefits, temp labor
- Incremental cost for S/N and vetting = $96

Incremental cost of ~$425k / year

Note: Sources and assumptions listed in detail on each relevant backup slide

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3.2.1
Backup: Current EAC site accounts for ~25% of all DAS dog adoptions

EAC location accounts for 25% of all DAS dog adoptions...

...even though EAC has ~85% fewer adoption kennels than main location

**Source:** DAS Chameleon database, BCG analysis
Current landscape of Texas EACs presents opportunity to open additional DAS adoption site serving city of Dallas

There are three EAC locations operating in North Texas...

- 3 in North Texas, 1 in West and 1 in South Texas

...two are run by Ft Worth Animal Control, while DAS runs just one site...

- Only Dallas location is DAS EAC in North Dallas
- "City of Fort Worth Animal Care and Control" shelter operates two EACs
- Current EAC location in zip with ~17k human households
- Example available locations in zip codes with comparably sized populations include: University Park, Irving, Lakewood, Las Colinas

Potential to open additional DAS adoption site based on site availability and precedent set by Ft. Worth EACs

Source: PetSmart website, BCG analysis, Experian Current year Estimates (Q2 2015); BCG analysis
Estimated impact: Establishment of an additional adoption site could increase adoptions by ~1,300 dogs per year

Key assumptions

<table>
<thead>
<tr>
<th>Total 2015 DAS Adoptions¹</th>
<th>6,830</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAC % of 2015 DAS Adoption¹</td>
<td>0.25</td>
</tr>
<tr>
<td>EAC 2015 Adoptions¹</td>
<td>1,736</td>
</tr>
<tr>
<td>Number EAC Adoption Kennels 2015</td>
<td>18</td>
</tr>
<tr>
<td>EAC 2015 Adoptions per Kennel per year</td>
<td>96</td>
</tr>
</tbody>
</table>

Impact dependent on number of kennels and adoption rate

Adoption rate: adoptions per kennel relative to existing EAC:

- Same adoption rate as EAC: 96 adoptions/kennel/year
- Conservative, 75% EAC rate: 72 adoptions/kennel/year
- Worst case, 50% EAC rate: 48 adoptions/kennel/year

Potential ~1,300 dogs adopted per year

1. Statistic from Chameleon data; Source: DAS Chameleon Database, Interviews with EAC staff; BCG analysis, BCG analysis
3.2.1

Resource requirements: New adoption site estimated to incur an incremental cost of \(~\$425k\) per year

Key assumptions

Structure of new adoption partnership
- Same as existing

Size/ staffing of new site
- Same as existing

Costs to operate new site
- 2 full time salaries \(^1\) $85,075
- Benefits & supplies\(^1\) $50,647
- 5 Temp laborers\(^1\) $164,995

Incremental cost of dog adoption\(^2\) $96/dog

Resources required driven primarily by labor cost

Cost ($)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Full Time Benefits &amp; Misc Supplies</th>
<th>Full Time Salary</th>
<th>Temp Labor Cost</th>
<th>Incremental cost of adoption</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction fee</td>
<td></td>
<td>$50,647</td>
<td>$85,075</td>
<td>$164,995</td>
<td>$425,517</td>
</tr>
<tr>
<td>Facility fee/rent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Requirements dependent upon nature of partnership

- **Construction fee** – Current partnership for EAC shields DAS from "fixed cost" of opening/constructing new facility. Incurring this expense would greatly increase required resources.
- **Facility fee/rent** – Current EAC partnership similarly insulates DAS from any rent expense or facility fee for operating new site. If terms were to be renegotiated, potential for variable cost increase.

---

1 Costs derived from FY'14-'15 DAS Expenditures and are fully loaded; 2. Estimated incremental cost of adoption, inclusive of S/N and vaccine costs; Source: FY '14-'15 Expenditures, DAS Chameleon Database, BCG analysis
**Overview: Expanding its retail presence via extended adoption hours**

<table>
<thead>
<tr>
<th>Summary of research and findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context:</strong> DAS currently operates its Westmoreland adoption center 50hrs/week, resulting in a total of ~6,400 animal adoptions each year</td>
</tr>
<tr>
<td><strong>Key takeaway:</strong> DAS can increase its number of adopted dogs by ~520 per year by adding 12 incremental adoption hours at a total cost of ~$81k/year</td>
</tr>
<tr>
<td><strong>Overall recommendation:</strong> Invest resources in expanding adoption center hours as a direct method of increasing positive outcomes</td>
</tr>
</tbody>
</table>

**Estimated Impact**

**Methodology**
- Analyze number of animals adopted and adoption center service hours across peer animal shelters
  - Extrapolate potential to increase dog adoptions by increasing adoption hours

**Key Assumptions**
- 80% of animals adopted at DAS are dogs
- DAS operates 6 days/wk, 52 days/yr

**Resource Requirements**

**Methodology**
- Break out distinct components of incremental cost associated with increasing dog adoption by adding to adoption center service hours
  - Incremental labor cost: estimate labor cost of incremental hours
  - Incremental adoption cost: cost of preparing a dog for adoption (S/N and vaccines)

**Key Assumptions**
- Incremental cost for S/N and vetting = $96
- Adoption desk staffed by 2 workers @ $15/hr
- Additional staff to aid adopters @ $10/hr

**Incremental ~520 dogs adopted / year**

**Incremental cost of ~$81k / year**

Note: Sources and assumptions listed in detail on each relevant backup slide.

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Estimated impact: Extending adoption hours could result in an additional ~520 dogs adopted per year

Key assumptions...

<table>
<thead>
<tr>
<th>% of adoptions that are for dogs</th>
<th>80%¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks of operation per year</td>
<td>52</td>
</tr>
</tbody>
</table>

Adoption hours vs. Weekly animal adoptions

Impact

- **4.2**: More animals adopted each week, per add’l hour
- **1/4**: Conservative adjustment for less productive hours²
- **12**: Additional hours of adoption per week
- **80%¹**: Of animals adopted at DAS are dogs
- **52**: Weeks per year
- **~520 dogs/yr**: Increased adoption of dogs per year

1. Statistic from Chameleon Database; 2. Conservatively estimate that some hours of day are less productive for adoptions (morning and night hours); Source: DAS Chameleon database, Shelter websites, BCG analysis

---

1. Statistic from Chameleon Database; 2. Conservatively estimate that some hours of day are less productive for adoptions (morning and night hours); Source: DAS Chameleon database, Shelter websites, BCG analysis
Resource requirements: Extending adoption hours would incur a cost of ~$81k per year

Key assumptions...

<table>
<thead>
<tr>
<th>Resource Requirement</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental cost of dog adoption at main location(^1)</td>
<td>$96/dog</td>
</tr>
<tr>
<td>Num workers at adoption center</td>
<td>2</td>
</tr>
<tr>
<td>Adoption Center labor</td>
<td>$15/hr</td>
</tr>
<tr>
<td>Adoption center additional hours a week</td>
<td>12</td>
</tr>
<tr>
<td>Additional staff to aid adopters</td>
<td>2</td>
</tr>
<tr>
<td>Adopter aid labor</td>
<td>$10/hr</td>
</tr>
<tr>
<td>Adopter aid additional hours a week</td>
<td>12</td>
</tr>
</tbody>
</table>

Incremental costs due to extended adoption hours

1. Estimated incremental cost of adoption, inclusive of S/N and vaccine cost; 2. Yearly salary of Dallas Animal Services Coordinator – Texas Tribune Govt Salaries Explorer; Source: DAS Chameleon Database, Texas Tribune Government Salaries Explorer, BCG analysis
Overview: DAS should establish a "Transfer-on-Intake" program with a single high-volume transfer partner

**Summary of research and findings**

- **Context**: Redirecting "adoptable" dogs to high volume transfer partners presents an opportunity to benefit the community/dog population, DAS, and transfer partner by efficiently re-allocating adoption resources.
- **Key takeaway**: Opportunity exists to transfer ~1,000 dogs from DAS OTC intake to various high volume transfer partners in DFW each year.
- **Overall recommendation**: Coordinate to establish "Transfer-on-Intake" partnerships with key DAS transfer partners.

**Estimated Impact**

**Methodology**
- Analyze 2015 DAS OTC intake by dog type and health status to identify high priority dogs for potential redirection.
- Project percentage of available dogs that would be "tagged" for rapid redirection by transfer partners.

**Key Assumptions**
- 2015 Dog Owner Surrender = 6,624
- 2015 Puppy Owner Surrender = 2,135
- Conservative percentage "Tagged" = 50%
- Average Kennel Stay = 7.6 days

- ~1,000 dogs transferred
- ~7,700 days of "freed" kennel day capacity

**Resource Requirements**

No cost incurred by DAS

Partner shelters incur cost of program:
- Labor cost for resource staffed in DAS to identify redirects
- Transport cost for transfer from DAS to partner shelter
- Any intake/vet costs for redirected dogs

Note: Sources and assumptions listed in detail on each relevant backup slide.
Transfer-on-Intake program allows high volume transfer partner to pick up surrendered dogs before DAS intake

From a dog population and DAS capacity management perspective, one of best options for a dog on its way to DAS OTC intake is to be turned away at the door and placed at high volume partner shelters around DFW

- **Benefit to animals** – avoid days in DAS dog population, decreased likelihood of "last option" euthanasia
- **Benefit to DAS** – fewer dogs in general DAS population, decreased cost to care for and place dogs
- **Benefit to transfer partners** – increased number of dogs available to adopt or foster

"Transfer-on-Intake" methodology allows key, high volume transfer partners to have "first pick" on animals brought OTC to DAS

- Transfer partner staffs desk/person in OTC area to evaluate and hand pick select animals to hold and adopt them through their shelter's services
- If necessary, transferred animals can live out stray hold time at partner shelter
Surrendered dogs prioritized for potential redirection based on low risk of being "owned" and high adoption potential

<table>
<thead>
<tr>
<th>Owner Surrender</th>
<th>Owner Surrender</th>
<th>OTC Stray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puppy</td>
<td>(Excl. Puppies)</td>
<td></td>
</tr>
</tbody>
</table>

**Risk of transferring an owned animal**
- Owner Surrenders are at no or minimal risk of being reclaimed as a lost dog
  - Owner Surrenders are at no or minimal risk of being reclaimed as a lost dog
  - Stray dogs turned in are potentially lost or escaped, high risk of being reclaimed as a lost dog

**Potential for adoption of animal**
- Puppies perceived as easier to adopt, more likely to be easily accepted by partners
  - Adoption potential for adult owner surrenders highly variable based on health status and age
  - OTC strays are potentially roaming or feral dogs with little previous vet care, likely significant vet care required before adoption

**Overall prioritization**
- Prioritize healthy & treatable for Rapid Redirection
- Prioritize healthy for Rapid Redirection
- Do not prioritize for Rapid Redirection program

**Rapid Redirection prioritizes Healthy & Treatable surrendered puppies and Healthy surrendered adult dogs**

Source: Expert interviews, BCG analysis

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Backup: General process steps for Rapid Redirect
Using Rockwall Pets as an example high volume program partner

Process steps

I. Dogs brought to DAS
- Dogs brought to the Lost and Found desk at DAS, either through stray or owner surrender

II. Dog assessed at Lost and Found desk
- Lost and Found staff quickly visually assesses dog in order to classify
- Classified on age and health status

III. Transfer partners make quick call on dog
- Representative from select Transfer Partner sits in Lost and Found lobby to "tag" priority dogs
- Priority dogs include subset of Healthy/Treatable puppies and Healthy adult dogs

IV. Target dogs redirected to transfer shelter
- "Tagged" dogs are shuttled immediately to Partner shelter using Partner shelter transport resources
- Non-"Tagged" dogs proceed to DAS intake flow

1. Leverage Asilomar rankings for health assessment; Source: BCG analysis
Estimated impact: Establishment of "Transfer-on-Intake" has potential to result in \(~1,000\) incremental transfers per year

- **Key assumptions**
  - 2015 Owner Surrender Dog\(^2\) Intake Assessments: 6,624
  - 2015 Owner Surrender Dog – Puppy\(^2\): 2,135
  - 2015 Owner Surrender Dog – Adult\(^2\): 4,489
  - Conservative % "tagged" for redirect: 50\(^{\%}\)

- **2015 Owner Surrender Dog Intake Assessments**
  - Number of dogs
  - Owner Surrender Puppies: 2,135
  - Owner Surrender Adult dogs: 4,489
  - 1,418
  - 2681
  - 245
  - 493
  - 327
  - 493
  - 0

- **Projected transfers dependent upon OTC assessments**
  - Number of dogs
  - Puppy - Treatable Rehabilitatable: 608
  - Puppy and Adult - Healthy: 2,026
  - Total Suitable Dogs: 2,634
  - Adjust: 1,013
  - Total Redirected Dogs: 1,013

1. % of suitable dogs flagged < 100\% due to practical considerations for logistics of dog intake (some dogs may need more time to process/document), flagging (Transfer Partner rep can't feasibly inspect every OTC dog), and staffing (more feasible to have a Transfer Partner resource staffed for some portion of the day).
2. Statistics from DAS Chameleon Database; Source: DAS Chameleon Database; BCG analysis
Backup: Transfers from "Transfer-on-Intake" program also result in ~7,700 day decrease in kennel days utilization

Projected Impact of "Transfer on Intake" to Shelter Kennel Day Utilization (2015)

- Total Filled Kennel Days 2015: 114,610
- Estimated Capacity "Freed" from Transfer-on-Intake Program: 7,699
- Adjusted Filled Kennel Days: 106,911

-7,699 (-7%)

**Note:** Assuming 100% utilization of kennel days in 2015

- 314 available general DAS kennels x 365 days per year

1. Statistic from DAS Chameleon Database; Note: Assuming 100% kennel day utilization in 2015 as base; Source: DAS Chameleon Database; BCG analysis
Overview: DAS should segment relationship management of transfer partners by size and support

Summary of research and findings

- **Context:** Currently, the transfer coordinator spends majority of time reacting to transfer partners’ questions or tagging/pulling dogs and does not proactively build relationships or assess partners’ needs
- **Key takeaway:** DAS can better address needs of transfer partners, increasing partner satisfaction with DAS and, as a result, increase the number of transfers by ~570 dogs
- **Overall recommendation:** Apply best B2B sales practices to 1. segment partners by size and need; 2. Address aggregate needs of the smaller partners, 3. Address tailored needs of larger partners

---

**Estimated Impact**

**Methodology**
- Map satisfaction levels of rescue organizations to the number of dogs transferred from DAS
- From the rescue and animal organization survey, determine what DAS can do to increase satisfaction levels for large vs. small partners
- Estimate the number of incremental transfers that would result from a marginal increase in satisfaction

**Key Assumptions**
- Key account management will increase satisfaction of current partners

---

**Estimated costs**

**Methodology**
- Analyze current activities of transfer coordinator
- Identify how many more transfer coordinators necessary for account management

**Key Assumptions**
- 1 transfer coordinator @ $51k yearly

---

Incremental ~570 transfers / year

Incremental cost of $51,000 / year

Note: Sources and assumptions listed in detail on each relevant backup slide
Estimated impact: Segmenting partners could result in an additional ~570 transfers annually

Assumptions

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 rescue org. dog intake</td>
<td>46,000</td>
</tr>
<tr>
<td>% Rescue dogs pulled from city shelters</td>
<td>32%</td>
</tr>
<tr>
<td>2016 dogs pulled by rescues from city shelters</td>
<td>14,720</td>
</tr>
</tbody>
</table>

Principles of account management:

- Focus resources on the big key, accounts by providing higher touch service
- Improve relationships with smaller accounts by targeting common needs
- Tailor all relationships using customer data

Apply account management principles to improve DAS satisfaction

<table>
<thead>
<tr>
<th>Customer satisfaction</th>
<th>% all dogs pulled from city shelters</th>
<th>Lift from improved account management</th>
<th>Additional dogs transferred out of DAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissatisfied</td>
<td>23%</td>
<td>+1 bps</td>
<td>32</td>
</tr>
<tr>
<td>Neutral</td>
<td>24%</td>
<td>+6 pps</td>
<td>224</td>
</tr>
<tr>
<td>Satisfied</td>
<td>30%</td>
<td>+5 pps</td>
<td>318</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>38%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

574 additional transfers

1. According to rescue survey, 58 orgs. have had a total intake of 21,483 YTD. Multiplied this by 2 and rounded up to 46k to account for the orgs. that did not take this survey; 2. According to the rescue survey, 32% of all dog intake for rescues comes from city shelters, which is an estimated 14,720 dogs for 2016; 3. Average share of shelter dogs from DAS was determined from the rescue survey; 4. Based on the response to the rescue survey question: *I am satisfied with DAS overall. (n=46)* "Very satisfied "is not portrayed because no dog intake was associated with those respondents; 5. Percentage of total intake reported by survey respondents in each of the satisfaction categories; Source: Rescue survey (n=58; DAS Chameleon database; interviews with rescue organizations; BCG best practices in Key Account Management; BCG analysis
### Resource requirements: Additional FTE will cost ~$51k annually

#### Assumptions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 large partners require an hour a week</td>
<td>20 hrs/wk.</td>
</tr>
<tr>
<td>All small partners require 2 hours a day</td>
<td>20 hrs/wk.</td>
</tr>
</tbody>
</table>

| Total FTEs required for account management     | ~1             |

| Transfer coordinator salary                   | $51k           |

| Total costs                                   | $51k           |

#### Today, transfer coordinator spends time reacting

- **Answering partners’ questions about dogs**
  - 36%
- **Tagging/pulling dogs**
  - 54%
- **Sending targeted emails**
  - 5%
- **Misc.**
  - 5%

#### With additional employee, time to manage accounts

- **Spend half of week on proactive outreach and custom needs for 10 large partners**
  - E.g., develop specialized reports
  - E.g., Develop MOU agreements with partners

- **Spend half of week on addressing common needs and processes for smaller partners**
  - E.g., streamline tagging process

---

1. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; Source: Interviews with DAS employees; BCG best practices in Key Account Management, Texas Tribune; BCG analysis

---

"There are so many administrative tasks to do. We need one person who can really focus on partnerships.."
Rescue organizations take 35% of all of their intake from municipal shelters—10% from DAS and 25% from others

Reported January – July 2016 dog intake of rescue organizations

Jan-July 2016 Dog Intake

Source of intake

1. According to rescue survey, 58 orgs. have had a total intake of 21,208 as of the time of this survey; Question: What percentage of your 2016 intake came from [source]... (n=48); Source: Rescue and Animal Organization survey (n=72); BCG analysis
Dallas rescue organization landscape concentrated with large organizations rescuing majority of dogs

Reported 2015 dog intake of rescue organizations

2015 Dog Intake\(^1\)

<table>
<thead>
<tr>
<th>Size rank</th>
<th>Total(^1)</th>
<th>Rescues 16-58</th>
<th>Rescues 4-12</th>
<th>Top 3 Rescues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large rescue orgs</td>
<td>30,867</td>
<td>5,439 (18%)</td>
<td>5,055 (16%)</td>
<td>20,373 (66%)</td>
</tr>
<tr>
<td>Small rescue orgs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Includes all rescue organizations that took the Rescue and Animal Organization Survey; Question: Approximately how many dogs did your organization take in during 2015? (n=58); Note: Gini coefficient is .76; Note: Large rescue organizations defined as having 2015 intake > 40; Source: Rescue and Animal Organization survey (n=72); BCG analysis
Large rescues get 8% of their dogs from DAS, small 17%

**i** Large rescues pull 8% dogs from DAS

Estimated 2016 dog intake of large rescue orgs.¹

<table>
<thead>
<tr>
<th>Source of Intake²</th>
<th>Municipal Shelters</th>
<th>Owner Surrender</th>
<th>Street Rescue</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-DAS</td>
<td>10,170</td>
<td>18,570</td>
<td>4,351</td>
<td>4,518</td>
<td>37,608</td>
</tr>
<tr>
<td>DAS</td>
<td>19%</td>
<td>49%</td>
<td>12%</td>
<td>12%</td>
<td>8%</td>
</tr>
</tbody>
</table>

**ii** Small rescues pull 17% dogs from DAS

Estimated 2016 dog intake of small rescue orgs.¹

<table>
<thead>
<tr>
<th>Source of Intake²</th>
<th>Municipal Shelters</th>
<th>Owner Surrender</th>
<th>Street Rescue</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-DAS</td>
<td>5,635</td>
<td>1,524</td>
<td>1,524</td>
<td>922</td>
<td>8,392</td>
</tr>
<tr>
<td>DAS</td>
<td>17%</td>
<td>18%</td>
<td>17%</td>
<td>4%</td>
<td>83%</td>
</tr>
</tbody>
</table>

1. According to rescue survey, 58 orgs. have had a total intake of 21,483 YTD. Multiplied this by 2 and rounded up to 46k to account for the orgs. that did not take this survey. Then, used assumption that 82% of dog intake is attributed to large rescues as was the response from the Rescue and Animal Organization Survey for both 2015 and 2016 YTD intake numbers; Question: What percentage of your 2016 intake came from [source]… (n=48); Note: Large rescue organizations defined as having 2015 intake > 400; Note: Assumes that the distribution of sources from the survey is similar to all rescue organizations in the Dallas area; Source: Rescue and Animal Organization survey (n=72); BCG analysis
~40% orgs. have **decreased** intake from DAS; 30% have **increased**

**How has the total number of dogs you have pulled from Dallas Animal Services changed in the past 3 years?**

<table>
<thead>
<tr>
<th>Segment of rescue org.</th>
<th>Many fewer dogs than in previous years</th>
<th>Slightly fewer dogs than in previous years</th>
<th>About the same amount of dogs as in previous years</th>
<th>Slightly more dogs than in previous years</th>
<th>Many more dogs than in previous years</th>
</tr>
</thead>
<tbody>
<tr>
<td>All orgs.</td>
<td>29</td>
<td>10</td>
<td>31</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Large orgs.</td>
<td>27</td>
<td>9</td>
<td>18</td>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td>Small orgs.</td>
<td>29</td>
<td>10</td>
<td>34</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Question: How has the total number of dogs you have pulled from Dallas Animal Services changed in the past 3 years? (n=52); Note: Large organizations defined as having >400 dog intake in 2015; Source: Rescue and Animal Organization survey (n=72); BCG analysis
**3.3.2**

**Unique reasons and personal relationships most frequent causes for decrease in DAS transfers**

**Factors causing decrease in DAS transfers**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other (unique reasons)</td>
<td>60</td>
</tr>
<tr>
<td>Poor relationship with DAS staff</td>
<td>35</td>
</tr>
<tr>
<td>Process of pulling dogs from DAS was too difficult</td>
<td>20</td>
</tr>
<tr>
<td>You weren’t able to pull the types of dogs that you wanted</td>
<td>15</td>
</tr>
<tr>
<td>Negative media attention around DAS</td>
<td>10</td>
</tr>
<tr>
<td>An overall decrease in size of your organization</td>
<td>5</td>
</tr>
<tr>
<td>Information that you receive from DAS was too difficult to access</td>
<td>5</td>
</tr>
<tr>
<td>Health condition of the animals at DAS was too much of a risk for your organization</td>
<td></td>
</tr>
<tr>
<td>Health/behavior information posted on the dogs was inaccurate</td>
<td>0</td>
</tr>
</tbody>
</table>

Of organizations that have decreased number of DAS transfers in the last 3 years, 35% claim poor relationships were a driving factor.

**Unique reasons**

- "They don't respond to emails or phone messages"
- "Other groups pulling [the specific breed] first"
- "I can’t get certificates of sterilization from DAS"
- "I got behind on sending in proof of spay/neuter and just don't have the time to do all that paperwork"
- "We focus efforts in Grayson County"
- "Greater need in surrounding areas and fewer rescues working with those facilities; DAS seems to have some very large groups who have picked up the slack"
### Reasons for increasing DAS transfers

<table>
<thead>
<tr>
<th>Reason</th>
<th>Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>You developed personal relationships and trust with the DAS staff</td>
<td>69</td>
</tr>
<tr>
<td>Process of pulling dogs from DAS got easier</td>
<td>31</td>
</tr>
<tr>
<td>Information that you receive from DAS became easier to access</td>
<td>31</td>
</tr>
<tr>
<td>Health condition of the animals at DAS improved</td>
<td>25</td>
</tr>
<tr>
<td>Increase in size of your overall organization</td>
<td>19</td>
</tr>
<tr>
<td>You were able to pull more of the dogs that you wanted</td>
<td>19</td>
</tr>
<tr>
<td>Other (unique reasons)</td>
<td>19</td>
</tr>
<tr>
<td>Information you received on a dog's behavior/health became more accurate</td>
<td>13</td>
</tr>
</tbody>
</table>

Of organizations that have increased number of DAS transfers, 69% claim personal relationships a driving factor.

**Other unique reasons**

- "We were granted extra time by Danielle to get a foster in place which helped tremendously"
- "The ability to transport out of state"
- "Fantastic volunteer shelter named [xx] has helped by notifying us of Labs in the shelter"

Question: What factors have most contributed to the increase in the number of dogs you pulled from DAS? (n=16); Source: Rescue and Animal Organization survey (n=72); BCG analysis
To increase transfers from *small* rescues, DAS can build relationships, improve tagging and info sharing

### Survey showed three pain points for lrg. orgs.

<table>
<thead>
<tr>
<th>Pain Points</th>
<th>% of Large Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build stronger personal relationships with its rescue partners</td>
<td>49%</td>
</tr>
<tr>
<td>Improve process for tagging/pulling dogs</td>
<td>46%</td>
</tr>
<tr>
<td>Provide more access to info regarding the dogs</td>
<td>44%</td>
</tr>
<tr>
<td>Improve overall health of dogs at the shelter</td>
<td>10%</td>
</tr>
<tr>
<td>Improve quality of info posted about a dog</td>
<td>18%</td>
</tr>
<tr>
<td>Allow your org. to pull more of the type of dogs you prefer</td>
<td>10%</td>
</tr>
<tr>
<td>Assist in transporting dogs to orgs. in Dallas area</td>
<td>23%</td>
</tr>
<tr>
<td>Lower the cost of adopting dogs from DAS</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>26%</td>
</tr>
</tbody>
</table>

### DAS can respond to pain points with four actions ...

1. Create monthly meetings for rescue partners to hear their needs and develop a rapport
2. Automate tagging process so it is self-service
3. Create clear processes around pulling dogs and make them transparent
4. Enrich Pet Harbor dog profiles that partners can access

---

Note: Small rescues defined as having <400 dog intake in 2015; Source: Rescue survey; interviews with rescue organizations; BCG analysis
To increase transfers from *large* rescues, DAS can address specific needs and improve tagging and info

**Survey showed three pain points for lrg. orgs.**

- Other: specific needs (55%)
- Improve process for tagging/pulling dogs (45%)
- Improve quality of info posted about a dog (36%)
- Improve overall health of dogs at the shelter (27%)
- Lower the cost of adopting dogs from DAS (27%)
- Assist in transporting dogs to orgs. in Dallas area (27%)
- Build stronger relationships with rescue partners (27%)
- Provide more access to info regarding the dogs (18%)
- Allow your org. to pull more of the type of dogs you prefer (9%)

**DAS can respond to pain points with five actions …**

1. Provide higher touch relationships to better understand their needs
2. Tailor transfer coordinator relationship to the diverse specific needs of each large partner
3. Create MOUs with expedited processes for larger partners to pull dogs
4. Automate tagging process so it is self-service
5. Enrich Pet Harbor dog profiles that partners can access

Note: Large rescues defined as having >400 dog intake in 2015; Source: Rescue survey; interviews with rescue organizations; BCG analysis
Customer satisfaction scores for large vs. small rescues

Q: Please rate the following statements about Dallas Animal Services

<table>
<thead>
<tr>
<th>Statement</th>
<th>Large rescue orgs.</th>
<th>Small rescue orgs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The team at DAS is helpful and supportive of our work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dogs I pull from DAS are comparable in health to those I pull from other shelters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Das has improved over the last 3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the level of health assessments at DAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the type of info I have about the dogs I am trying to network or foster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The process for a rescue organization to tag or pull dogs from DAS is well organized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The process for a rescue organization to tag or pull dogs from DAS is fair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to pull the types of dogs I want from DAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with DAS overall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The process for a rescue org. to tag or pull dogs from DAS is easy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the level of behavior evaluations at DAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that DAS provides adequate animal enrichment activities for the dogs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAS receives enough resources to perform its mission</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. N=11; 2. N=41; Question: Please rate the following statements about Dallas Animal Services (n=52); Note: Large organizations defined as having >400 dog intake in 2015; Note: Excludes "no opinion"; Source: Rescue and Animal Organization survey (n=72); BCG analysis

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Considerations for transfer partner relationship management

1. Key account management is always custom-tailored
   - Standardized procedure, but
   - Company-specific solutions

2. For key account management to be introduced there must be sufficient potential
   - Key account management incurs cost
   - Key accounts must produce higher sales and earnings to be profitable
   - Prior to introducing high touch account management, it should be checked if there is a possibility that negative economic effects prevail when relationships are focused on one

3. Smaller accounts can also be improved through the model
   - Considering the needs of smaller customers as a whole will improve experience for all
   - Some changes implemented in response to key accounts can also benefit smaller accounts

Source: BCG experience BCG analysis
20160826_BCG_DallasDog_InitiativeDetail_vPublic.pptx
Overview: DAS should establish a pet transport program to facilitate out-of-state adoptions

Summary of research and findings

- **Context:** Transporting dogs via fosters and ground pet transport companies is a relatively low cost way to deliver southern dogs to northern adopters.
- **Key takeaway:** After establishing or linking into a robust transfer/transport network, DAS could feasibly transport 900-2,000 dogs a year out-of-state.
- **Overall recommendation:** Invest in a full time supervisor employee to develop and grow the transfer/transport network structure

Estimated Impact

**Methodology**
- Analyze varying scale deployments of shelter/foster networks to transport dogs to northern cities
  - Leverage utilization/capacity rates for fosters to hold and then transport successive dogs throughout the year

**Key Assumptions**
- 1 dog can be held at one foster home
- Foster network of 100 homes can be cultivated
- Transport company can make 50 trips a year
- No "demand" constraint from northern adopters

Resource Requirements

**Methodology**
- Analyze projected cost of implementing transport program at DAS, size based on estimated number of dogs adopted
  - Break program costs into yearly (fixed) and per dog costs incurred

**Key Assumptions**
- 1 supervisor @ $51k/yr
- Pet food provided = $21/two week hold period
- Incremental cost for S/N and vetting = $96
- DAS does not pay for the actual cost of transport – paid for by individual adopter

**Incremental ~900-2,000 dogs adopted / year**

**Incremental cost of ~$156k - $285k / year**

Note: Sources and assumptions listed in detail on each relevant backup slide
Industry overview

Pet Transport options available to safely move animals long distances

- **Types:** both plane and car/van/truck
- **Customers:** both individuals and other shelters
  - Pet Transport companies themselves act as "intermediary" between parties
- **Prices:** vary by type of service – air is fastest and most expensive, ground is cheaper, but can take several days
- **Key players:** Several large, fee based organizations operate national networks, many smaller scale no-cost volunteer organizations operate with specialized networks (e.g, NorCAL, Pit bulls)

### Detailed Description

<table>
<thead>
<tr>
<th>Transport options</th>
<th>Detailed Description</th>
<th>Approx. cost</th>
<th>Key players</th>
<th>Bottom line</th>
</tr>
</thead>
</table>
| **Air**           | Companies using dedicated planes, or leased space on commercial/ passenger planes to transport animals  
Individually coordinated primarily between fosters and individuals, low capacity of transport | ~$700-$1,400¹ | **Happy Tails Travel Inc. and Pilot N Paws** | High per animal price² and low available capacity |
| **Ground**        | Companies using commercial vehicles to transport (e.g., high capacity trucks). Multiple day journeys broken up by pre determined wellness stops.  
- **Primarily transport for individual adoptions, at scale**  
  - Animals originating from transfer partners/ foster destined for individual adopters out of state  
  - Individual adopters typically cover cost of transport  
- **Occasionally shelter – shelter group transfers**  
  - Transport from one shelter/foster⁴ to a different out of state shelter  
  - Less frequent because of 1) Cost – question of which shelter should cover, and 2) Logistics – necessity of additional ground transport from "drop off" point to destination shelter | ~$100-$200³ | **Pets LLC, Paws Without Boarders Inc., and Rescue Road Trips Inc.** | Relatively low per animal price³, large trip capacity, and defined route network |

1. Typically covers cost of transport door to door; 2. Given high cost of air transport, many volunteer organizations operate in this space – linking slack pilot capacity with animals requiring transport; 3. Includes only cost of transport – does not include cost to foster/board out of shelter, cost to S/N, vaccinate, or food. 4. Ground transports across state lines typically require week-two week "out of shelter" holding period before transport; Source: Company websites, Expert Interviews, BCG analysis
Process and responsibilities for ground pet transport (I/II)
Assuming that DAS leverages transfer partner foster network

Overview

1. **Transfer**
   - DAS coordinates with transfer partners to transfer animal to a partner shelter

2. **Foster**
   - Partner shelter leverages available foster network, finds minimum 2 week foster for animal

3. **Identify adopter**
   - Search for and connect with individual adopter (likely in northern city)

4. **Reserve transport**
   - DAS/shelter/foster/adopter coordinate to organize pick up and drop off of animal

5. **Pick up & transport**
   - Transport company picks up animal at set pick up location, trucks to adopter over several day journey

6. **Deliver**
   - Transport company delivers adopted animal at set drop location around adopter

**Process and Cost Responsibilities include...**

<table>
<thead>
<tr>
<th>Process</th>
<th>DAS</th>
<th>Shelter/Foster</th>
<th>Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: Transfer coord. identifies shelter w/ space</td>
<td>Basic vet care</td>
<td>Food for stay</td>
<td></td>
</tr>
<tr>
<td>Cost:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost: Ongoing food for foster duration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Intake animal in temporary capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Foster takes animal from shelter, houses for 2 wk period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Transport Supv leads adopter search (WOM, social media)</td>
<td>Ongoing food for foster duration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Assist Transport Supv in connecting adopters with fosters (word of mouth, social media)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Transport Supv confirms adoption and transport method</td>
<td>Ongoing food for foster duration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Shelter, foster, assist Transport Supv in coordinating w/ Transport company for logistics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Coordinate with DAS/shelter/foster and adopter on pick up and drop off location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process: Shelter and foster deliver animal to transport company with necessary paperwork</td>
<td></td>
<td>Food, care, transit</td>
<td></td>
</tr>
<tr>
<td>Process: Transport company delivers specific dog to adopter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Transport cost typically covered entirely by adopter (at mkt price)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Expert interviews, company websites, BCG analysis

The Boston Consulting Group
### Overview

**DAS coordinates with its shelter network, finds minimum two week foster for animal**

**Process:** Foster takes animal from DAS, houses for 2 wk period

**Cost:** Ongoing food for foster duration

<table>
<thead>
<tr>
<th>Process and Cost Responsibilities include...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview</strong></td>
</tr>
<tr>
<td><strong>DAS</strong></td>
</tr>
<tr>
<td><strong>Foster</strong></td>
</tr>
<tr>
<td><strong>Transport</strong></td>
</tr>
</tbody>
</table>

### Process and Cost

1. **Foster**
   - **Identify adopter**
     - **Search for and connect with individual adopter (likely in northern city)**
       - **Process:** Transport Supv leads adopter search (WOM, social media)
       - **Cost:** Ongoing food for foster duration

2. **Foster**
   - **Reserve transport**
     - **DAS/foster/adopter coordinate to organize pick up and drop off of animal**
       - **Process:** Transport supv confirms adoption and transport method
       - **Cost:** Ongoing food for foster duration

3. **Foster**
   - **Pick up & transport**
     - **Transport company picks up animal at set pick up location, trucks to adopter over several day journey**
       - **Process:** Foster assists Transport Supv in coordinating w/ Transport company for logistics

4. **Foster**
   - **Deliver**
     - **Transport company delivers adopted animal at set drop location around adopter**
       - **Process:** Coordinate with DAS/ foster and adopter on pick up and drop off location

      **Note:** Transport cost typically covered entirely by adopter (at mkt price)

### Cost

- **Transport company delivers specific dog to adopter**
  - **Cost:** Food, care, transit
Estimated impact: Potential to transport ~900-2,000 dogs each year by implementing a robust pet transport program

Key assumptions

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster dog capacity per home</td>
<td>1 dog</td>
</tr>
<tr>
<td>Number of potential “Transport” trips per year</td>
<td>50</td>
</tr>
<tr>
<td>Minimum dog stay in foster before transport</td>
<td>2 wks</td>
</tr>
<tr>
<td>Num fosters per year</td>
<td>15-20</td>
</tr>
<tr>
<td>Achievable foster network size</td>
<td>60-100 homes</td>
</tr>
</tbody>
</table>

Potential number of DAS dogs for transport depends on size and activity of transfer and foster network

Transport projections rely on robust foster network
- Setting up own DAS network or “Plugging in” to different shelter’s existing foster network is key enabling criteria
- Either option requires at least partially dedicated DAS resource to coordinate
  - Estimated 1 full incremental FTE required to increase Transport coordination efforts

1. Estimated based on Expert Interviews and nationwide animal service staff benchmarks; Source: Transport websites, Expert interviews; BCG analysis
**Resource requirements: Implementing a robust pet transport program would cost ~$156k-$285k each year**

### Key assumptions

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster dog capacity per home</td>
<td>1 dogs</td>
</tr>
<tr>
<td>Number of potential &quot;Transport&quot; trucks per year</td>
<td>50</td>
</tr>
<tr>
<td>Minimum dog stay in foster before transport</td>
<td>2 wks</td>
</tr>
<tr>
<td>Num fosters per year</td>
<td>15-20</td>
</tr>
<tr>
<td>Achievable foster network size</td>
<td>60-100 homes</td>
</tr>
<tr>
<td>Staffing requirement</td>
<td>1 supv. employee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost to transport (Excluding transport fee)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental cost of dog adoption</td>
<td>$96(^1)</td>
</tr>
<tr>
<td>Pet food expense (per dog)</td>
<td>$21(^2)</td>
</tr>
<tr>
<td>1 Supv employee (yearly)</td>
<td>$51k(^3)</td>
</tr>
</tbody>
</table>

### Transport costs (excluding transport company fee) driven by supervisor salary and vet / dog food costs

- **Conservative, few fosters:**
  - 156
  - 165
  - 203
  - 215
  - 215
  - 227
  - 238
  - 250
  - 262
  - 273
  - 285

- **Stretch, many foster:**
  - ~$156k - $285k

### Cost to transport ($k)

- **High cost**
  - 1 dog per foster
  - 20 fosters / per year

- **Low cost**
  - 1 dog per foster
  - 15 fosters / per year

### Approx. annual cost:

- ~$156k - $285k

---

1. Estimated incremental cost of adoption, inclusive of S/N and vaccine cost; 2. Assumed to cover two weeks of pet food expenses; 3. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; 4. Rates for PETS LLC, Rescue Road Trips, Alpha Dog Transport; Source: Company websites, Petfinder.com, Texas Tribune Government Salaries Explorer; BCG analysis

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### Overview: DAS should deflect owner surrenders through owner assistance programs

**Summary of research and findings**

- **Context:** Owner surrender deflection provides resources to pet owners to keep their pets at home instead of surrendering to the animal shelter.
- **Key takeaway:** Surrender deflection program at DAS has the potential to deflect ~2,600 dogs from ever entering DAS intake.
- **Overall recommendation:** Invest in building out a full DAS Pet Retention program.

### Estimated Impact

**Methodology**
- Survey pet owners surrendering their pets to DAS to identify reasons for surrender and potential reasons for retention
- Project estimated animals retained by extrapolating reasons for retention on current base of owner surrendered animals

**Key Assumptions**
- 2015 DAS dog intake = 20,807
- 2015 dog intake through owner surrender = 32%
- 2015 owner surrender dogs = 6,624

Incremental ~2,600 dogs retained at home

### Resource Requirements

**Methodology**
- Break out fixed and variable costs associated with each pillar of DAS surrender deflection program
- Develop high and low cost projections based on varying resource levels

**Key Assumptions**
- Coordinator employee = ~$51k/year
- Dog run, routine vet care, S/N surgeries, food assistance, and behavior courses costs from community

Incremental cost of ~$26k / year

---

Note: Sources and assumptions listed in detail on each relevant backup slide.

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Developed sample Owner Deflection Program in "lean" and "robust" options to support impact and resource sizing

### Program Pillars

<table>
<thead>
<tr>
<th>Resources Available to Pet Owners</th>
<th>Program Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Construction of Dog Run/Fence</td>
<td>- DAS supervisor responsible for creating and overseeing pet retention program</td>
</tr>
<tr>
<td>ii Assistance with Routine Veterinary Care</td>
<td>- Support construction of fence or dog run</td>
</tr>
<tr>
<td>iii Provision of Spay/Neuter Surgery</td>
<td>- Support pet with routine veterinary procedure</td>
</tr>
<tr>
<td>iv Assistance with Pet Food Expenses</td>
<td>- Assist with S/N surgery for pet</td>
</tr>
<tr>
<td>v Assistance with Behavior Courses</td>
<td>- Assist with 1 month of obedience classes</td>
</tr>
<tr>
<td>vi Assistance with Finding Temporary Home</td>
<td>- Connect with available networks or resources for temporary foster</td>
</tr>
<tr>
<td>vii Removal of Tickets/Citations from ASOs</td>
<td>- Void or remove existing /citations from ASOs</td>
</tr>
</tbody>
</table>

### Description

- **"Lean"**
  - Pay for portion of fence or dog run construction
  - Pay for routine vet care
  - Pay for full fence or dog run construction
  - Connect w/ free or discounted resources

- **"Robust"**
  - Pay for S/N surgery
  - Pay for 1 month of pet food
  - Pay for 1 month of obedience course
  - Connect w/ free or discounted resources

### Implementation Options

- **"Lean"**
  - Connect pet owner with existing support services – low cost to implement

- **"Robust"**
  - Provide free service/care to pet owners – higher cost to implement

*Note: "Robust" option provides all services to pet owners for free; assumes discounts are less effective retention strategy*
### Pet Retention Program "Intervention"

<table>
<thead>
<tr>
<th>Option</th>
<th>&quot;Lean&quot; option availability</th>
<th>DFW resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of Dog Run/Fence</td>
<td>- Dallas Animal Services pays for portion of fence or dog run construction</td>
<td></td>
</tr>
<tr>
<td>Assistance with Routine Veterinary Care</td>
<td>- Discounted routine veterinary care for pets (vaccinations, wellness check up, etc.)</td>
<td></td>
</tr>
<tr>
<td>Provision of Spay/Neuter Surgery</td>
<td>- Discounted Spay/Neuter surgery for pets</td>
<td></td>
</tr>
<tr>
<td>Assistance with Pet Food Expenses</td>
<td>- Discounted/Free pet food products, based on donation availability</td>
<td></td>
</tr>
<tr>
<td>Assistance with Behavior Courses</td>
<td>- Free online training resources for pet owners</td>
<td></td>
</tr>
<tr>
<td>Assistance with Finding Temporary Home</td>
<td>- Emergency temporary boarding in extreme circumstances (e.g., fire, domestic abuse)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Temporary foster while animal awaits new permanent home</td>
<td></td>
</tr>
<tr>
<td>Removal of Tickets/ Citations from ASOs</td>
<td>- Dallas Animal Services &quot;forgives&quot; tickets and citations from record</td>
<td></td>
</tr>
</tbody>
</table>
Estimated impact: Owner Surrender Deflection Program has potential to deflect ~2,600 dogs per year

Key assumptions

Surveyed reason for surrender at DAS¹

<table>
<thead>
<tr>
<th>Reason</th>
<th>% of respondents indicating surrender reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard Housing</td>
<td>30</td>
</tr>
<tr>
<td>Cost of every day care</td>
<td>25</td>
</tr>
<tr>
<td>Cost of medical care</td>
<td>20</td>
</tr>
<tr>
<td>Lack of time</td>
<td>16</td>
</tr>
<tr>
<td>Personal health</td>
<td>14</td>
</tr>
<tr>
<td>Moving</td>
<td>9</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>7</td>
</tr>
<tr>
<td>Animal Service Officers</td>
<td>5</td>
</tr>
<tr>
<td>Euthanasia</td>
<td>2</td>
</tr>
<tr>
<td>Animal aggression</td>
<td>2</td>
</tr>
</tbody>
</table>

Surveyed reason for retention at DAS²

<table>
<thead>
<tr>
<th>Reason</th>
<th>% of respondents indicating retention reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not want animal</td>
<td>47</td>
</tr>
<tr>
<td>Temporary Home</td>
<td>14</td>
</tr>
<tr>
<td>Vet Care</td>
<td>14</td>
</tr>
<tr>
<td>Dog run/fencing</td>
<td>10</td>
</tr>
<tr>
<td>Pet food Products</td>
<td>5</td>
</tr>
<tr>
<td>Obedience courses</td>
<td>3</td>
</tr>
<tr>
<td>S/N Surgery</td>
<td>3</td>
</tr>
<tr>
<td>Removal</td>
<td>1</td>
</tr>
</tbody>
</table>

Projected Retention Impact

Projected dogs retained

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of dogs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary Home</td>
<td>946</td>
</tr>
<tr>
<td>Vet Care</td>
<td>341</td>
</tr>
<tr>
<td>Dog run/fencing</td>
<td>199</td>
</tr>
<tr>
<td>Pet food Products</td>
<td>199</td>
</tr>
<tr>
<td>Obedience courses</td>
<td>199</td>
</tr>
<tr>
<td>Tickets/citations Removal</td>
<td>189</td>
</tr>
<tr>
<td>Total</td>
<td>2,593</td>
</tr>
</tbody>
</table>

Potential ~2,600 dogs “deflected” per year

Impact logic:

Reasons owner surrenders pet (%) → Interventions that would make owner keep pet (%) → # dogs surrendered

1. Q: Why are you bringing this animal to DAS today?; 2. Q: If any of the following were available to you, would you choose to keep this animal?; Source: DAS Chameleon database, July 2016 DAS Owner Intake Survey (n = 44), BCG analysis
**Resource requirements: Deflection program costs ~$26k a year**

**Key assumptions**

<table>
<thead>
<tr>
<th>Program coordinator</th>
<th>½ FTE @ $51k/yr¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DAS Owner Deflection:</strong></td>
<td></td>
</tr>
<tr>
<td>i) Dog Run/ Fence</td>
<td>-</td>
</tr>
<tr>
<td>ii) Routine Vet Care</td>
<td>-</td>
</tr>
<tr>
<td>iii) S/N Surgery</td>
<td>-</td>
</tr>
<tr>
<td>iv) Pet Food Expense</td>
<td>-</td>
</tr>
<tr>
<td>v) Behavior Courses</td>
<td>-</td>
</tr>
<tr>
<td>vi) Temporary Foster</td>
<td>-</td>
</tr>
<tr>
<td>vii) Remove Citations</td>
<td>-</td>
</tr>
</tbody>
</table>

**Estimated yearly costs of Owner Deflection Program**

![Incremental cost of ~$26k per year](image)

1. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; Source: DAS Chameleon database, PetFinder.Com "Annual Dog Care Costs", Texas Tribune Government Salaries Explorer, BCG analysis
**Overview:** DAS should provide enhanced behavior training to increase the adoptability of dogs

<table>
<thead>
<tr>
<th>Summary of research and findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context:</strong> ~5,800 dogs &quot;sufficiently healthy&quot; (TR or TM(^1)) for adoption were euthanized for behavioral reasons in 2015</td>
</tr>
<tr>
<td><strong>Key takeaway:</strong> Providing behavior training to this volume of adoptable but euthanized dogs would result in ~700–1,300 incremental adoptions each year</td>
</tr>
<tr>
<td><strong>Overall recommendation:</strong> DAS should provide behavior training to a subset of dogs that are &quot;sufficiently healthy&quot; for adoption in order to increase their chances of adoption</td>
</tr>
</tbody>
</table>

### Estimated Impact

#### Methodology
- Determine "sufficiently healthy" dogs for adoption that were euthanized for behavior reasons
- Determine subset of this population that could be adopted after having taken behavior training classes

#### Key Assumptions
- 49% of dogs are euthanized for behavior reasons
- At most 46% of dogs would be adopted after

**Note:** Dog does not have to be in shelter for training. Coupons to be given to adopted dogs

**Incremental ~700 – 1,300 dog adoptions / year**

### Resource Requirements

#### Methodology
- Determine the incremental cost of adopting a dog vs. euthanasia
- Project the total cost of behavior classes for adopted dogs

#### Key Assumptions
- Cost of adopted dog = $96
- Behavior classes = $21–$46/month

**Incremental cost of ~$392k - $770k / year**

1. Asilomar animal health classifications: TR = Treatable- Rehabilitatable, TM = Treatable- Manageable; Note: Sources and assumptions listed in detail on each relevant backup slide
Est. Impact: Training "sufficiently healthy" dogs could lead to incremental ~700 - 1,300 adoptions

Key assumptions

% of dogs euthanized for behavior reasons\(^4\) 49%
% of dogs adopted after behavior classes\(^5\) 25%-46%

Though "TR"\(^1\) & "TM"\(^2\) dogs "sufficiently healthy"\(^3\) for adoption, ~5.8k are euthanized...

...of this ~5.8k, ~50% are euthanized for behavior

Can Increase adoptions by training "TR"\(^1\) & "TM"\(^2\) dogs

Impact logic:

Euthanized dogs that are "Sufficiently healthy"\(^3\) to have been adopted

~50% of these euthanized dogs are euthanized for behavior reasons

25%-46% efficacy of training programs spurring adoptions

Incremental ~700 – 1,300 dogs adopted

---

1. Treatable Rehabilitatable; 2. Treatable Manageable; 3. "Sufficiently healthy" refers to TR & TM dogs that are technically healthy enough to be adopted, according to DAS staff and DAS Chameleon data; 4. Statistic from DAS Chameleon data; 5. Statistic based on academic report "The Effects of Training and Environmental Alterations on Adoption Success of Shelter Dogs"; 6. "Other" includes RTO and Transferred dogs; Source: DAS Chameleon Database, Expert Interviews, "The Effects of Training and Environmental Alterations on Adoption Success of Shelter Dogs" – Luescher and Medlock, BCG analysis
Resource requirements: Providing training courses to all "sufficiently healthy" dogs costs ~$392k-$770k yearly

Key assumptions

<table>
<thead>
<tr>
<th>Incremental Cost Increase of Adopted Dog</th>
<th>$96/dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Behavior Classes</td>
<td></td>
</tr>
<tr>
<td>Low end adoption: behavior classes for one month</td>
<td>$21/dog</td>
</tr>
<tr>
<td>High end adoption: behavior classes for two months</td>
<td>$42/dog</td>
</tr>
</tbody>
</table>

Resources required dependent upon adoption volume

Low End Cost Estimate: (~700 adoptions)

High End Cost Estimate (~1,300 adoptions)

Incremental cost of ~$392k - $770k

1. Treatable Rehabilitatable; 2. Treatable Manageable; 3. Cannot assume to know which "TM" & "TR" dogs will require training, must offer training to full population of "TR" and "TM"

Overview: DAS should hire 1 vet and 2 vet techs to perform S/N and vaccinations for incremental dog adoptions

Summary of research and findings

- **Context:** There is a legal requirement for DAS to spay or neuter and vaccinate all dogs that are adopted
- **Key takeaway:** Due to recommendations increasing number of adoptions, additional staff needs to be hired to perform surgeries and vaccinate
- **Overall recommendation:** DAS should hire 1 veterinarian and 2 vet techs due to the increase in spay/neuters that are required for increasing adoptions

Recommendation

DAS should hire additional staff to perform spay/neuter surgeries and administer vaccines on the incremental adoptions

- 1 veterinarian
- 2 vet technicians

Rationale

- Assumes team can perform up to 8,000 surgeries annually
- Labor costs have been allocated across the recommendations

Source: BCG analysis
Recommendation 4: Provide 46,000 free spay and neuter surgeries in southern Dallas each year for next three years
Overview: The Dallas community should provide 46,000 low-cost S/N surgeries for each of the next 3 years

<table>
<thead>
<tr>
<th>Summary of research and findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context</strong>: Intact male dogs account for 70-75% of bites. There are currently 5k low-cost sterilization surgeries yearly in southern Dallas – potential to control population by increasing availability</td>
</tr>
<tr>
<td><strong>Key takeaway</strong>: Community can sterilize dog population and increase public safety by increasing number of available low-cost surgeries to 46k a year at a total cost of ~$7.5MM a year.</td>
</tr>
<tr>
<td><strong>Overall recommendation</strong>: Invest in resources and coordination efforts for surge spay/neuter throughout southern Dallas</td>
</tr>
</tbody>
</table>

### Estimated Impact

**Methodology**
- Analyze number of intact dogs and sterilization surgeries needed per zip code
  - Determine intact population based on DAS intake by zip code

**Key Assumptions**
- 6% of dogs are loose
- 50/50 sex ratio
- 1.16 litters a year, 7 puppies a litter, 75% birth survival rate for average of 6.09 puppies/year
- 10 year life expectancy
- 2.8% of owned dogs can breed

### Resource Requirements

**Methodology**
- Break out distinct components of incremental costs associated with providing more spay/neuter surgeries
  - Incremental labor cost: labor cost for vets, vet techs, project manager
  - Incremental location cost: cost to purchase vans
  - Incremental supplies cost: vaccination costs

**Key Assumptions**
- $50k marketing budget, $100k project manager budget, $60/surgery for vet, $40k vet tech salary
- ~$70 supplies per surgery

**Incremental 46k surgeries / year**

**Incremental cost of ~$7.5MM / year**

Source: Canine aggression toward people: bite scenarios and prevention; Which dogs bite? A case-control study of risk factors; BCG analysis
Estimated Impact: Increase low-cost spay/neuter efforts to 46k surgeries annually

Key assumptions

- 6% of dogs roaming
- 50/50 sex ratio
- 1.16 litters a year, 7 puppies a litter, 75% birth survival rate for 6.09 puppies a year
- 10 year life expectancy
- 2.8% of owned dogs breeding
- 100% loose dogs breeding
- 14k DAS intake yearly
- 5k sterilized placements back into southern Dallas yearly

Surgeries needed to sterilize population

By increasing S/N surgeries to 46k a year, intact dog population will be sterilized in 3 years

Estimated Impact

Dogs born with no home

Intact Dogs in southern Dallas (%)

1. Assumes gradual ramp up to 46,000 surgeries. Intact population to stop at 20% due to people not wanting to sterilize their pets.; Source: Experian Current Year Estimates (Q2 2015) for population data, AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994; BCG analysis

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### Resource requirements: Community coordination and investment of ~$7.5MM necessary to reach S/N targets

<table>
<thead>
<tr>
<th>Additional Spay Days (DAS)</th>
<th>New Mobile Units to fill gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted surgeries per year</td>
<td>5,880</td>
</tr>
<tr>
<td>Cost per surgery</td>
<td>$160</td>
</tr>
<tr>
<td>Total cost for surgery</td>
<td>~$950k</td>
</tr>
<tr>
<td>Total indirect costs</td>
<td>~$227k</td>
</tr>
</tbody>
</table>

- **Open Spay Days to 8 days / month²**
  - Additional 35,194 surgeries required to hit 46k spay/neuter target. Cost is for 5 mobile units that have capacity for 37,500.
  - Spay Days currently open once per month.

- **5 new mobile units**
  - Units focused on dogs

---

¹. Additional 35,194 surgeries required to hit 46k spay/neuter target. Cost is for 5 mobile units that have capacity for 37,500; ². Spay Days currently open once per month; Source: BCG analysis.
# Program costs vary slightly depending on how surgeries delivered

<table>
<thead>
<tr>
<th>Direct Costs:</th>
<th>What's Included</th>
<th>Total Cost</th>
<th>DAS Cost/Surgery(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Requirements</td>
<td></td>
<td>(5,880 surgeries)</td>
<td></td>
</tr>
<tr>
<td><strong>Facilities</strong></td>
<td></td>
<td>Mobile Cost/ Surgery(^2)</td>
<td></td>
</tr>
<tr>
<td>Transport vehicle(^3)</td>
<td>12k/vehicle/year</td>
<td>2</td>
<td>n/a</td>
</tr>
<tr>
<td>Gas for transport</td>
<td>2.5k/year</td>
<td>0.5</td>
<td>n/a</td>
</tr>
<tr>
<td>Transport equipment</td>
<td>20k/year</td>
<td>3</td>
<td>n/a</td>
</tr>
<tr>
<td>Mobile van(^4)</td>
<td>75k/van/year</td>
<td>n/a</td>
<td>10</td>
</tr>
<tr>
<td>Gas/generator for mobile</td>
<td>50k/year</td>
<td>n/a</td>
<td>7</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinarian</td>
<td>60/surgery</td>
<td>60</td>
<td>60 (2 FTE)</td>
</tr>
<tr>
<td>Vet technician</td>
<td>40k/year</td>
<td>14 (2 FTE)</td>
<td>n/a</td>
</tr>
<tr>
<td>Transport driver</td>
<td>35k/year</td>
<td>3 (0.5 FTE)</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Consumables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies, meds, vaccines</td>
<td>50/surgery</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Ancillary medical</td>
<td>18/surgery</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Mobile van consumables</td>
<td>15k/van</td>
<td>n/a</td>
<td>2</td>
</tr>
<tr>
<td><strong>Overhead</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager time</td>
<td>10/surgery</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No means based testing and assumes $0 cost to owner</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total | \($160\) | \($168\) |

<table>
<thead>
<tr>
<th>Indirect Costs:</th>
<th>What's Included</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Requirements</td>
<td></td>
<td>($227,000)</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td></td>
<td>50k/year</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td></td>
<td>3 FTE at 25k/year each</td>
</tr>
<tr>
<td><strong>Overhead</strong></td>
<td></td>
<td>100k/year</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2k/year</td>
</tr>
</tbody>
</table>

1. DAS Shelter to be open additional 7 days a month (for a total of 8 Spay Days) doing 70 surgeries daily; 2. Mobile unit assumes 30 surgeries daily, 5 days a month, 50 weeks a year; 3. $35k/year transport vehicle depreciated over 3 years; 4. $225k/year mobile van depreciated over 3 years; Source: SPCA; SNN; Expert Interviews; BCG analysis
# Backup: Spay and neuter targets by zip code for southern Dallas

<table>
<thead>
<tr>
<th>Zip code</th>
<th>Households</th>
<th>Y1 Intact (%)</th>
<th>Y1 Estimated Dogs</th>
<th>Y1 Intact Population</th>
<th>Y1 Target S/N Surgeries</th>
<th>Y2 Target Intact Population</th>
<th>Y2 Target Intact (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75211</td>
<td>21,214</td>
<td>80</td>
<td>18,732</td>
<td>14,954</td>
<td>4,191</td>
<td>11,557</td>
<td>59</td>
</tr>
<tr>
<td>75212</td>
<td>7,311</td>
<td>84</td>
<td>6,456</td>
<td>5,412</td>
<td>1,395</td>
<td>3,846</td>
<td>60</td>
</tr>
<tr>
<td>75216</td>
<td>17,440</td>
<td>86</td>
<td>15,400</td>
<td>13,250</td>
<td>3,602</td>
<td>9,934</td>
<td>64</td>
</tr>
<tr>
<td>75217</td>
<td>22,015</td>
<td>88</td>
<td>19,439</td>
<td>17,050</td>
<td>4,686</td>
<td>12,922</td>
<td>65</td>
</tr>
<tr>
<td>75224</td>
<td>10,295</td>
<td>82</td>
<td>9,090</td>
<td>7,472</td>
<td>2,111</td>
<td>5,821</td>
<td>61</td>
</tr>
<tr>
<td>75227</td>
<td>17,572</td>
<td>86</td>
<td>15,516</td>
<td>13,320</td>
<td>3,813</td>
<td>10,514</td>
<td>64</td>
</tr>
<tr>
<td>75228</td>
<td>24,652</td>
<td>78</td>
<td>21,768</td>
<td>16,934</td>
<td>5,002</td>
<td>13,795</td>
<td>59</td>
</tr>
<tr>
<td>75241</td>
<td>10,647</td>
<td>87</td>
<td>9,401</td>
<td>8,211</td>
<td>2,318</td>
<td>6,391</td>
<td>65</td>
</tr>
<tr>
<td>75116</td>
<td>6,842</td>
<td>85</td>
<td>6,041</td>
<td>5,135</td>
<td>1,569</td>
<td>4,327</td>
<td>64</td>
</tr>
<tr>
<td>75134</td>
<td>7,320</td>
<td>85</td>
<td>6,464</td>
<td>5,494</td>
<td>1,680</td>
<td>4,634</td>
<td>64</td>
</tr>
<tr>
<td>75180</td>
<td>7,903</td>
<td>85</td>
<td>6,978</td>
<td>5,932</td>
<td>1,811</td>
<td>4,994</td>
<td>64</td>
</tr>
<tr>
<td>75203</td>
<td>6,292</td>
<td>81</td>
<td>5,556</td>
<td>4,528</td>
<td>1,264</td>
<td>3,487</td>
<td>60</td>
</tr>
<tr>
<td>75207</td>
<td>787</td>
<td>85</td>
<td>695</td>
<td>591</td>
<td>174</td>
<td>479</td>
<td>64</td>
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<tr>
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<td>10,391</td>
<td>78</td>
<td>9,175</td>
<td>7,201</td>
<td>2,052</td>
<td>5,658</td>
<td>59</td>
</tr>
<tr>
<td>75210</td>
<td>3,006</td>
<td>85</td>
<td>2,654</td>
<td>2,256</td>
<td>629</td>
<td>1,735</td>
<td>63</td>
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<tr>
<td>75223</td>
<td>4,478</td>
<td>83</td>
<td>3,954</td>
<td>3,274</td>
<td>913</td>
<td>2,518</td>
<td>61</td>
</tr>
<tr>
<td>75226</td>
<td>2,217</td>
<td>85</td>
<td>1,958</td>
<td>1,664</td>
<td>500</td>
<td>1,378</td>
<td>64</td>
</tr>
<tr>
<td>75232</td>
<td>10,221</td>
<td>86</td>
<td>9,025</td>
<td>7,722</td>
<td>2,197</td>
<td>6,058</td>
<td>64</td>
</tr>
<tr>
<td>75233</td>
<td>5,041</td>
<td>81</td>
<td>4,451</td>
<td>3,622</td>
<td>1,024</td>
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<tr>
<td>75236</td>
<td>4,801</td>
<td>81</td>
<td>4,239</td>
<td>3,413</td>
<td>997</td>
<td>2,748</td>
<td>60</td>
</tr>
<tr>
<td>75237</td>
<td>8,076</td>
<td>77</td>
<td>7,131</td>
<td>5,480</td>
<td>1,625</td>
<td>4,480</td>
<td>59</td>
</tr>
<tr>
<td>75249</td>
<td>5,238</td>
<td>76</td>
<td>4,625</td>
<td>3,520</td>
<td>1,040</td>
<td>2,869</td>
<td>58</td>
</tr>
<tr>
<td>75253</td>
<td>6,375</td>
<td>90</td>
<td>5,629</td>
<td>5,048</td>
<td>1,408</td>
<td>3,882</td>
<td>67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>220,134</strong></td>
<td><strong>83</strong></td>
<td><strong>194,378</strong></td>
<td><strong>161,481</strong></td>
<td><strong>46,000</strong></td>
<td><strong>126,852</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>

1. Intact population in southern Dallas estimated from S/N status of DAS intake within zip. If intake in a given zip code was < 50 dogs, intact population assumed to be 85% of total dog population.

Overview: Animal welfare organizations in Dallas should coordinate spay/neuter efforts

Summary of research and findings

- **Context:** Today, spay/neuter efforts across the city are not collaborated (e.g. limited data sharing) and not at a sufficient scale to reduce the population of intact dogs
- **Key takeaway:** By coordinating efforts, Dallas can reduce the population of intact dogs and control future population growth by sterilizing the population
- **Overall recommendation:** A coordinated coalition should be put in place with a goal to increase the number of spay/neuter surgeries

Recommendation

* Work together to increase number of spay/neuter surgeries
  - Interest organizations should hold a summit to assess pool of resources

* Coalition to be formed with a common brand, mission, operating agreement or memorandum of understanding and share data across community

* Continue to take a door-to-door canvassing approach to promote upcoming spay and neuter clinics

* Identify community advocates or leaders

Rationale

- Community to have a targeted approach on spay/neuter surgeries
  - Focus on specific zip codes together to make a noticeable impact
- Provide community presence to promote animal welfare
- Current structure and productivity of CARE team will take 17 years to reach southern Dallas households twice

1. Based on Pets for Life community outreach in Dallas; Source: Experian Current Year Estimates (Q2 2015), Dallas Animal Services Target area memos, Pets for Life; BCG analysis
Overview: The City of Dallas establish elementary school education programs related to pet ownership

Summary of research and findings

- **Context**: Community issues related to animals (e.g., dog bites, loose dogs) are potentially partly due to community views of pet ownership and responsibility
- **Key takeaway**: Establishing an "Animal Education" curriculum in DISD elementary schools has the potential to reach ~6k students each year
- **Overall recommendation**: DAS should coordinate with the city and DISD to establish an "Animal Education" class in DISD elementary schools

Estimated Impact

**Methodology**
- Estimate total student reach of "Animal Education" program based on number of teachers, classes, and average class size

**Key Assumptions**
- One teacher per class
- Three classes per teacher per day
- Average class size of 22 students
- 10 week program duration

~6k students reached / year

Resource Requirements

**Methodology**
- Project total program cost based on varying required number of teachers

**Key Assumptions**
- Teacher resource costs ~$66k/yr

Incremental cost of ~$396k / year

Note: Sources and assumptions listed in detail on each relevant backup slide
School based education programs focused on animal care have potential to hugely impact the community

Several systemic issues in the community can be addressed through animal education

Dallas faces many animal and animal care issues...

- **Dog bites**¹ – direct danger to community residents
- **Loose dogs**² – damaging to health of animal population and overall community safety
- **Low S/N rates**³ – short term issue leading to increased dog roaming and aggression, long term issue leading to out of control stray dog population

...and many of these issues can be connected to insufficient community animal education

- **Dog ownership** – conception of "owned" dog not tied to fenced/ secured house area
- **Dog health** – misunderstanding of effort and investment necessary to care for dog in home
- **S/N awareness** – dangerous stereotypes or preconceptions on animal fertility

Early education programs target issues during youth, impact long term solution

Programs, such as New Mexico "Making Tracks" Humane Education course focus on equipping students with a robust education in animal care

- Presentations on key animal care topics:
  - Dog bite safety & prevention
  - Presence and risks of loose dogs
  - Importance of S/N programs
  - General guidance on animal care

Early focus on animal care works to change cultural norms of pet ownership over time, leverages proven long term efficacy of other national early childhood education programs⁴

---

1. Increase in USPS dog attacks, 311 dog attack requests, 911 dog attack calls suggests Dallas dog bits increasing; 2. 32% of fatal dogs attacks in US from loose dogs (Sacks et al. (1989) study from The Ethology and Epidemiology of Canine Aggression by Randall Lockwood); 3. 85% of dogs in South Dallas are intact; 4. “Impacts of Early Childhood Programs” – Brookings Institute, demonstrates tangible positive impacts of national programs like State Pre-K, Head Start, and Early Head Start; Source: USPS, 311, 911, Sacks et al. (1989) study from The Ethology and Epidemiology of Canine Aggression by Randall Lockwood, Brookings Institute, DAS Chameleon database, Expert interviews, BCG analysis
Potential pillars of Dallas "Animal Education" program
Aimed at directly impacting community's attitudes towards pet ownership

Program Overview

<table>
<thead>
<tr>
<th>Goal</th>
<th>Teaching school age children to think more deeply about community relationship with animals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Impacting systemic issues in community with long term solution of early childhood education</td>
</tr>
</tbody>
</table>

Requirements of animal care

1. E.g., Effort and time required to provide humane care, best practices on feeding, walking, brushing, veterinary support

Loose dogs & bite safety

2. E.g., Verbal and non-verbal dog behavior cues, dangers of chaining, how to protect against and during an attack,

Importance of S/N

3. E.g., Population growth rates and control, discuss common misconceptions, contribution to shelter crowding

Role of Animal Service Officers

4. Responsibilities to community, care for stray animals, coordination with different animal services entities

Realities of life for shelter animals

5. Animal intake and adoptions, staff required to support, kennel conditions of dogs

Resources required

Investment of teaching resources

• Costs dependent upon scale of program and specific offerings

Note: Pillars modeled on New Mexico Humane Education program

Source: "Making Tracks" New Mexico Humane Education, Animal Protection New Mexico website; BCG analysis

Note: Teachers to also distribute spay/neuter coupons and educational materials to students to take home

Teaching school age children to think deeply about community relationship with animals

1. Responsibility of animal care
2. Loose dogs & bite safety
3. Importance of S/N
4. Role of Animal Service Officers
5. Realities of life for shelter animals

Investment of teaching resources
## Estimated impact: Establishment of an "Animal Education" program has potential to reach \(~6k\) students per year

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Classes</th>
<th>Class Size</th>
<th>Frequency</th>
<th>Estimated Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>One teacher runs each class</td>
<td>Each teacher hosts 3 classes per day, 5 days each week</td>
<td>Average size within Texas Education standards</td>
<td>Three 10 wk programs included in 35 wk school year</td>
<td>5,940 students reached each year</td>
</tr>
</tbody>
</table>

### Program Assumptions
- **Estimated impact**: Establishment of an "Animal Education" program has potential to reach \(~6k\) students per year

### Stretch impact estimate
- 6 teachers
- 90 classes/wk
- 32 students/class
- 3 programs/yr

Source: Texas Education Agency, BCG Experience, BCG analysis
Resource requirements: Establishment of "Animal Education" program would incur cost of $396k yearly

Key assumptions

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of teacher resource</td>
<td>$66k/yr¹</td>
</tr>
<tr>
<td>Number of teachers required</td>
<td>6</td>
</tr>
</tbody>
</table>

Resources required dependent upon adoption volume

Incremental cost of $396k

1. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; Source: Texas Tribune Salary Explorer, BCG analysis
Overview: DAS should enforce S/N ordinances in coordination with outreach

Summary of research and findings

- **Context:** In the past 24 months, 406 animal spay/neuter citations were issued and 199 were not responded to (49% of citations)
- **Key takeaway:** It is more effective for residents to become compliant by eliminating any barriers and continuing education
- **Overall recommendation:** ASOs should more actively enforce spay and neuter ordinances

Recommendation

**ASOs should educate owners on:**
- Available resources to become compliant
- Mandatory requirement
- Benefits of sterilization

**ASOs to more actively enforce spay and neuter ordinances**

More patrol shifts in the early evening when dogs are most active and residents are coming home from work (Recommendation 2.1)

Opportunity for owner to become compliant within certain timeframe before issuing a citation

Rationale

- Educating the community on available services has been successful in other cities
- Focusing on how to get the resident compliant can help build a relationship between ASOs and community

Source: BCG analysis
Recommendation 5: Create a collaborative community of partners
Overview: DAS should work with CIS and other city departments to provide access to data and reports

Summary of research and findings

- **Context:** Current data request process proves frustrating to citizens, as only limited DAS data is published online in the form of monthly and annual reports
- **Key takeaway:** Aligning to principles of open data enables better community engagement
- **Overall recommendation:** DAS should work with CIS and other city departments to provide open access to Chameleon data and fill its vacant Database Analyst position

**Recommendation / Rationale**

- DAS should work with CIS to open its Chameleon database to the public in order to better support community inquiries and engagement
  - Tactically, team can leverage the already established Dallas Open Data Portal in order to easily put all DAS data online
- Additionally, DAS should recruit for and fill its vacant database analyst position in order to accomplish the above two goals
- The current data request process proves frustrating to community citizens who desire full data access
- Publishing Chameleon data online would facilitate stronger connection with the Dallas community through a focus on transparency

**Key Resources**

**Methodology**

- Difference in salary between Coordinator II and Manager II position to ensure proper skill sets

**Incremental cost of**

~$30k / year

---

1. Dallas Animal Advisory Commission recording Jan 21, 2016; Note: DAS Org chart as of June 27, 2016, Texas Tribune, BCG analysis
Overview: The animal welfare community should share the workload of the strategic recommendations

**Context:** There are 150+ animal related organizations throughout Dallas, however, there is little collaboration between organizations to leverage or focus resources

**Key takeaway:** Animal welfare community can better channel and coordinate their work and benefit from specialization, experience, and increased fundraising success

**Overall recommendation:** Dallas community to create a plan and coalition to determine common goals and specific roles for each

**Recommendation**

- Form a coalition between Dallas animal welfare organizations
- Create a community plan for addressing the loose dog problem
  - Identify measurable community goals
  - Determine specific roles and commitments for organizations to play
- Coordinate efforts to implement plan
  - E.g., several rescue organizations put into play an owner surrender deflection program at DAS and apply for a joint grant from Best Buddies
- Track progress towards community goals and troubleshoot when implementation is off track

**Rationale**

- Animal welfare organizations have a lot to offer Dallas
  - Annual funding of $28MM+ a year to impact at least 128k animals
- Dallas will need to rely on the resources of many of these organizations in order to address the loose dog population
- Currently, there is no organizing body or collective to coordinate and leverage the scale of Dallas animal welfare organizations
- In order to focus and gain buy in from these organizations, a coalition is necessary
- Animal welfare organizations can benefit from coordination to scale fundraising and volunteer efforts which all have identified as a catalyst for growth

---

1: Rescue and Animal Organization Survey (n=72); Source: Expert interviews, BCG analysis

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**Animal orgs. have significant and growing capacity**

$28MM+ in annual budget to serve 148k+ animals

<table>
<thead>
<tr>
<th>% total</th>
<th>Annual budget</th>
<th>Animals served '15</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>28,407,151</td>
<td>148,500</td>
</tr>
</tbody>
</table>

64 smaller orgs. (8 larger orgs.)

Majority are growing

<table>
<thead>
<tr>
<th>% respondents</th>
<th>All respondents</th>
<th>Orgs. serving &gt;1k animals</th>
<th>Orgs. serving &lt;1k animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many more animals served than in previous years</td>
<td>50</td>
<td>69</td>
<td>46</td>
</tr>
<tr>
<td>Slightly more animals served than in previous years</td>
<td>24</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>About the same amount of animals served as in previous year</td>
<td>21</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>Slightly fewer animals served than in previous year</td>
<td>6</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Much fewer animals served than in previous year</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Question: What is the annual budget for your organization? (n=72); Question: Approximately how many animals did your organization impact in 2015 through fostering, boarding, owner education, etc? (n=72); Question: How has your organization changed over the last three years in terms of how many animals it has impacted through fostering, boarding, owner education, etc.? (n=72); Source: Rescue and Animal Organization survey (n=72); BCG analysis.
Organizations overlap across multiple functions...

Animal organizations have 15+ functions

1. Place animals with new owners through adoption
2. Operate a network of foster homes
3. Provide pet ownership education
4. Rescue strays directly from the streets
5. Transport animals to different cities and states
6. Provide financial support to pet owners in need
7. Advocate for animal related legislative issues
8. Provide free or low-cost behavioral training
9. Perform free and/or discounted spay and neuter
10. Operate a shelter for animals
11. Other: humane investigations, emergency rescue
12. Trap-neuter-release
13. Host vaccination clinics
14. Host microchip clinics
15. Provide low-cost veterinary care
16. Go door to door in some communities to offer education, spay/neuter information, pet care etc.

On average, one organization participates in 6 different functions

Question: Which of the following activities does your organization participate in? (n=71); Source: BCG rescue survey (N=72); BCG analysis
Most perform functions related to immediate positive outcomes for dogs rather than long term solutions

Question: Which of the following activities does your organization participate in? (n=71); Question: Which of the following activities is your primary focus? (n=71); Source: Rescue and Animal Organization survey (n=72); BCG analysis

**Orgs. perform multiple functions**
- Place animals with new owners through adoption: 89%
- Operate a network of foster homes: 77%
- Provide pet ownership education: 76%
- Rescue strays directly from the streets: 57%
- Transport animals to different cities: 43%
- Provide financial support to pet owners in need: 43%
- Advocate for animal related legislative issues: 34%
- Provide free/low-cost behavioral training: 33%
- Perform free/low-cost spay-neuter surgeries: 26%
- Operate a shelter for animals: 23%
- Other: 23%
- Trap-neuter-release: 19%
- Host vaccination clinics: 19%
- Host microchip clinics: 16%
- Provide low cost vet care: 14%
- Go door to door to offer education, etc.: 14%

**Orgs. focus on similar functions**
- 63% focus on adoptions and fostering

% respondents
Animal orgs. could do even more for community with added funding and volunteers

What one thing would enable you to positively impact even more animals and humans?

<table>
<thead>
<tr>
<th></th>
<th>All animal orgs</th>
<th>Animal orgs serving &gt;1k animals annually</th>
<th>Animal orgs serving &lt;1k animals annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>More funding</td>
<td>47</td>
<td>62</td>
<td>44</td>
</tr>
<tr>
<td>More volunteers</td>
<td>36</td>
<td>23</td>
<td>39</td>
</tr>
<tr>
<td>More collaboration with other organizations</td>
<td>10</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

"The time needed to recruit and train key volunteers to take over specific operations is also a significant barrier"

"Assigned days to pull animals from shelters"

"Collaborative shelter system"

"More communication"

"City support in education"

Question: What one thing would enable you to positively impact even more animals and humans? (n=72); Source: Rescue and Animal Organization survey (n=72); BCG analysis
Overview: The animal welfare community of Dallas should engage in an inclusive, fact-based dialogue

Summary of research and findings

- **Context:** Today, the animal welfare environment is charged with emotion. DAS often finds itself in the middle of emotional and sometimes negative dialogue with some organizations distrusting DAS
- **Key takeaway:** By increasing transparency and open communication, DAS can establish productive dialogue and build trust with the city
- **Overall recommendation:** DAS should engage community in a fact-based, inclusive dialogue and refine social media policy to be similar to that of Dallas Police Department

Recommendation

- DAS to establish a fact-based, inclusive dialogue with the community
  - Proactively address mistakes
  - Share data with community then engage community on a dialogue around facts
  - Celebrate its victories publically
- Refine social media policy to be similar to that of DPD's policy

Rationale

- The Dallas animal welfare environment is emotionally charged
  - "Groups of people sit at home and get all emotionally invested in every dog that is euthanized"¹
- DAS becomes embroiled in negative, emotion fueled dialogue
  - DAS Accountability Facebook page often posts about DAS missteps
  - Frequent open records request that consume the time of an entire employee
  - Negative headlines in the Dallas Morning News target DAS as a problem

¹ One local director of an animal welfare organization; Source: Rescue and Animal Organization Survey (n=72); expert interviews; Dallas Police Department General Order, Section 214; BCG analysis

5.3
Social media policies promote responsible online behavior
Enforced policies typically improve value of discourse and prevent reputational damage for an org

Dallas Police Department has a social media policy that applies to off-duty online behavior

"Employees are free to express themselves as private citizens on social media sites to the degree that their speech and/or language does not impair working relationships of the Department, impede the performance of their duties, impair discipline and harmony among coworkers, or negatively affect the public perception of the Department."

DAS may benefit from using standardized, solutions-oriented responses to critical discourse

<table>
<thead>
<tr>
<th>Representative historical comments directed towards DAS</th>
<th>Alternative (recommended) Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>When DAS was accused of being &quot;evil&quot; for euthanizing a dog</td>
<td>At DAS our goal is to not euthanize any animal that could be placed. We haven't achieved that goal yet, but we are making progress every day through expanded adoptions and transfer partners. Just like you, we don't like seeing any animals euthanized. To find out how you can help go to [link]</td>
</tr>
<tr>
<td>Regarding DAS euthanizing animals</td>
<td>When our facilities at DAS are full and we do not have transfer partners available to take the animals, we have the very difficult responsibility of deciding which animals are euthanized. We do this through a standard and defined process which you can view here [link]. In the future we hope that no animals will be euthanized through expanded adoptions and transfers.</td>
</tr>
<tr>
<td>Regarding a private individual reporting to have saved many animals</td>
<td>At DAS we know we can't save every animal. Your actions are helping the animals in our city. Thank you.</td>
</tr>
<tr>
<td>Regarding anti-DAS conversations</td>
<td>Your opinion is important to DAS. We'd like to understand what policies and or procedures we could improve to better serve the community in the future</td>
</tr>
<tr>
<td>Regarding loose dogs in Dallas</td>
<td>DAS has an obligation to the residents of Dallas. We take your safety seriously and are doing [A, B, C] to address these concerns</td>
</tr>
</tbody>
</table>

Source: Dallas Police Department General Order Section 214, BCG analysis

20160826_BCG_DallasDog_InitiativeDetail_vPublic.pptx
Recommendation 6: Make animal services a priority and strengthen accountability within the city government
### Overview: DAS should become an independent municipal department

#### Summary of research and findings

- **Context:** Currently, DAS operates within Dallas' Code Compliance division
- **Key takeaway:** By removing DAS from Code Compliance and making the organization a standalone department, DAS could have the greatest level of control and least risk when executing strategic plan
- **Overall recommendation:** Dallas Animal Services should be come a standalone department that reports directly to an assistant city manager

### Recommendation / Rationale

**Dallas animal services should become a standalone department instead of operating under Dallas' code compliance division**
- Organization would require additional overhead staff, including but not limited to finance and humane resources officials
- DAS head official would report directly to city manager

**Becoming standalone could increase DAS's effectiveness**
- Standalone option provides improvement across all three levels of governance
- No clear privatization partner
- Divesting DAS would give the city less control and increase risk when executing strategic plan
- No comparative advantage to privatization to justify complex change process

### Key Resources

**Methodology**
- Average between benchmarking public sector and animal services organizations and current transfer cost

**Key Assumptions**
- Finance positions = $50k/yr
- Information technology positions = $50k/yr
- Human Resources positions = $50k/yr
- Communications positions = $50k/yr

*Incremental cost of ~$310k / year*
## Organization and Governance models impact three key areas

<table>
<thead>
<tr>
<th>Key Areas</th>
<th>Impact on Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resources and Talent</strong></td>
<td><strong>How can animal services acquire resources?</strong></td>
</tr>
<tr>
<td></td>
<td>Impacts how resources and talent can be acquired, including:</td>
</tr>
<tr>
<td></td>
<td>• Funding, staff, procurement, donations, volunteers, and partnerships</td>
</tr>
<tr>
<td><strong>Communication and Coordination</strong></td>
<td><strong>How can animal services align goals and values?</strong></td>
</tr>
<tr>
<td></td>
<td>Impacts communication and coordination of effort, among:</td>
</tr>
<tr>
<td></td>
<td>• Staff, volunteers, non-profits, rescue groups, and other partners</td>
</tr>
<tr>
<td><strong>Delivery and Execution</strong></td>
<td><strong>How can animal services ensure successful service delivery?</strong></td>
</tr>
<tr>
<td></td>
<td>Impacts accountability, delivery, and execution of services, including:</td>
</tr>
<tr>
<td></td>
<td>• Adoptions, medical care, animal quarantine, cruelty investigations, etc.</td>
</tr>
</tbody>
</table>
When considering animal services operations, there are multiple governance structures to consider:

<table>
<thead>
<tr>
<th>Subdivision within a department</th>
<th>Standalone Department</th>
<th>Partially Privatized</th>
<th>Completely Privatized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operates all facets of animal services, but reports to the head of another department, creating a layer between animal services and city management</td>
<td>Operates all facets of animal services and reports directly to city management</td>
<td>City contracts part of its animal services operations to an organization, typically a nonprofit, that can operate animal services on behalf of the city</td>
<td>City contracts all animal services operations to an organization, typically a nonprofit, that can operate animal services on behalf of the city</td>
</tr>
</tbody>
</table>

- Dallas, TX
- Jacksonville, FL
- Houston, TX
- Los Angeles, CA
- San Antonio, TX
- San Diego, CA
- Austin, TX
- Miami, FL
- Las Vegas, NV
- Reno, NV
- Atlanta, GA
- New York, NY (although not considered a benchmark to Dallas)

Note: above cities' animal control functions are government operated

1. Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves; Note: If operations are partially privatized, the part of the organization that is not privatized can be a subdivision within a department or a standalone department within the city/county; Source: BCG analysis
### Each structure has different pros and cons and impact on key areas

<table>
<thead>
<tr>
<th>Subdivision within a department</th>
<th>Resources and Talent</th>
<th>Communication and Coordination</th>
<th>Execution and Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring leadership and staff difficult due to lower profile &amp; complexity</td>
<td>Lacks a &quot;seat at the table&quot; with senior city leadership</td>
<td>Lower-level leadership role lacks authority to execute</td>
<td></td>
</tr>
<tr>
<td>Can receive layover funds from parent department</td>
<td>Perceived to not prioritize animal welfare underneath Code</td>
<td>Multiple layers of mgmt cloud accountability</td>
<td></td>
</tr>
<tr>
<td>Hiring easier due to higher profile</td>
<td>Greater control over messages and access</td>
<td>Single accountability sharpens priorities</td>
<td></td>
</tr>
<tr>
<td>Competes with other departments for budget</td>
<td>Demonstrates animal services as a priority</td>
<td>Least likely to experience conflicts of interest</td>
<td></td>
</tr>
<tr>
<td>Hiring easier due to partial separation from city</td>
<td>Partial control over message, but removed from government</td>
<td>Greater operating potential</td>
<td></td>
</tr>
<tr>
<td>Fixed funding from city, but can receive donations</td>
<td>Greater freedom of action</td>
<td>Moderate effort in standing-up new structure</td>
<td></td>
</tr>
<tr>
<td>Hiring easiest due to complete separation from city</td>
<td>Lack of coordination between shelter and animal control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed funding from city, but can receive donations</td>
<td>Free control of message, but removed from government</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greatest freedom of action</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Typically, cities/counties will only privatize their animal shelter operations and operate field collection themselves. 
Source: BCG analysis

---

6.1
When estimating the cost for DAS to become a standalone department, there are two main approaches.

Public Sector and Animal Services Benchmarks

Based off information gathered from BCG public sector benchmarks and benchmark cities/counties, we determined the average employees DAS needs

<table>
<thead>
<tr>
<th>Position</th>
<th>FTEs Required</th>
<th>Incremental Needed</th>
<th>Estimated Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm</td>
<td>1</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Finance</td>
<td>6</td>
<td>4</td>
<td>$200k</td>
</tr>
<tr>
<td>HR</td>
<td>3</td>
<td>1</td>
<td>$50k</td>
</tr>
<tr>
<td>IT</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

$250,000

$370,000

Using these approaches, we estimate becoming a standalone department will cost around ~$310,000

Current Transfer Costs

Currently, City of Dallas spreads overhead costs (Finance, HR, IT, Communications) across all departments

- Dallas bases this "City Forces" charge off a percentage determined from each department's financial statements
- In FY2015 DAS had a "City Forces" of $369,063.20

Source: Texas Tribune, DAS Expenditures; BCG analysis
Overview: The City of Dallas should increase funding for Dallas Animal Services to support recommendations

<table>
<thead>
<tr>
<th>Summary of research and findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context:</strong> Currently, compared to peers in communities comparable to Dallas, DAS is underfunded by ~10%, or $0.78 per person</td>
</tr>
<tr>
<td><strong>Key takeaway:</strong> By increasing funds going to animal services, Dallas can better support the implementation of other recommendations</td>
</tr>
<tr>
<td><strong>Overall recommendation:</strong> City of Dallas and private funders should fully invest in the recommendations outlined in the report</td>
</tr>
</tbody>
</table>

**Recommendation**

City of Dallas and private funders should increase funds going to Dallas Animal Services to promote the effective implementation of recommendations

**Rationale**

The City of Dallas has been increasing funds going to Dallas Animal Services for the last three years

- Municipal shelter receives on average $0.78 per person less than other comparable shelters.

The community of Dallas (municipal budget and 501(c)(3) budgets) has a deficit of $6.50 per person, accounting to over $8MM

Note: Sources and assumptions listed in detail on each relevant backup slide.
DAS operates with budget ~10% below peer average...
Proposed FY 16-17 budget inline with peers

Municipal Spending on Animal Services for Benchmark Cities

Municipal Animal Services Budget ($/person)

DAS budget is 10% below that of peers today, was 24% lower in FY 13-14, and tentatively expected to be above average next fiscal year

Note: Mean excludes Dallas; Source: Interviews with management from Los Angeles Animal Services, Washoe County Animal Services, County of San Diego Animal Services, San Antonio Animal Care Services, Fulton County Animal Services Austin Animal Services, Dallas Animal Services FY 2015 General Fund Budget, Jacksonville Animal Care and Protective Services, and Clark County Animal Control.), Lifeline Animal Project 990 Tax Form (2014), Miami-Dade Animal Services Projected Budget (2015), US Census Bureau 2013 Population Estimate and BCG analysis
...and significantly below cities with explicit 501(c)(3)s partnerships which provide ancillary funding

100% of partner budget to demonstrate potential funding, however, full budget likely not fully dedicated to shelter’s needs

Municipal and Non-Profit Spending on Animal Services for Benchmark Cities

<table>
<thead>
<tr>
<th>City</th>
<th>Municipal Budget</th>
<th>501(c)(3) Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washoe County (Reno)</td>
<td>22.13</td>
<td>5.77</td>
</tr>
<tr>
<td>Austin</td>
<td>20.27</td>
<td>13.57</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>18.77</td>
<td>12.94</td>
</tr>
<tr>
<td>Fulton County (Atlanta)</td>
<td>17.38</td>
<td>10.84</td>
</tr>
<tr>
<td>San Antonio</td>
<td>17.62</td>
<td>10.72</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>16.85</td>
<td>9.24</td>
</tr>
<tr>
<td>County of San Diego</td>
<td>13.24</td>
<td>8.02</td>
</tr>
<tr>
<td>Miami-Dade County</td>
<td>10.22</td>
<td>6.31</td>
</tr>
<tr>
<td>Dallas</td>
<td>8.63</td>
<td>7.84</td>
</tr>
<tr>
<td>Clark County (Las Vegas)</td>
<td>7.84</td>
<td>7.01</td>
</tr>
<tr>
<td>Houston</td>
<td>7.01</td>
<td>6.03</td>
</tr>
</tbody>
</table>

Mean: 15.13

Reaching average would require $7MM/yr in funding

Overview: The City of Dallas or DAS should hire a project manager and data analyst

Summary of research and findings

- **Context:** There is not an available resource to take lead on the strategic recommendations
- **Key takeaway:** It will be difficult to coordinate the implementation of all recommendations unless a project manager is put in place
- **Overall recommendation:** Project manager and analyst should be hired to ensure initiatives are coordinated, track successes, and reprioritize as necessary

Recommendation

Project manager should be hired in order to oversee recommendations for strategic plan by:

- Aligning and collaborating with the community on overall efforts for all recommendations
- Tracking effectiveness of controlling loose dog population
- Tracking effectiveness of recommendations on increasing LRR
- Overseeing the establishment of a transport program through different programs at DAS and throughout the community

Analyst should be responsible for tracking progress and generating weekly reports

Resource Requirements

**Key Assumptions**

- Project manager = $100k/yr
- Analyst = $58k/yr

Incremental cost of

~$158k / year

---

1. Determined by finding the median salary of a comparable position on the Texas Tribune Salary Explorer, and then applying an extra 20% to that salary to account for benefits; Source: Texas Tribune, BCG analysis
Overview: The Animal Advisory Commission should take on additional problem-solving responsibility

Summary of research and findings

- **Context:** Currently, Dallas Animal Advisory Commission contains 0 subcommittees, limiting the commission's ability to bring about change.
- **Key takeaway:** Subcommittees can take on specific and detailed work when a task is too complex and time consuming to handle in meetings with the entire board.
- **Overall recommendation:** Animal Advisory Committee should establish 5 subcommittees to implicitly increase responsibility of the commission and its members.

Recommendation

Dallas Animal Advisory Commission should consist of five subcommittees, each with 3 commission members:

- Public Safety Subcommittee
- Shelter Management Subcommittee
- Animal Cruelty Subcommittee
- Public Relations Subcommittee
- External Relations Subcommittee

Dallas Animal Advisory Commission should also implement policies that address and limit risks for conflicts of interest and regulatory capture:

- Establishing a conflicts of interest clause that limits participation
- Requiring no external organization or other nonprofit board have 2 members that are also on Dallas Animal Advisory Commission

Rationale

- Subcommittees increase overall efficiency of boards due to less time spent going over detailed topics in commission meetings that would best be explained in small groups.
- Subcommittees with member requirements allow for experts to provide insights.
- Limiting conflicts of interest and regulatory capture ensures Animal Advisory Commission will make decisions in the best interest of Dallas citizens.

Note: Expert Interviews with benchmark cities, BCG analysis.
Given DAS's mission and strategic plan, we recommend 5 subcommittees consisting of 3 members each.

### City of Dallas Animal Advisory Commission

<table>
<thead>
<tr>
<th><strong>Public Safety</strong></th>
<th><strong>Shelter Management</strong></th>
<th><strong>Animal Cruelty</strong></th>
</tr>
</thead>
</table>
| • One member with a background in law enforcement  
• One member with a background in public health  
• One additional commission member | • One member with a background in shelter operations  
• One business owner, leader, or executive  
• One additional commission member | • One member with a background in animal welfare advocacy  
• One member with a background in law  
• One additional commission member |

<table>
<thead>
<tr>
<th><strong>Public Relations</strong></th>
<th><strong>External Relations</strong></th>
</tr>
</thead>
</table>
| • One member with a background in Public Relations/Media  
• One city or county official  
• One additional commission member | • One member from a high-volume spay/neuter clinic  
• One member from a DAS transfer partner  
• One additional commission member |

Committees composed of three members with specific expertise. Commission shall establish rules to limit conflicts of interest and board independence from Dallas Animal Services.

Source: BCG analysis
Overview: DAS should be exempt from the civil service hiring process

Summary of research and findings

- **Context:** It can take up to 9 months to fill an open position
- **Key takeaway:** Being exempt from civil service hiring will streamline the hiring process, allow the organization to employ top talent, decrease the time to fill open positions, and allow DAS to hire candidates with specialized training that could otherwise be difficult for civil service screenings
- **Overall recommendation:** Dallas Animal Services should adopt a civil service exemption for hiring

Recommendation

- DAS should adopt civil service exemption for hiring including:
  - Job postings
  - Resume screening
  - Interviews
  - etc.

Rationale

- Can take up to 9 months to fill a position
- Good candidates find employment elsewhere
- DAS has 14% of positions unfilled
- Being exempt from civil service hiring process allows ability to:
  - Streamline hiring process
  - Employ top talent
  - Fill positions easier/quicker

Note: Incremental costs will not be incurred if DAS becomes an independent department (Recommendation 6.3)

Source: BCG analysis
Recommendation 7: Ensure efficiency by measuring outcomes and increasing volunteers
Overview: DAS should align its organizational structure and employee performance with its mission

Summary of research and findings

- **Context:** Embarking on necessary steps to address the recommendation within this report is a significant undertaking and ownership and accountability are needed to realize intended results. DAS organization will be key player for majority of recommendations
- **Key Takeaway:** Initiative ownership and accountability will increase likelihood of success
- **Overall recommendation:** Identify recommendation owners within DAS to be accountable for recommendations; establish productivity metrics across DAS to support mission

Suggested recommendation

- Identify individuals with DAS organization to "own" each of the recommendations
  - Individual recommendation owners should be assigned where coordination with groups outside of DAS is needed
  - Recommendations to be implemented by DAS only should have operational units assigned with appropriate manager leading efforts

- Establish operational/productivity metrics for specific shelter functions

- Hire incremental data analyst for mission & ops scorecard and reporting

  *Incremental cost of ~$58k / year*

Rationale

- Not possible for a single individual within DAS to effectively oversee and manage implementation of all of the recommendations

- Increases likelihood of reaching intended outcome of each recommendation

- Productivity metrics enable tracking of progress/efficiency gains and to hold initiative owners accountable

Source: BCG analysis
Recommendation ownership shared across Dallas City, DAS, and Non-Profit organizations

Establishing ownership for each recommendation will ensure accountability and accelerate implementation.

City of Dallas driven
- Rec 2.4
- Rec 4.3
- Rec 4.4
- Rec 5.1
- Rec 6.1
- Rec 6.2
- Rec 6.3
- Rec 6.4
- Rec 6.5

Community partners driven
- Rec 2.3
- Rec 3.4
- Rec 3.5
- Rec 4.1
- Rec 4.2
- Rec 5.2
- Rec 5.3
- Rec 5.4
- Rec 5.5
- Rec 5.6

Representative organizational structure

Head of DAS
- Rec 1.1
- Rec 1.2
- Rec 1.3
- Rec 4.1

Field Service & Admin (73 budgeted positions)
- Support staff
- Field Service Manager
- Business Manager
- Transfer Coordinator
  - Rec 3.3
  - Rec 3.4
- Volunteer Coordinator
  - Rec 7.2
- Data Analyst
  - Rec 5.1
- PR Manager
  - Rec 5.3

Shelter & Medical (112 budgeted positions)
- Shelter Manager
  - Rec 3.1
  - Rec 3.2
  - Rec 3.5
  - Rec 3.6
- Medical Manager
  - Rec 3.7
  - Rec 4.1
  - Rec 4.2
- Support staff
  - Volunteer Coordinator
    - Rec 7.2

Shelter Manager
Currently Open

Medical Manager
Currently Open

Support staff

Transfer Coordinator
- Rec 3.3
- Rec 3.4

Volunteer Coordinator
- Rec 7.2

Source: BCG analysis
Productivity metrics within DAS's control should be established and tracked

<table>
<thead>
<tr>
<th>Field team metrics</th>
<th>OTC intake team metrics</th>
<th>Shelter team metrics</th>
<th>Medical team metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field intake</td>
<td>OTC owner surrenders deflected with aid</td>
<td>Live release rate</td>
<td>Live release rate</td>
</tr>
<tr>
<td>Intake per ASO</td>
<td></td>
<td>Length of stay</td>
<td>Spay/neuter per hour and per day</td>
</tr>
<tr>
<td>Citations per ASO</td>
<td></td>
<td>Return rate for adopted dogs</td>
<td>% of dogs experiencing health decline in DAS</td>
</tr>
<tr>
<td>CARE team metrics</td>
<td></td>
<td>'Share of wallet' for top 20 transfer partners</td>
<td>% of dogs euthanized by intake</td>
</tr>
<tr>
<td>• People reached</td>
<td></td>
<td></td>
<td>Asilomar health categorization</td>
</tr>
<tr>
<td>• Warnings issued</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Citations written</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Productivity metrics for DAS should be limited to actions DAS can control

Source: BCG analysis
Overview: DAS should increase the scale of its volunteer program with a greater variety of roles

**Summary of research and findings**

- **Context:** DAS’s volunteer program realizes low full-time employee equivalents from volunteer hours; DAS recently hired a full-time volunteer coordinator in October 2015; DAS volunteers currently limited in ways to help
- **Key takeaway:** After expanding volunteer program DAS could realize productivity and operational gains
- **Overall recommendation:** Increase the number of tasks volunteers are able to help DAS with; increase total volunteer hours garnered from volunteer program

**Suggested recommendation**

Increase the number of full-time employee equivalents volunteer program is able to source from hours worked by volunteers

Increase the number of tasks volunteers are allowed to participate in such as:
- Helping with adoptions
- Helping at lost and found desk
- Transporting dogs to rescue partners
- Administering medical treatment
- Fostering animals
- Setting and monitoring traps
- Creating reports or analysis from Chameleon data

Hire volunteer coordinator

**Rationale**

DAS Westmoreland location currently realizing only ~1.2 FTE equivalent of work on annual basis from volunteer hours\(^1\)
- Operational efficiencies could increase if more employee equivalents utilized from volunteers

Other shelters routinely garner higher employee equivalents from volunteers than DAS

Expanding scope of volunteer tasks increases impact on shelter efficiency from volunteer hours

---

\(^1\) See backup slide for comparison with animal shelter from other cities; Source: DAS volunteer hour spreadsheet; BCG analysis
Increase the scale of volunteer program with greater variety of roles to garner more volunteer hours

FTE Equivalents from volunteer hours

Source: Expert interviews, BCG analysis
Thank you
Loose Dogs in Dallas: Strategic recommendations to improve public safety and animal welfare in Dallas

BCG working materials

August 2016
Context

In June 2016, BCG was engaged on behalf of the city of Dallas to evaluate opportunities to improve public safety, while safeguarding and improving animal welfare. BCG’s assignment was to:

- Quantitatively understand the supply of dogs in Dallas
- Identify community priorities given varying constituent perspectives
- Identify best practices from other animal services organizations across the US
- Identify and prioritize levers to maximize impact on public safety and animal welfare
- Synthesize findings in a strategic plan for the community of Dallas to achieve its goals

To develop a comprehensive understanding of the situation, we employed a team of consultants for eleven weeks. Our recommendations are based on:

- Qualitative interviews with nearly 100 stakeholders in Dallas
- Quantitative analysis of all available data sources including the DAS database (Chameleon), 311 service requests, and 911 Record Management System (RMS) calls
- Primary research including a loose dog census, resident survey, and a survey of rescue/animal welfare organizations
- Review of third-party studies from national organizations and academic studies
- Benchmarking of animal services organizations in ten highly comparable cities across the US, including 30 qualitative interviews and desk research to understand best-practices

BCG scope was constrained by:

- Focus on dog population\(^2\) only (vs. all animals) given link to public safety
- Not inclusive of process or recommendations surrounding animal cruelty investigation
- BCG efforts focused on improving the current situation, not assessing prior events unless critical to path forward

---

1. Live Release Rate from shelter; 2. Despite focus on dogs, most recommendations related to increasing live release rate expected to have significant positive impact on cats and other animals entering DAS
Loose Dogs in Dallas: Strategic Recommendations to Improve Public Safety and Animal Welfare in Dallas

BCG completed three deliverables:

**White-paper**
- Document contains written explanation of:
  - Project background
  - Relevant context and facts
  - BCG recommendations
  - Supporting rationale

**Initiative detail**
- Contains details on each recommended initiative:
  - Background context
  - Key assumptions
  - Sizing of potential (intake, outcomes, etc)
  - Cost to execute

**Working materials**
- Additional analysis completed during project, including analysis not reflected in recommendations
- Not all materials validated by a second party

BCG Loose Dogs in Dallas: Strategic recommendations to improve public safety and animal welfare in Dallas Initiative detail August 2016

---

Project estimated animals retained by DAS Owner Deflection:
- 20,807

Survey pet owners surrendering their pets to DAS to determine the benefit of surrender deflection programs
- S/N cost = $139/surgery
- Half FTE
- Cost to execute

Background context
- Ride multiple research streams for understanding the situation
- Resource requirements
- Population growth
- Safety risk?
- How many dogs are in DAS?

Key takeaway
- Project estimated animals retained by DAS Owner Deflection:
- 20,807

Survey potential owners and key stakeholders:
- 100+ stakeholder interviews completed including:
  - 47 interviews with DAS respondents
  - 14 interviews with stakeholders from comparable benchmark cities
  - ~2,600 dog owners interviewed

Impact logic:
- $46K/yr potential to deflect additional dogs
- 0%
- 10%
- 20%
- 40%
- 60%
- 80%
- 100%

Reasons owner surrendered animals (%):
- Other (5)
- Lifestyle (3)
- Chameleon (199)
- Other (19)
- Euthanasia (11)
- Other (9)
- Personal health (7)
- Animal aggression (6)
- Other (5)
- Yard/Housing (4)
- Animal Service Officers (4)
- Other (3)
- Enforcement & Animal Control (2)
- Other (2)
- Vet Care (1)
- Other (1)

Additional analysis completed:
- Detailed analysis of all relevant data sources:
  - Gathered and reviewed large volume of available secondary research:
  - Interviewed with stakeholders from comparable benchmark cities
  - Additional analysis completed

Other white papers:
- 5
- 3
- 1
- 1

---

Note: Sources and assumptions listed in detail on each relevant backup slide

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This document is divided into four themes

<table>
<thead>
<tr>
<th>Supply of Dogs</th>
<th>Enforcement &amp; Reporting</th>
<th>DAS Operations</th>
<th>Benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many dogs are in Dallas?</td>
<td>How effectively does Dallas institute and enforce animal</td>
<td>How effectively does DAS collect dogs?</td>
<td>How do other US cities structure their Animal</td>
</tr>
<tr>
<td>• Registered, Loose?</td>
<td>ordinances?</td>
<td>How efficiently and quickly does DAS operate its</td>
<td>control agencies?</td>
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<tr>
<td>Do dogs pose a public safety risk?</td>
<td>How effectively does DAS respond to animal-related requests /</td>
<td>shelter?</td>
<td>How have comparable cities overcome similar</td>
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<tr>
<td>What services are available to prevent population growth</td>
<td>complaints?</td>
<td></td>
<td>dog issues?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What best practices can be applied in Dallas?</td>
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</table>
Dallas dogs can be conceptualized as buckets and flows

1. Imagine the Dallas dog population as a bucket of water.
2. The bucket is continuously filled as new dogs are born.
3. Some owners surrender their dogs to DAS.
4. DAS shelters and attempts to rehome dogs, within its capacity.
5. Some dogs "fall through the cracks" and become loose, including runaway, loose-owned, community or feral dogs.
6. Loose dogs collected from field to prevent public safety and animal welfare issues.
7. DAS returns dogs to their owners or places them through adoptions and transfer partners—overflow results in euthanasia.

Loose dogs collected from field to prevent public safety and animal welfare issues.
Dog issue difficult to fix because it requires coordinating efforts

Actions that impact only a single point often create unintended consequences

<table>
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<tr>
<th>Single Action</th>
<th>Direct or Unintended Consequence</th>
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<tbody>
<tr>
<td>6 Pick up all the loose dogs</td>
<td>2 People replace pets given large supply of new dogs</td>
</tr>
<tr>
<td>5 Encourage community to keep loose dogs off the street</td>
<td>7 Euthanasia spikes from increased intake</td>
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<tr>
<td>4 Build a bigger shelter</td>
<td>2 If breeding continues, dog population overwhelms the most responsible of owners</td>
</tr>
<tr>
<td>2 S/N all the dogs</td>
<td>3+6 Intake fills shelter, returns to &quot;business as usual&quot;</td>
</tr>
<tr>
<td>7 Owned pets still roam the streets</td>
<td></td>
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</table>
Supply of Dogs
### Key questions

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<tbody>
<tr>
<td>A</td>
<td>How many dogs are in Dallas?</td>
</tr>
<tr>
<td>B</td>
<td>Do loose dogs pose a public safety risk?</td>
</tr>
<tr>
<td>C</td>
<td>What services are available to prevent population growth?</td>
</tr>
</tbody>
</table>

### Our approach

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
</table>
| A | Survey of Dallas citizens  
Census of loose dogs in Dallas  
Industry estimates (AVMA formulas) |
| B | Analysis of bites and other incidents from USPS, 311, 911 records  
Survey of Dallas citizens |
| C | Consolidated historical activity from different spay and neuter organizations  
Modeled expected population growth |
Total dog population, spay and neuter level, and growth potential can be modeled from basic inputs

<table>
<thead>
<tr>
<th>Metric</th>
<th>Estimate considers:</th>
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</thead>
<tbody>
<tr>
<td>1 Beginning of period dog population</td>
<td>Population, Prior intake, AVMA, community stats</td>
</tr>
<tr>
<td>2 New dogs born</td>
<td>Observed S/N levels, reproduction variables</td>
</tr>
<tr>
<td>3 Dogs removed (OTC, Field)</td>
<td>Historical DAS OTC, Field collection from area</td>
</tr>
<tr>
<td>4 Dogs placed (Adoptions, RTO)</td>
<td>Historical DAS placement into area</td>
</tr>
<tr>
<td>5 Dogs placed (Transfers, Other)</td>
<td>Allocation of historical DAS transfers into area</td>
</tr>
<tr>
<td>6 Intact dogs &quot;removed&quot; for S/N</td>
<td>Historical or planned S/N efforts in area</td>
</tr>
<tr>
<td>7 Intact dogs &quot;returned&quot; following S/N</td>
<td>Historical or planned S/N efforts in area</td>
</tr>
<tr>
<td>8 Dog Death in 2015</td>
<td>Assumes 10 year average dog life</td>
</tr>
</tbody>
</table>

**End of period dog population**

*Net neutral*

Sizing dog population needed to design effective solutions

Source: BCG analysis
Dallas home to ~350k dogs, with low adoption of spay and neuter in southern Dallas resulting in high population growth

Dallas home to ~350k dogs

Spay and neuter (S/N) levels vary between North & southern Dallas

Southern Dallas dog population in position to grow quickly

1. Dog population is a function of households and dogs per household. There are 333,700 households in North Dallas and 0.584 dogs per household based on AVMA; 2. There are 173,598 households in southern Dallas and 0.883 dogs per household. Dogs per household is average of American Veterinary Medical Association (0.583 dogs/HH) and Pets for Life (1.182 dogs/HH); 3. Assumes 80% sterilized in North Dallas based on local expert interviews; 4. Based on 2015 DAS shelter and field intake – and inline with local expert interviews; 5. Growth rates based on starting population, birth rate, and death rate. Birth rate assumes 1.16 litters a year, 7 puppies a litter, 75% birth survival rate for an average of 6.09 puppies a year per intact female. Sex ratio assumed to be 50/50. A 10 year life expectancy, implies 10% of dogs die in a given year; Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8; Source: DAS Chameleon database, Experian Current Year Estimates (Q2 2015) for population data, AVMA, ASPCA, PFL, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, BCG analysis
Population growth slowed by DAS and community efforts, but will only "pay off interest, not principal"

Population growth contained in two ways

A. DAS collection & placement
- DAS removes dogs from area through Field and OTC collects
- DAS places some dogs back into community that have been S/N

B. Low-cost S/N surgeries
- DAS and community organizations offer low-cost S/N surgeries that serve dog-owners in the community

Today, efforts have contained growth in southern Dallas, but not reduced intact population

Intact Dogs in southern Dallas (k)

Today’s activities prevent rapid population growth

Higher levels of S/N or removal from area required to reduce intact population

1. Assumes no spay and neuter, adoptions, RTO, or transfers; 2. Assumes no spay and neuter, however, number of adoptions, RTO, and transfers into southern Dallas constant to 2015; 3. Surgeries completed by BFBD, SNN, SPCA, DAS (through BFBD), DCAP, PFL specific to southern Dallas. Assumes levels of S/N are constant to 2015. 4% does not align to next slide, due to difference in 10 year CAGR and one year growth rate. Faster growth seen in later years.; Note: Assumes starting intact population of 130,294 dogs in southern Dallas, 6% roaming, 50/50 sex ratio, 1.16 litters a year, 7 puppies a litter, 75% birth survival rate, 10 year life expectancy, 2.8% of owned dogs breeding; Source: AVMA, ASPCA, American Kennel Club, Pets for Life Canine Perinatal Mortality Study 2012, Birth and Death Rate Estimates of Cats and Dogs 2004, PetMD, Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994, BFBD, SNN, SPCA, DAS Chameleon database, DCAP, PFL, BCG analysis
Across southern Dallas, ~150k dogs expected to grow at ~5%
DAS & community interventions reduce the possible growth rate through S/N and removals

1. There are 173,598 households in southern Dallas and 0.883 dogs per household. Intact % is based on DAS intake. Dogs per household is average of AVMA (0.583 dogs/HH) and Pets for Life (1.182 dogs/HH) ownership rates; 2. Birth rate assumes 1.16 litters a year, 7 puppies a litter, 75% birth survival rate for an average of 6.09 puppies a year per intact female. Sex ratio assumed to be 50/50; 3. 2015 DAS shelter and field intake; 4. 2015 RTO and adoptions from DAS; 5. Allocates total transfer volume to southern Dallas based on 50% of RTO and adoption from DAS. Assumes all transfers are sterilized; 6. Surgeries completed by SNN, SPCA, DAS (through BFBD), DCAP, PFL specific to southern Dallas. Some surgeries completed through BFBD; 7. A 10 year life expectancy, implies 10% of dogs die in a given year; Note: 2.6% does not align to previous slide, due to difference in 10 year CAGR and one year growth rate. This is based on US census block group level data; Source: Experian Current Year Estimates (Q2 2015) for population data, AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004 for birth rate, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, BFBD, SNN, SPCA, DAS, DCAP, PFL, BCG analysis.
In areas targeted for Big Fix low-cost S/N campaigns, growth slightly slower, but intact population still growing at 1%
Areas without independent spay and neuter efforts (Big Fix) seeing much higher rates of growth—average of 8% annually

In 2015, DAS removed ~2K intact dogs from non-BFBD southern Dallas zips ~1K sterilized dogs through Adoptions, RTOs, Transfer partners

Independent organizations sterilized 300 dogs in non-BFBD southern Dallas zips in 2015

1. There are 42,452 households and 0.883 dogs per household. Intact % is based on DAS intake. Dogs per household is average of AVMA (0.583 dogs/HH) and Pets for Life (1.182 dogs/HH) ownership rates; 2. Birth rate assumes 1.16 litters a year, 7 puppies a litter, 75% birth survival rate for an average of 6.09 puppies a year per intact female. Sex ratio assumed to be 50/50.
3. 2015 DAS shelter and field intake; 4. 2015 RTO and adoptions from DAS; 5. Allocates total transfer volume to southern Dallas based on 50% of RTO and adoption from DAS. Assumes all transfers are sterilized; 6. Surgeries completed by SNN, SPCA, DAS (through BFBD), DCAP, PFL specific to southern Dallas. Some surgeries completed through BFBD; 7. A 10 year life expectancy, implies 10% of dogs die in a given year; Note: This is the difference between southern Dallas numbers and Big Fix for Big D numbers; Source: Experian Current Year Estimates (Q2 2015) for population data, AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004 for birth rate, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, BFBD, SNN, SPCA, DAS, DCAP, PFL, BCG analysis
Population growth in some areas under control due in part to Big Fix for Big D...

Estimated Intact Dog Population & Expected Growth of Dallas Zip Codes

1. Dog population based on number of households per US census per zip code and pet ownership rates. North Dallas uses AVMA estimate of 0.583 dogs/HH. Southern Dallas uses average of AVMA estimate (0.583 dogs/HH) and Pets for Life (1.182 dogs/HH). Intact population in North assumed to be 20% of total dog population. Intact population in southern Dallas estimated from S/N status of DAS intake within zip. If intake in a given zip code was < 50 dogs, intact population assumed to be 85% of total dog population. Rate of reproduction then assumes, 6% roaming, 50/50 sex ratio, 1.16 litters a year, 7 puppies a litter, 75% birth survival rate, 10 year life expectancy, 2.8% of owned dogs breeding; Note: 9 North Dallas zip codes have intact growth rate less than -20% and are not shown on graph; Source: Experian Current Year Estimates (Q2 2015), AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, BFBD, SNN, SPCA, DAS, DCAP, PFL, BCG analysis
## Summary: Dallas zip code level detail

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<tr>
<td>Total BFBD</td>
<td>96,603</td>
<td>19,199</td>
<td>115,802</td>
<td>24,091</td>
<td>9,299</td>
<td>1,738</td>
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<td>164</td>
<td>2,139</td>
<td>1,152</td>
<td>11,580</td>
<td>4,582</td>
<td>0.7</td>
<td>23,414</td>
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<td>4.3</td>
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<td>Total Other South</td>
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<td>Total Dallas</td>
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</tbody>
</table>

Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. southern Dallas includes districts 1,3,4,5,7,8. These numbers do not tie back to previous slides due to discrepancies in zip codes and census block groups. Some zip codes span multiple city lines outside of Dallas. These detail summary slides account for all zip codes that are in the city of Dallas even if they cross city lines. This analysis is based on zip code level detail; Source: Experian Current Year Estimates (Q2 2015), AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994, BFBD, SNN, SPCA, DAS, DCAP, PFL, BCG analysis.
```plaintext
Backup: BFBD and southern Dallas zip code level detail

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<td>14,500</td>
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</tbody>
</table>

Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14, southern Dallas includes districts 1,3,4,5,7,8. These numbers do not tie back to previous slides due to discrepancies in zip codes and census block groups as these do not match. Some zip codes span multiple city lines outside of Dallas and are not included in block group analysis These detail summary slide shows all zip codes that are in the city of Dallas even if they cross city lines; Source: Experian Current Year Estimates (Q2 2015), AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994, BFBD, SNR, SPCA, DAS, DCAP, PFL, BCG analysis

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Working materials – not validated with all parties
Zips
75006
75007
75019
75039
75043
75060
75062
75063
75081
75087
75088
75089
75098
75126
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75230
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75235
75238
75243
75244
75246
75247
75248
75251
75252
75254
75287
Total
North

2015
2015
2015
2015
DAS
Intact Sterilized Estimated 2015 Intake
Dogs
Dogs
Dogs
Growth Intact

2015 DAS
Intake
Sterilized

Intact
Intake
(%)

2015 DAS 2015 DAS
Outcome Outcome
Intact
Sterilized Transfers

2015
Death
Total

S/N

2016 Change 2016
2016
Intact Intact Sterilized Total
Dogs
(%)
Dogs
Dogs

Change
Total
2016
(%)
Growth

2016
Death
Total

2017
Total

3,144
3,454
2,780
1,392
3,974
2,680
2,760
3,159
2,516
2,037
1,530
1,889
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2,061
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114
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82
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90
19
151
104
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137
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49
115
218
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158
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127
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272

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1,236
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1,174
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181
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967
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575
1,057
2,003
498
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137
1,066
829
2,341

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5,777
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11,127
11,463
13,114
10,448
8,454
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8,554
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7,093
16,005
580
4,942
5,579
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7,238
9,610
10,569
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6,830
1,630
18,205
8,700
9,726
11,344
8,215
5,171
9,511
18,031
4,484
726
207
12,226
1,230
9,590
7,461
21,070

98,845

395,379

494,224

5,574

5,008

1,655

75.2

2,319

3,347

2,833

49,422

2,616

89,229

-9.7

362,982

452,211

-8.5

5,039

45,725

411,526

Note: These numbers do not tie back to previous slides due to discrepancies in zip codes and census block groups as these do not match. Some zip codes span multiple city lines outside of Dallas
and are not included in block group analysis These detail summary slides account for all zip codes that are in the city of Dallas even if they cross city lines; Source: Experian Current Year Estimates
(Q2 2015), AVMA, Birth and Death Rate Estimates of Cats and Dogs 2004, ASPCA, Canine Perinatal Mortality Study 2012, DAS Chameleon database, Development of a Model for Estimating the
Size and Dynamics of Pet Dog Population 1994, BFBD, SNN, SPCA, DAS, DCAP, PFL, BCG analysis
20160826_BCG_DallasDog_WorkingMaterials_vPublic.pptx

Working materials – not validated with all parties 17

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Backup: North Dallas zip code level detail


Multiple organizations have performed low-cost cost spay and neuter surgeries in southern Dallas

Organizations performed majority of spay and neuter surgeries...

...averaging ~6k annually, but declining in recent years

Number of surgeries

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Surgeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>4,182</td>
</tr>
<tr>
<td>2013</td>
<td>6,198</td>
</tr>
<tr>
<td>2014</td>
<td>6,703</td>
</tr>
<tr>
<td>2015</td>
<td>4,926</td>
</tr>
<tr>
<td>2016</td>
<td>5,636</td>
</tr>
</tbody>
</table>

Note: This includes SNN, SPCA, DAS (through BFBD), DCAP, PFL specific to southern Dallas. Some surgeries completed through BFBD. This does not include spay and neuters that were completed as part of DAS operations (~3,500 were completed for adoptions into southern Dallas in 2015). I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8; Source: Chameleon Database, SNN, BFBD, DCAP, BCG analysis.
...but fixing problem across southern Dallas requires a surge of ~46-70k low-cost S/N each year over 2-3 years

Estimated Intact Population in southern Dallas¹ (k)

<table>
<thead>
<tr>
<th>Outcome for Given S/N Level</th>
<th>Years to Sterilize Current Dog Population in Southern Dallas</th>
</tr>
</thead>
<tbody>
<tr>
<td>No community intervention</td>
<td>46k yearly</td>
</tr>
<tr>
<td>DAS intake only</td>
<td>69k yearly</td>
</tr>
<tr>
<td>Current levels of S/N (5k)</td>
<td>28k yearly</td>
</tr>
<tr>
<td>12k yearly</td>
<td>12k yearly</td>
</tr>
<tr>
<td>6k yearly</td>
<td>6k yearly</td>
</tr>
</tbody>
</table>


¹: Assumes starting intact population based on census population estimate and average of AVMA (0.583 dogs/HH) and Pets for Life (1.182 dogs/HH) ownership rates, 6% roaming, 50/50 sex ratio, 1.16 litters a year, 7 puppies a litter, 75% birth survival rate, 10 year life expectancy, 2.8% of owned dogs breeding; Note: Assumes starting intact population of 130,294 dogs in southern Dallas; Source: Experian Current Year Estimates (Q2 2015) for population data, AVMA, ASPCA, American Kennel Club, Pets for Life Canine Perinatal Mortality Study 2012, Birth and Death Rate Estimates of Cats and Dogs 2004, PetMD, Development of a Model for Estimating the Size and Dynamics of Pet Dog Population 1994, BCG analysis
### Backup: Spay and Neuter Targets by Zip Code for Southern Dallas

<table>
<thead>
<tr>
<th>Zip code</th>
<th>Households</th>
<th>Y1 Intact (%)</th>
<th>Y1 Estimated Dogs</th>
<th>Y1 Intact Population</th>
<th>Y1 Target S/N Surgeries</th>
<th>Y2 Target Intact Population</th>
<th>Y2 Target Intact (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75211</td>
<td>21,214</td>
<td>80</td>
<td>18,732</td>
<td>14,954</td>
<td>4,191</td>
<td>11,557</td>
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<td>75212</td>
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<td>6,456</td>
<td>5,412</td>
<td>1,359</td>
<td>3,846</td>
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<tr>
<td>75216</td>
<td>17,440</td>
<td>86</td>
<td>15,400</td>
<td>13,250</td>
<td>3,602</td>
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<td>75217</td>
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<td>75228</td>
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<tr>
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<td>85</td>
<td>1,958</td>
<td>1,664</td>
<td>500</td>
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<td>81</td>
<td>4,451</td>
<td>3,622</td>
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<tr>
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<td>4,801</td>
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<td>997</td>
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<td>4,625</td>
<td>3,520</td>
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<td>58</td>
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<tr>
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<td>90</td>
<td>5,629</td>
<td>5,048</td>
<td>1,408</td>
<td>3,882</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>220,134</strong></td>
<td><strong>83</strong></td>
<td><strong>194,378</strong></td>
<td><strong>161,481</strong></td>
<td><strong>46,000</strong></td>
<td><strong>126,852</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>

1. Intact population in southern Dallas estimated from S/N status of DAS intake within zip. If intake in a given zip code was < 50 dogs, intact population assumed to be 85% of total dog population.

Anecdotally "culture" reported as a strong barrier limiting S/N levels, but evidence suggests otherwise

We've heard in some communities culture discourages sterilization

"Some communities are against spay and neuter."

"Residents in southern Dallas believe it's emasculating to sterilize dogs."

"Dogs are seen as safety/watch dogs in this area. They want them to be aggressive."

PetSmart Charities survey found price & time were two leading barriers

<table>
<thead>
<tr>
<th>Reason not to sterilize</th>
<th>% of respondents</th>
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</thead>
<tbody>
<tr>
<td>Pet is too young</td>
<td>41</td>
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<tr>
<td>Too expensive</td>
<td>32</td>
</tr>
<tr>
<td>Haven't had time</td>
<td>21</td>
</tr>
<tr>
<td>Pet not loose</td>
<td>11</td>
</tr>
</tbody>
</table>

HSUS study found just 20% refused S/N for cultural/ethical reasons

<table>
<thead>
<tr>
<th>Reason not to sterilize</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet not loose</td>
<td>26</td>
</tr>
<tr>
<td>Want pet to breed</td>
<td>25</td>
</tr>
<tr>
<td>Too expensive</td>
<td>17</td>
</tr>
<tr>
<td>Haven't had time</td>
<td>13</td>
</tr>
<tr>
<td>Never thought of it</td>
<td>11</td>
</tr>
<tr>
<td>Cruel or unnatural</td>
<td>11</td>
</tr>
<tr>
<td>Change personality</td>
<td>10</td>
</tr>
<tr>
<td>Don't know</td>
<td>9</td>
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</tbody>
</table>

Note: PetSmart Charities conducted surveys in 2011 to recently acquired dog and cat owners in past 12 months (n = 317); Humane Society conducted 2007 study in Louisiana and Mississippi asking for top 2 reasons pets not sterilized (n = 779); Source: PetSmart Charities, Humane Society of US, BCG analysis
How many loose dogs are there in Dallas?

We conducted a census of the loose dog population in areas Dallas residents reported seeing them.

1. Based on multiple routes driven; Note: ‘Often’ is at least once a day; Source: Google Maps, City of Dallas, Dallas Community Survey June 2016, BCG analysis.

<table>
<thead>
<tr>
<th>Dogs Seen</th>
<th>Miles Driven</th>
<th>Dogs / mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
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<tr>
<td>21</td>
<td>20</td>
<td>1.05</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>1.25</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>0.44</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>0.37</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>0.40</td>
</tr>
<tr>
<td>23</td>
<td>15</td>
<td>1.53</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>0.13</td>
</tr>
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<td>4</td>
<td>12</td>
<td>0.33</td>
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<tr>
<td>0</td>
<td>15</td>
<td>0.01</td>
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<tr>
<td>0</td>
<td>12</td>
<td>0.01</td>
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<tr>
<td>4</td>
<td>15</td>
<td>0.27</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>0.71</td>
</tr>
<tr>
<td>20</td>
<td>16</td>
<td>1.25</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>0.67</td>
</tr>
<tr>
<td>5</td>
<td>17</td>
<td>0.29</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>0.40</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>0.13</td>
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<tr>
<td>4</td>
<td>12</td>
<td>0.33</td>
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<td>15</td>
<td>0.27</td>
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<td>10</td>
<td>14</td>
<td>0.71</td>
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<td>23</td>
<td>15</td>
<td>1.53</td>
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<td>1</td>
<td>8</td>
<td>0.13</td>
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<td>4</td>
<td>12</td>
<td>0.33</td>
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<tr>
<td>0</td>
<td>15</td>
<td>0.01</td>
</tr>
<tr>
<td>0</td>
<td>15</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>0.27</td>
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<tr>
<td>10</td>
<td>14</td>
<td>0.71</td>
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<tr>
<td>23</td>
<td>15</td>
<td>1.53</td>
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<tr>
<td>1</td>
<td>8</td>
<td>0.13</td>
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<tr>
<td>4</td>
<td>12</td>
<td>0.33</td>
</tr>
<tr>
<td>0</td>
<td>15</td>
<td>0.01</td>
</tr>
<tr>
<td>0</td>
<td>15</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>0.27</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>0.71</td>
</tr>
<tr>
<td>23</td>
<td>15</td>
<td>1.53</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Heat map based on citizen input

% of survey respondents that see dogs often based on input from citizen survey.
Based on results, estimate ~8,700 loose dogs in southern Dallas
Sizing population can be helpful in identifying resources needed to address issue and progress tracking

What did we see:
136 dogs along 235 miles

BCG counted loose dogs on ~235 miles driven

<table>
<thead>
<tr>
<th>Census Trips</th>
<th>Miles Driven</th>
<th>Dogs Seen</th>
<th>Average Per Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas</td>
<td>5</td>
<td>59</td>
<td>1</td>
</tr>
<tr>
<td>Southern Dallas</td>
<td>15</td>
<td>176</td>
<td>135</td>
</tr>
</tbody>
</table>
• Also observed citizens walking with sticks for protection on most routes in southern Dallas

What does it mean:
~8,700 loose dogs in southern Dallas

Observations extrapolated based on road mileage to estimate total loose dogs in Dallas

<table>
<thead>
<tr>
<th>Total Road Miles¹</th>
<th>Dogs Seen / Mile</th>
<th>Unseen Multiplier²</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dallas</td>
<td>2,226</td>
<td>0.02</td>
<td>n/a</td>
</tr>
<tr>
<td>Southern Dallas</td>
<td>1,751</td>
<td>0.77</td>
<td>~6.45x</td>
</tr>
</tbody>
</table>

Math shown is simplified, but representative based on approaches endorsed by:


Census does not provide indication of trend and would need to be repeated in the future to assess progress
**Detail:** Loose dogs spotted during census were of various sizes and breeds—most appeared healthy and owned.

*Source:* BCG Dog Census June 2016, BCG analysis
National research helps to quantify link between loose dogs, public safety and animal welfare

Loose-owned dogs major bite risk

- Most dog bites from owned dogs
  - 83% of bites belong to someone else dog\(^1\)
  - 40% of bites are from a stranger's dog\(^2\)

- Significant number of bites from loose dogs
  - 35-45% of bites are from loose dogs\(^3,4\)
  - 32% of fatal attacks from loose dogs\(^5\)

- Victims tend to be children or elders
  - 38% of bite victims were children (15% of population)\(^6\)
  - 30% of bite victims were over 50 (11% of population)\(^6\)
  - 70% of fatal dog attacks were children under 10 and 21% over 50\(^2\)

---

Reported dog bites in Dallas up 15% annually from 2013-15 with bites from loose-owned dogs growing at 23%

DAS completes a "bite report" for every reported dog bite per CDC guidelines

In Dallas, dog bites, especially those from loose-owned, dogs are growing

1. DAS dog bite reports from 2013-2016 (n=4,290); BCG performed manual data entry of key fields; 2. Compounded annual growth rate; 3. Stray defined as a dog without an owner; 4. Compared the total dog bites for January to March of 2015 and 2016 to find ~1.1x growth in 2016. Applied ~1.1x to the total number of bites in 2015 (1,524) to estimate 2016 total dog bites. Note: For the fields that were left blank in the bite reports, assumed those reports were distributed in line with completed records. Whether dog was stray or owned had 213 incompletes (~4.9%). Of owned dogs, 1,384 (42.9%) had the "at large," or loose, field incomplete; Note: Dog bites are thought to be underreported in the US. In the future, better tracking of bites may result in an apparent increase as previously unreported bites begin to be reported; Source: DAS bite reports 2013 - Q1 2016, BCG analysis
In addition, other unofficial indicators suggest bites are up
However sources are biased due to methods, taxonomy, and system of reporting

USPS dog attacks in Dallas grew by 13% in 2015

No. dog attacks on USPS carriers

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>47</td>
<td>53</td>
</tr>
</tbody>
</table>

*“I get bit all the time, man.... It’s really rough, man. I been bit five times. We just had a guy come back, his arm’s been bit, face swollen. He was out for about six months.”*

-Dallas USPS carrier

311 requests related to attacks up 66% since '14

Avg. 311 attack requests per month

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016 YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>283</td>
<td>615</td>
<td>778</td>
</tr>
</tbody>
</table>

Average animal 311 requests per month

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016 YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>~4,000</td>
<td>~3,900</td>
<td>~4,200</td>
</tr>
</tbody>
</table>

911 dog attack calls up 51% since '14

Avg. 911 dog attacks per month

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016 YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>10</td>
<td>14</td>
<td>23</td>
</tr>
</tbody>
</table>

1. Includes following types of 311 requests "aggressive activity," "attack in progress," "bite," and "urgent assist"; 2. Includes calls tagged as “Attack by Dog SBI” and “Attack by Dangerous Dog”;
Source: USPS 2016 dog bite report, D Magazine Article “Dallas Fights to Solve Stray Dog Problem”, 311 service request history, Police RMS Incidents, accessed on 6/7/2016 and BCG analysis

Data not controlled for USPS labor hours
Taxonomy of call type has changed over last 3 yrs.
System for categorizing calls has changed over last 3 yrs.
Loose dogs not identified as the leading problem in Dallas, but 46% of southern Dallas considers it a "major problem"
According to Dallas city survey, enforcement related to loose dogs cited as key mission for Code, but has low satisfaction

<table>
<thead>
<tr>
<th>Area</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Sum of top two choices (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforcement of loose dogs &amp; unrestrained pets</td>
<td>11</td>
<td>36</td>
<td>31</td>
<td>22</td>
<td>73</td>
</tr>
<tr>
<td>Enforcement of blighted residential properties</td>
<td>9</td>
<td>35</td>
<td>31</td>
<td>25</td>
<td>66</td>
</tr>
<tr>
<td>Enforcement of open storage of junk violations</td>
<td>7</td>
<td>36</td>
<td>36</td>
<td>21</td>
<td>69</td>
</tr>
<tr>
<td>Enforcement of mowing &amp; cutting of weeds &amp; high grass on private property</td>
<td>8</td>
<td>33</td>
<td>33</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td>City efforts to remove abandoned or inoperative vehicles</td>
<td>7</td>
<td>32</td>
<td>32</td>
<td>29</td>
<td>63</td>
</tr>
<tr>
<td>Enforcement of bulk/brush trash violations</td>
<td>6</td>
<td>24</td>
<td>38</td>
<td>32</td>
<td>62</td>
</tr>
<tr>
<td>Enforcement of open storage of junk violations</td>
<td>6</td>
<td>24</td>
<td>33</td>
<td>31</td>
<td>60</td>
</tr>
<tr>
<td>Enforcement of loose dogs unrestrained pets</td>
<td>6</td>
<td>24</td>
<td>33</td>
<td>31</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Dallas Community Survey 2016 performed by the City of Dallas, BCG analysis
2 Enforcement & Reporting
Two key questions served as basis for approach to understand efficacy of enforcement

<table>
<thead>
<tr>
<th>Key questions</th>
<th>Our approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is DAS able to effectively respond to service requests?</td>
<td>Analysis of 311 requests</td>
</tr>
<tr>
<td></td>
<td>Review of 311 scripts</td>
</tr>
<tr>
<td></td>
<td>Interviews with ASOs and supervisors</td>
</tr>
<tr>
<td></td>
<td>Ride-a- longs with ASOs</td>
</tr>
<tr>
<td>Does Dallas effectively enforce its animal ordinances?</td>
<td>Review of current animal-related ordinances</td>
</tr>
<tr>
<td></td>
<td>Ride-a- longs with ASOs</td>
</tr>
<tr>
<td></td>
<td>Analysis of citations issued</td>
</tr>
<tr>
<td></td>
<td>Mapping of court follow-up</td>
</tr>
</tbody>
</table>

Working materials – not validated with all parties
Section 7 of the City of Dallas, Texas Code of Ordinances covers all rules related to animals

<table>
<thead>
<tr>
<th>Sec. Article</th>
<th>Title</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>General</td>
<td>• Defines of adopters, animal, animal services, etc.</td>
</tr>
<tr>
<td>7.2</td>
<td>Animal Services; City Animal Shelters</td>
<td>• Establishes policies regarding DAS rights to impound, redeem, adopt, and euthanize animals</td>
</tr>
<tr>
<td>7.3</td>
<td>Care and Treatment of Animals</td>
<td>• States animals need to be properly restrained</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• States animals need to live in sanitary conditions</td>
</tr>
<tr>
<td>7.4</td>
<td>Specific Requirements for Dogs and Cats</td>
<td>• Requires dogs and cats to be vaccinated and registered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Limits number of dogs and cats in a single dwelling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Requires dogs and cats to be sterilized</td>
</tr>
<tr>
<td>7.5</td>
<td>Dangerous Dogs</td>
<td>• Defines dangerous dog as one that makes an unprovoked attack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Permits director to investigate dog upon written request</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Allow director to impound dangerous dog if it makes an attack</td>
</tr>
<tr>
<td>7.6</td>
<td>Prohibited and Regulated Animals</td>
<td>• Requires regulated animals to have a valid permit</td>
</tr>
<tr>
<td>7.7</td>
<td>Miscellaneous</td>
<td>• States a person cannot interfere with animal services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• States a person cannot sell an animal found on public property</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prohibits animals from being awarded as prizes</td>
</tr>
<tr>
<td>7.8</td>
<td>Violations, Penalties, and Enforcement</td>
<td>• States violations and penalties for Section 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Routes all monetary penalties to the Dallas Animal Welfare Fund</td>
</tr>
</tbody>
</table>

Source: Dallas City Code, BCG analysis
DAS responsible for enforcing these rules

DAS receives community information from four sources...

- **311**: Animal requests are funneled directly to DAS
- **911**: Fields emergency calls; dispatches DAS
- **Hospitals**: Receive attack victims and notify DAS
- **DAS**: Officers report issues when in the field

...And responds with four methods of enforcement

- **Issue citations**: To enforce code
- **Capture dogs**: Through trapping, sweeping, direct contact
- **Engage in outreach**: To avoid occurrence or worsening of issues
- **Conduct follow-up**: After bites or with violations

Source: 311 interviews, DAS ride-a-longs, DAS interviews, BCG analysis
311 animal requests made through three channels, but only urgent requests received via phone are dispatched to ASOs

1. Call → 311 agent (all requests)
2. Computer (some non-urgent requests)
3. Mobile app (some non-urgent requests)

Urgent requests dispatched

311 dispatcher + ASO officer
- Respond to request in person and in order of priorities
- Might issue a citation, capture an animal, or perform outreach

Non-urgent requests sent directly to DAS

DAS
- Track data to identify areas for sweeps and targeted initiatives
- Send letters to addresses of requests that outline animal ordinances and animal-related resources

Source: 311 interviews, DAS ride-a-longs, DAS interviews, BCG analysis
Annually, DAS fields ~48k calls, ~60% of which are dispatched for ASO response

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Response timeline</th>
<th>Response goal</th>
<th>Examples</th>
<th>TTM from May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immediately</td>
<td>45m – 1 hour</td>
<td>Animals attacking humans or each other; humans attacking animals; public safety obstruction</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>Immediately after Level 1</td>
<td>1-2 hours</td>
<td>Critically injured animals; animals that will die if left in their current condition/environment; rabies vector species in living quarters</td>
<td>16%</td>
</tr>
<tr>
<td>3</td>
<td>Immediately after Level 2</td>
<td>2-3 hours</td>
<td>Urgent assists to Police or Fire</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>Once levels 1-3 cleared</td>
<td>3-4 hours</td>
<td>Animals on school grounds; aggressive packs of dogs; animal neglect; sick or injured</td>
<td>15%</td>
</tr>
<tr>
<td>5</td>
<td>Once Level 4 cleared</td>
<td>4-6 hours</td>
<td>Animal bite calls/quarantine; confined animals not in danger from the elements; wild animals in living quarters</td>
<td>3%</td>
</tr>
<tr>
<td>6</td>
<td>Once level 5 cleared</td>
<td>12 hours</td>
<td>Low priority police assists; owner surrenders for disabled or senior citizens; loose owned dogs</td>
<td>15%</td>
</tr>
<tr>
<td>7</td>
<td>Case dependent</td>
<td>7-10 days</td>
<td>Follow ups</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>Within 7-30 days</td>
<td>7 days</td>
<td>Compliance calls; loose dogs in non CARE areas</td>
<td>38%</td>
</tr>
</tbody>
</table>

1: Range is 6/1/2015-5/31/2016; Note: TTM is trailing twelve months. Applied Volumes for the calls that had outcomes (~44k) to all calls; Source: 311 interview, Animal Service Request Types matrix from 311 prepared on 6/20/2016, and “Follow-up to Dallas Animal Services Update” to Quality of Life Committee on 5/6/2016, BCG analysis.

~45% of dispatched requests

~40% of requests not dispatched
ASOs cite inefficient dispatch as time consuming

"It seems like 30% of calls don't have a proper address, an updated contact number, or an animal to respond to"

"The requests are not always prioritized correctly so I have to read the fine print of each request to determine if I should see to it immediately"

"I have to manually write down each request even though they are in the Chameleon system"

"Chameleonic doesn't map my route for me so I have to always look at a mapsco or my phone to figure out the fastest route"

"311 doesn't patch through any photos taken so I have no idea what the dog looks like"

"My computer always disconnects from the internet so I have to stop, restart the computer, and wait to connect"

"It seems like 30% of calls don't have a proper address, an updated contact number, or an animal to respond to"

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"311 doesn't patch through any photos taken so I have no idea what the dog looks like"

"My computer always disconnects from the internet so I have to stop, restart the computer, and wait to connect"

Source: Interviews with DAS ASOs and BCG analysis
DAS ASOs issue citations, and municipal courts execute the follow-through actions

<table>
<thead>
<tr>
<th>City oversight</th>
<th>DAS</th>
<th>Municipal courts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offender action</td>
<td>Offender receives criminal or civil citation...</td>
<td>...and can respond to citations with one of several actions</td>
</tr>
<tr>
<td></td>
<td>• Pay fine</td>
<td>• Warrants</td>
</tr>
<tr>
<td></td>
<td>• Contest or request trial</td>
<td>• Increased penalty</td>
</tr>
<tr>
<td></td>
<td>• Defer disposition</td>
<td>• Possible holds on drivers licenses</td>
</tr>
<tr>
<td></td>
<td>• Claim indigence</td>
<td></td>
</tr>
</tbody>
</table>

CRIMINAL
98% of all citations

CIVIL
2% of all citations

---

1. Includes all citations between June 2014 and May 2016; Source: Citation data from municipal courts between June 2014 and May 2016, Dallascityhall.com, BCG analysis
Majority of citations issued for vaccination and sterilization, control and restraint, and registration

ASOs focus on particular types of code

Other
- Sale of animal
- Defecation
- Dangerous dogs

Vaccination and sterilization
- Animals wear tags that show rabies vaccination
- Animals altered unless specially registered

Control and restraint
- Animals restrained and on leash in public
- Animals only restrained if owner is present and not more than 3 hours a day

Registration
- Animals wear proper tags
- Owner able to show registration receipt

90% of citations issued in three areas

Source: Chapter 7 of Dallas code and ordinances, Citation data from municipal courts between June 2014 and May 2016, BCG analysis
DAS citations growing at ~7% monthly and majority issued in southern Dallas

Monthly citations growing 7% monthly

Number of citations per month:

- 2014-06: 90
- 2015-01: 107
- 2015-06: 132
- 2016-01: 163
- 2016-06: 190
- 2017-01: 202
- 2017-06: 176
- 2018-01: 183
- 2018-06: 144
- 2019-01: 213
- 2019-06: 286
- 2020-01: 231
- 2020-06: 240
- 2021-01: 308
- 2021-06: 437
- 2022-01: 461

3488 citations over TTM

Citations concentrated in southern Dallas

1. This concentration could be accounted for by the concentration of ASO officers where ~80% of ASO time is focused on southern Dallas; Note: TTM = trailing twelve months; Source: Google Maps, Citation data from municipal courts between June 2014 and May 2016, BCG analysis
Ability to issue more citations is hindered by three factors

First, most ASO time spent on priority calls

Second, citations difficult to issue

Third, officers know that citations aren't addressed

---

% of ASO time spent on service requests¹

- 60% 311- Attack in Progress (Priority 1)
- 30% 311- Injured animals (Priority 2)
- 10% Other requests (Priorities 3-6)

---

**Incorrect address entered into 311**

**No person or animal found at address**

**ASOs not deputized so can't enter property due to safety**

**Hard to identify the owner of a stray or loose dog**

**Civil citations can take up to an hour to issue due to IT difficulties**

---

1. Anecdotal evidence from DAS ASO interview; Source: DAS ride along, DAS ASO and supervisor interviews, BCG analysis

---

"They aren't going to pay them anyways"

"I don't think they are even arrested if they are pulled over and have outstanding animal citations"

"Some people can't afford to pay them"
44% of citations issued in 2015 were not responded to by defendant

1. For citations that had multiple outcomes classifications, included the outcome with the highest violation number with the assumption that that is the most recent outcome; 2. Maximum amount citation fines due was $466,589.73, maximum total paid was $177,661.37. In addition, some citations indicate that a defendant has not responded, but a citation has been paid; Source: Citation data from municipal courts between June 2014 and May 2016, BCG analysis

38% of citation fines were paid

No. citations 2015

<table>
<thead>
<tr>
<th>Responded to by defendant</th>
<th>Not responded to by defendant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>44%</td>
<td>1,033</td>
<td>2,368</td>
</tr>
<tr>
<td>56%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These citations were either closed, dismissed, or are in process of being closed
DAS Operations
Three key questions served as basis for approach to understand DAS shelter operations

<table>
<thead>
<tr>
<th>Key questions</th>
<th>Our approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Intake: How do dogs arrive at shelter?</td>
<td>• Analyzed DAS Chameleon data &amp; BCG analysis</td>
</tr>
<tr>
<td></td>
<td>• Conducted ride-alongs with ASOs</td>
</tr>
<tr>
<td></td>
<td>• Surveyed DAS shelter employees</td>
</tr>
<tr>
<td><strong>B</strong> Inside Operations: What happens to dogs inside DAS?</td>
<td>• Modeled costs by delineating/allocating DAS expenditures to stages of shelter ops; use third party estimates for medical procedures</td>
</tr>
<tr>
<td></td>
<td>• Analyzed DAS Chameleon data &amp; BCG analysis</td>
</tr>
<tr>
<td><strong>C</strong> Outcomes: Where do dogs go when leaving the shelter?</td>
<td>• Analyzed DAS Chameleon data &amp; BCG analysis</td>
</tr>
</tbody>
</table>
# DAS mission statement primarily focused on animal welfare

## Animal Welfare

<table>
<thead>
<tr>
<th>City</th>
<th>Mission Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin</td>
<td>To provide <strong>public service and a safety net for lost and homeless animals</strong> in the community by providing necessary food, water, shelter and standard municipal veterinary care for animals in need</td>
</tr>
<tr>
<td>Dallas (public)</td>
<td>Dallas Animal Services and Adoption Center is dedicated to the <strong>humane treatment of animals in Dallas</strong> and educating others about <strong>responsible pet ownership</strong>. We reinforce these ideals every day by providing daily care for hundreds of animals in our shelter, assisting citizens who come to see us as well as out in the community. We respond to calls regarding animal welfare and concerns, conduct free Responsible Pet Ownership classes, hold offsite animal adoption events, and speak at and provide educational information at public safety fairs, environmental festivals, and neighborhood organizations</td>
</tr>
<tr>
<td>Dallas (private)</td>
<td>To strengthen our community through outreach and enforcement efforts that preserve the human animal bond through the City of Dallas</td>
</tr>
<tr>
<td>Miami</td>
<td>To <strong>save the lives of abandoned animals</strong> in our care, <strong>reunite lost pets</strong> with their owners, <strong>protect the people and pets in our community from health related issues and ensure the public’s safety</strong></td>
</tr>
<tr>
<td>Jacksonville</td>
<td>Jacksonville’s Animal Care and Protective Services (ACPS) provides <strong>animal control to the citizens</strong> in Jacksonville by fair enforcement and community education. ACPS also <strong>enhances the quality of life in our neighborhoods by offering quality pets for adoption at a reasonable cost</strong>. ACPS is dedicated to providing a high level of service to the citizens in Jacksonville and to <strong>saving the lives of all adoptable animals in our community</strong></td>
</tr>
<tr>
<td>Houston</td>
<td>Our mission is to <strong>promote and protect public health and animal care</strong> through sheltering, pet placement programs, pet ownership education and animal law enforcement</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>To promote and protect the health, safety and welfare of animals and people</td>
</tr>
<tr>
<td>San Diego</td>
<td>To protect the health, safety &amp; welfare of people &amp; animals</td>
</tr>
<tr>
<td>San Antonio</td>
<td>Animal Care Services’ mission is to encourage <strong>responsible pet ownership</strong> by promoting and <strong>protecting the health, safety, and welfare</strong> of the residents and pets of San Antonio through education, enforcement, and community partnership</td>
</tr>
<tr>
<td>Reno</td>
<td>Washoe County Regional Animal Services promotes <strong>responsible care of animals</strong> through education, proactive outreach, and regulation <strong>making Washoe County a safe community</strong></td>
</tr>
<tr>
<td>Las Vegas</td>
<td>The mission of Clark County Animal Control is to <strong>promote public safety, rabies control and responsible pet ownership</strong> through education, service and enforcement</td>
</tr>
</tbody>
</table>

## Public Safety

Source: Mission statements pulled from animal services websites in respective cities, BCG Analysis.
Current DAS leadership hired in 2011 to turn around shelter with high rate of euthanasia and little community trust

Leadership changed on heels of major systematic failures

"Jones and veterinarian and operations manager Catherine McManus were hired in 2011 and 2012 to tighten up the struggling shelter"

-Dallas Morning News

Since change euthanasia has decreased and releases to Dallas households up

Evidence suggest DAS has made drastic improvements in shelter operations and LRR since 2011

Source: DAS personnel interviews, Dallas Morning News, Historical Maddies Fund reports, HSUS Shelter Evaluation Program Report for DAS 2010, BCG analysis
Today, dog intake split about evenly between OTC and Field

Largest bucket of activity are dog surrenders by owner (~30% of volume)

Several paths a dog take to the shelter

Avoided Intake
- **Field Same Day RTO**: ASO picks up loose dog and returns to owner same day

Field
- **Field owner surrender**: ASO picks up owner surrendered or confiscates dog
- **Field stray/loose**: ASO picks up stray or loose dog

OTC
- **Owner surrenders**: dog at shelter
- **Stray turn-in**: Volunteer/Activist catches dog and brings to shelter

>50% of DAS dog intake comes in OTC

<table>
<thead>
<tr>
<th>DAS Dog Intake</th>
<th>TTM As Of May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field - Same Day RTO</td>
<td>2,166 (11%)</td>
</tr>
<tr>
<td>Field - Owner Surrender</td>
<td>6,839 (34%)</td>
</tr>
<tr>
<td>Field - Stray/Loose</td>
<td>4,705 (23%)</td>
</tr>
<tr>
<td>OTC - Stray Turn-In</td>
<td>6,293 (31%)</td>
</tr>
<tr>
<td>OTC - Owner Surrender</td>
<td>20,159</td>
</tr>
</tbody>
</table>

Note: TTM = trailing twelve months; Note: TTM period is from June 2015 through May 2016; Note: ‘Field – Same Day RTO (return-to-owner)’ includes dogs with primary intake type of ‘Field’ and any intake subtype and reunited with owner on the same day; ‘Field – Owner Surrender’ includes dogs with primary intake type of ‘Field’ and intake subtypes of ‘owner surrender’ or ‘confiscated’; ‘Field – Stray’ includes dogs with primary intake type of ‘Field’ and intake subtype of ‘stray’ or ‘stray – confined’; ‘OTC – Stray Turn-In’ includes dogs with primary intake type of ‘OTC’ and intake subtype of ‘stray’; ‘OTC – Owner Surrender’ includes dogs with primary intake type of ‘OTC’ and intake subtypes of ‘owner surrender’ or ‘confiscated’

Source: DAS Chameleon database, BCG analysis

Note: Avoided Intake: Several paths a dog take to the shelter

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Working materials – not validated with all parties
Since 2011, DAS dog intake flat with increase in over-the-counter surrenders offsetting a decline in field intake

DAS Intake Volume by Type

1. CAGR = compound annual growth rate. 2. TTM = trailing twelve months; Note: 'Field – Same Day RTO (return-to-owner)' includes dogs with primary intake type of 'Field' and any intake subtype and reunited with owner on the same day; 'Field – Owner Surrender' includes dogs with primary intake type of 'Field' and intake subtypes of 'owner surrender' or 'confiscated'; 'Field – Stray' includes dogs with primary intake type of 'Field' and intake subtype of 'stray' or 'stray – confined'; 'OTC –Stray Turn-In' includes dogs with primary intake type of 'OTC' and intake subtype of 'stray'; 'OTC – Owner Surrender' includes dogs with primary intake type of 'OTC' and intake subtypes of 'owner surrender' or 'confiscated'

Source: DAS Chameleon database, BCG analysis
On trailing-12-month basis (TTM) volatility seen
OTC overtook Field intake in April 2012; Field intake more volatile than OTC intake

OTC surpassed Field intake in April 2012 and has been flat compared to Field

Field intake fluctuates more than OTC, where Field intake currently falling

Volatility not explained by seasonality as each TTM period has same # of summer months

Source: DAS Chameleon database, BCG analysis

Working materials – not validated with all parties
## Field work

<table>
<thead>
<tr>
<th>Reactive (311)</th>
<th>Proactive (Patrol)</th>
<th>Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respond to 311 requests</td>
<td>Target one area with sweeps, door-to-door education, and citations (CARE team)</td>
<td>Create and investigate bite records</td>
</tr>
<tr>
<td>Collect animals, return dogs to owners, issue citations, and educate community</td>
<td>Perform sweeps of some neighborhoods</td>
<td>Euthanize dogs at the shelter</td>
</tr>
<tr>
<td>Sweeps, cites, educates</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

~80% of ASO time  
~10% of ASO time  
~10% of ASO time
Compared to peers, DAS has higher ASO staffing levels and lower ASO field intake

DAS has 45% more ASOs per million people than benchmarks...

ASOs Per Million People

<table>
<thead>
<tr>
<th>Location</th>
<th>ASOs Per Million People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washoe County (Reno)</td>
<td>37</td>
</tr>
<tr>
<td>Dallas</td>
<td>26</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>-24</td>
</tr>
<tr>
<td>Austin</td>
<td>23</td>
</tr>
<tr>
<td>San Antonio</td>
<td>21</td>
</tr>
<tr>
<td>County of San Diego (Atlanta)</td>
<td>17</td>
</tr>
<tr>
<td>Fulton County (Atlanta)</td>
<td>16</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>16</td>
</tr>
<tr>
<td>Houston</td>
<td>12</td>
</tr>
<tr>
<td>Clark County (Las Vegas)</td>
<td>8</td>
</tr>
<tr>
<td>County of San Diego (Phoenix)</td>
<td>7</td>
</tr>
</tbody>
</table>

...but, DAS field collection lags by 20%

Dog Intake Per ASO Per Year

<table>
<thead>
<tr>
<th>Location</th>
<th>Dog Intake Per ASO Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washoe County (Reno)</td>
<td>551</td>
</tr>
<tr>
<td>Dallas</td>
<td>500</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>453</td>
</tr>
<tr>
<td>Austin</td>
<td>412</td>
</tr>
<tr>
<td>San Antonio</td>
<td>315</td>
</tr>
<tr>
<td>County of San Diego (Phoenix)</td>
<td>284</td>
</tr>
<tr>
<td>Fulton County (Atlanta)</td>
<td>-180</td>
</tr>
<tr>
<td>County of San Diego (Las Vegas)</td>
<td>-180</td>
</tr>
<tr>
<td>Austin</td>
<td>-180</td>
</tr>
<tr>
<td>Houston</td>
<td>-180</td>
</tr>
</tbody>
</table>

Note: Assumes 33 DAS ASOs with a field intake of 9363 for CY 2015.
Majority of DAS dog intake from southern Dallas
75% of field intake from southern Dallas; 57% of OTC intake from southern Dallas

**Field:** 75% of Field intake from southern Dallas and has been trending up

- **% of Field intake**
  - Not Dallas: 1, 2, 2, 2, 2, 2, 2
  - North Dallas: 29, 28, 27, 28, 26, 25, 24
  - Southern Dallas: 70, 71, 71, 70, 72, 73, 75

- **Field**: 75% of field intake from southern Dallas and has been trending up

**OTC:** 57% of OTC intake from southern Dallas

- **% of OTC intake**
  - Not Dallas: 27, 19, 9, 8, 8, 7, 7
  - North Dallas: 34, 37, 37, 40, 47, 36, 35
  - Southern Dallas: 40, 44, 54, 52, 46, 56, 57

Note: Used only intakes that were coded with addresses (88% of intakes). I-30 used to separate North from southern Dallas. North Dallas includes districts 2, 6, 9, 10, 11, 12, 13, 14. Southern Dallas includes districts 1, 3, 4, 5, 7, 8; Source: DAS Chameleon database, BCG analysis
Spayed/neutered dogs represent ~20% of DAS dog intake
Larger proportion of spayed/neutered dogs received via OTC owner surrender than other channels

DAS intake of spayed/neutered animals declined ~8% since 2011

OTC surrendered dogs much more likely to be spayed/neutered at intake

Spayed/Neutered Not Spayed/Neutered

Source: DAS Chameleon database, BCG analysis

Working materials – not validated with all parties
When excluding dogs returning to DAS, only ~11% of dogs at intake are already spayed or neutered – and steady since 2011

Lack of change in S/N of intake suggests community S/N efforts haven't reached a tipping point yet

Source: DAS Chameleon database, BCG analysis
Based on national research (not DAS-specific), owner surrenders often driven by housing issues, behavior, lifestyle

Note: Totals do not sum to 100% because respondents can list up to 5 reasons for relinquishment per survey.

Based on survey of DAS OTC owner surrenders, owners often point to housing issues, cost, time for relinquishment.

**Responses for reason relinquishing dog to DAS from OTC survey**

<table>
<thead>
<tr>
<th>Animal Issue</th>
<th>People Issue</th>
<th>External Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard/Housing</td>
<td>39%</td>
<td>30%</td>
</tr>
<tr>
<td>Cost of every day care</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Lack of time</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Cost of medical care</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>Personal health</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Number of animals</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Moving</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Euthanasia</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Source:** July 2016 DAS Owner Intake Survey (n = 44), BCG analysis

**Totals do not sum to 100% because respondents can list multiple reasons for relinquishment per survey.**
Upon intake, health assessed using Asilomar standards
Since 2014 the proportion of dogs categorized as unhealthy has hovered between 15% and 20%

Since 2014, proportion of dogs deemed unhealthy been ~15% to ~20%

Field captures and OTC stray turn-ins have fewest unhealthy dogs

Note: TTM = trailing twelve months; Asilomar health categories are defined as follows: "healthy" are reasonably healthy, reasonably well-adjusted pets over the age of eight weeks; "treatable-rehabilitatable" includes pets who are not "healthy," but who are likely to become "healthy," if typical medical care is provided "treatable-manageable" means pets are not expected to become reasonably healthy, well-adjusted pets, even if they are given care that meets the standard in their community; "unhealthy & untreatable" poses a health/safety threat or is suffering from a disease, injury, or congenital or hereditary condition that adversely affects the animal life
Source: DAS Chameleon database, BCG analysis
Median dog stays at DAS ~5 days, ~1.5 days past legal hold
Average dog stays at DAS ~9.5 days, ~5.6 days past hold, highlighting skew in longer-term stays

Total percentage of dogs having left shelter by shelter days

Cumulative % of dogs

~31% of dogs leave on or before legal hold
~70% of dogs leave prior to 5 days over their legal stay
~70% of dogs stay for less than total of 10 days

Reducing length of stay increases annual shelter capacity

Note: Excludes dog that are RTO or euthanized on same day as intake. Data are from 2014 through 2016 YTD
Source: DAS Chameleon database, BCG analysis
Length of stay in DAS differs by intake type and eventual outcome

Dogs received OTC stay fewer days than dogs received from field

<table>
<thead>
<tr>
<th>Average Days in DAS</th>
<th>3-Day Hold</th>
<th>10-Day Hold</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>11.9</td>
<td>12.0</td>
</tr>
<tr>
<td>2015</td>
<td>9.0</td>
<td>7.4</td>
</tr>
<tr>
<td>2014</td>
<td>8.7</td>
<td>7.9</td>
</tr>
<tr>
<td>2013</td>
<td>13.4</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Dogs eventually adopted stay longest in DAS

<table>
<thead>
<tr>
<th>Average Days in DAS</th>
<th>RTO</th>
<th>Euthanized</th>
<th>Transferred</th>
<th>Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>4.0</td>
<td>5.2</td>
<td>10.0</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Note: Data for calendar year 2015. 'Field – Same Day RTO' includes dogs with primary intake type of 'Field' and any intake subtype and reunited with owner on the same day; 'Field – Pickup' includes dogs with primary intake type of 'Field' and intake subtypes of 'owner surrender', 'confined', or 'confiscated'; 'Field – Capture' includes dogs with primary intake type of 'Field' and intake subtype of 'stray'; 'OTC – Stray Turn-In' includes dogs with primary intake type of 'OTC' and intake subtype of 'stray'; 'OTC – Owner Surrender' includes dogs with primary intake type of 'OTC' and intake subtypes of 'owner surrender' or 'confiscated'

Source: DAS Chameleon database, BCG analysis
~70% of dogs leave shelter within 10 days
However, distribution tail is long with majority of lengthy stays eventually adopted

DAS Dog Length of Stay Distribution

% of Dogs

~70% of dogs stay for 10 or less days

Average length of stay

Days in shelter

Outcome of > 15 days group

% of Dogs

~17% of dogs stay for more than 15 days

% of Dogs

Note: Excludes dog that are RTO or euthanized on same day as intake. Data are from 2014 through 2016 YTD
Source: DAS Chameleon database, BCG analysis

The Boston Consulting Group
20% of dogs leave shelter when legal hold arrives
Majority of dogs leaving prior to legal stay are RTO

DAS Dog Length of Stay Relative to Legal Hold Distribution

% of Dogs

Days in shelter over legal stay

% of bucket

Days in shelter over legal stay

Note: Excludes dog that are RTO or euthanized on same day as intake. Data are from 2014 through 2016 YTD
Source: DAS Chameleon database, BCG analysis
A "visual kennel" shows which cages are empty, occupied, or too crowded.

### Visual Kennel Screenshots

<table>
<thead>
<tr>
<th>Shelter Area</th>
<th>Dog Kennels</th>
<th>% of Dog Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>196</td>
<td>38%</td>
</tr>
<tr>
<td>Adoption</td>
<td>118</td>
<td>23%</td>
</tr>
<tr>
<td>Isolation¹</td>
<td>137</td>
<td>26%</td>
</tr>
<tr>
<td>Puppy/Small</td>
<td>27</td>
<td>6%</td>
</tr>
<tr>
<td>Groups²</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>488</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

1. Isolation includes contagious, injured, isolated, protective custody, and quarantine. 2. Groups areas include new moms, families, and group custody.

Source: DAS Chameleon database, BCG analysis.
On average day in 2015, 89% of general kennels in use
Lower utilization of isolation kennels drives aggregate utilization to 71% of all DAS dog kennels

<table>
<thead>
<tr>
<th>Shelter Area</th>
<th>Dog Kennels</th>
<th>% of Capacity</th>
<th>2015 Avg Utilized</th>
<th>Implied # Open</th>
<th>Max Day/ Area</th>
<th>May – July Avg</th>
<th>% days &gt;80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (1/kennel)</td>
<td>196</td>
<td>38%</td>
<td>89%</td>
<td>21</td>
<td>124%</td>
<td>89%</td>
<td>72%</td>
</tr>
<tr>
<td>General Adoption (1/kennel)</td>
<td>118</td>
<td>23%</td>
<td>89%</td>
<td>13</td>
<td>142%</td>
<td>100%</td>
<td>66%</td>
</tr>
<tr>
<td>Isolation1 (1/kennel)</td>
<td>137</td>
<td>26%</td>
<td>44%</td>
<td>86</td>
<td>80%</td>
<td>51%</td>
<td>0%</td>
</tr>
<tr>
<td>Puppy/Small (2/puppy &amp; 1/small)</td>
<td>27</td>
<td>6%</td>
<td>43%</td>
<td>14</td>
<td>145%</td>
<td>68%</td>
<td>13%</td>
</tr>
<tr>
<td>Groups2 (4/kennel)</td>
<td>10</td>
<td>8%</td>
<td>47%</td>
<td>0</td>
<td>168%</td>
<td>66%</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>488</td>
<td>100%</td>
<td>71%</td>
<td>124</td>
<td>97%</td>
<td>79%</td>
<td>16%</td>
</tr>
</tbody>
</table>

1. Isolation includes contagious, injured, isolated, protective custody, and quarantine. 2. Groups areas include new moms, families, and group custody; Note: 80% utilization or below leaves room for intake and cleaning. All data for 2015 calendar year
Source: DAS Chameleon database, BCG analysis
Understanding the cost of care for dogs, 4 main categories of costs identified for allocation

<table>
<thead>
<tr>
<th>Expense</th>
<th>Examples</th>
<th>$ amounts in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Equipment</td>
<td>• Fuel • ASO equipment • Truck maintenance</td>
<td>$0.3 (3%)</td>
</tr>
<tr>
<td>Medical Supplies</td>
<td>• Surgical supplies • Vaccinations • Gloves</td>
<td>$7.4 (71%)</td>
</tr>
<tr>
<td>Building/Supplies/Maint</td>
<td>• Furniture • Freight • Office supplies</td>
<td>$2.2 (21%)</td>
</tr>
<tr>
<td>Labor</td>
<td>• Salaries • Temp labor • Pensions • Contract service fees</td>
<td>$10.4</td>
</tr>
</tbody>
</table>

FY 2014/2015 Categorized Expenses

Note: Fiscal year from October through September of following year
Source: DAS fiscal year actual expenditure report, BCG analysis

Labor ~70% of DAS expenditures
**Detail:** Labor costs associated with specific activities

<table>
<thead>
<tr>
<th>Category</th>
<th>Amounts in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>$7.36</td>
</tr>
<tr>
<td>Field</td>
<td>$2.64</td>
</tr>
<tr>
<td>OTC</td>
<td>$0.24</td>
</tr>
<tr>
<td>Admin/Mgmt</td>
<td>$1.41</td>
</tr>
<tr>
<td>Kennel Care</td>
<td>$0.62</td>
</tr>
<tr>
<td>Adoption Labor</td>
<td>$1.12</td>
</tr>
<tr>
<td>EAC</td>
<td>$0.30</td>
</tr>
<tr>
<td>RTO</td>
<td>$0.05</td>
</tr>
<tr>
<td>Transfers</td>
<td>$0.05</td>
</tr>
<tr>
<td>Medical</td>
<td>$0.92</td>
</tr>
</tbody>
</table>

### Activity Based Estimates

<table>
<thead>
<tr>
<th>Category</th>
<th>Annual Expense</th>
<th>Dogs</th>
<th>Effort % to Dogs</th>
<th>Cost / Dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field</td>
<td>$2,976,000</td>
<td>9,849</td>
<td>90%</td>
<td>$272</td>
</tr>
<tr>
<td>OTC</td>
<td>$241,000</td>
<td>11,126</td>
<td>90%</td>
<td>$19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Annual Expense</th>
<th>Dogs</th>
<th>Effort % to Dogs</th>
<th>Cost / Dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoptions – Main</td>
<td>$1,116,000</td>
<td>5,177</td>
<td>90%</td>
<td>$194</td>
</tr>
<tr>
<td>Adoptions – EAC</td>
<td>$301,000</td>
<td>1,553</td>
<td>90%</td>
<td>$174</td>
</tr>
<tr>
<td>RTO</td>
<td>$50,000</td>
<td>2,257</td>
<td>90%</td>
<td>$20</td>
</tr>
<tr>
<td>Transferred</td>
<td>$50,000</td>
<td>2,794</td>
<td>90%</td>
<td>$16</td>
</tr>
</tbody>
</table>

### Fixed Costs Allocations

<table>
<thead>
<tr>
<th>Category</th>
<th>Annual Expense</th>
<th>Dog Days</th>
<th>Effort % to Dogs</th>
<th>Cost / Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building/Supplies/Maint</td>
<td>$2,217,000</td>
<td>159,874</td>
<td>90%</td>
<td>$12</td>
</tr>
<tr>
<td>Admin/Management</td>
<td>$1,413,000</td>
<td>159,874</td>
<td>90%</td>
<td>$8</td>
</tr>
<tr>
<td>Kennel Care</td>
<td>$624,000</td>
<td>159,874</td>
<td>90%</td>
<td>$4</td>
</tr>
</tbody>
</table>

### Notes
1. Field annual expense comprised of $334,827 of equipment and $2,641,119 of labor.
2. Dogs rounded to nearest hundred.


Euthanization estimates from Dallas Animal Services cost study performed in 2015.

Spay and neuter: $139

Vaccinations/Antibiotics: $5
Putting it all together: cost drivers identified across intake, operations, and outcome...

<table>
<thead>
<tr>
<th>Animal Intake</th>
<th>Shelter/Utilization Costs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per dog cost</strong></td>
<td><strong>Per day allocation of fixed costs</strong></td>
<td><strong>Per dog/activity cost</strong></td>
</tr>
<tr>
<td>$272 Field intake¹</td>
<td>$12 Building/Supplies²</td>
<td>$21 Cost to euthanize³</td>
</tr>
<tr>
<td>$8 Admin/Mgmt Labor²</td>
<td>$139 Cost to spay and neuter³</td>
<td></td>
</tr>
<tr>
<td>$4 Kennel care labor²</td>
<td>$194 Westmoreland adoption labor⁴</td>
<td></td>
</tr>
<tr>
<td>$19 OTC Labor¹</td>
<td>$174 EAC Adoption labor⁴</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-$34 Adoption revenue⁵</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$20 RTO labor⁴</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$5 Transfer labor⁴</td>
<td></td>
</tr>
</tbody>
</table>

For illustrative and directional purposes only.

All figures based on Fiscal Year 2015 expenditures, dog intake, and outcomes.

Go forward actual costs may differ from those shown here.

Calculation methods:
1. Associated labor/equipment costs divided by annual intake for respective channel.
2. Allocated costs divided by total number of dog kennel days during trailing twelve months.
3. 2015 DAS cost study.
4. Associated labor costs divided by annual outcomes for respective channel.
5. Calculated from Chameleon data

Source: Estimates based on DAS FY 14/15 actual expenditures, DAS cost study, DAS June 2016 organizational structure, DAS Chameleon database, and BCG analysis
...where total cost per dog to DAS ranges from $130-$940 depending on cost drivers

### Estimated Cost to DAS Per Dog by Intake/Outcome Channel

<table>
<thead>
<tr>
<th>Intake/Outcome Channel</th>
<th>Euthanized</th>
<th>Adopted - Main</th>
<th>Adopted - EAC</th>
<th>Transferred</th>
<th>RTO</th>
<th>Avg Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field</td>
<td>$447</td>
<td>$942</td>
<td>$850</td>
<td>$625</td>
<td>$429</td>
<td>$578</td>
</tr>
<tr>
<td>OTC</td>
<td>$133</td>
<td>$560</td>
<td>$468</td>
<td>$288</td>
<td>$198</td>
<td>$320</td>
</tr>
<tr>
<td>Avg Cost</td>
<td>$298</td>
<td>$693</td>
<td>$601</td>
<td>$427</td>
<td>$354</td>
<td>$441</td>
</tr>
</tbody>
</table>

**Example:**

- $19 OTC Intake
- $84 3.5 days @ $24/day
- $3 2% S/N at $139 per S/N
- $5 Antibiotics/Medical
- $21 100% Euth. at $21 per Euth.
- $133 Total cost to DAS for OTC Euthanized

**Modeled Annual vs. Actual Expenditures**

<table>
<thead>
<tr>
<th>Source</th>
<th>Fiscal Yr 2015</th>
<th>Modeled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures</td>
<td>$10.4MM</td>
<td>$9.5MM</td>
</tr>
<tr>
<td>% of actual</td>
<td>90%</td>
<td></td>
</tr>
</tbody>
</table>

Remaining 10% of spend for cats/other animals

### Figures heavily influences by volumes as fixed costs are allocated across current volume of dogs

1. Adoption revenue from DAS is returned to the general fund

Source: Estimates based on DAS FY 14/15 actual expenditures, DAS cost study, DAS June 2016 organizational structure, DAS Chameleon database, and BCG analysis
Achieving higher 90% LRR requires faster outcomes or more space

As fewer dogs are euthanized, average length of stay may increase

Average FY 15 DAS days to outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euthanized</td>
<td>5</td>
</tr>
<tr>
<td>RTO</td>
<td>4</td>
</tr>
<tr>
<td>Transferred</td>
<td>10</td>
</tr>
<tr>
<td>Adopted</td>
<td>11</td>
</tr>
</tbody>
</table>

Shifting dogs from euthanization to adopted or transferred necessitates more capacity

In FY 2015, reaching a 90% LRR would have required ~37,000 more kennel days – need solutions that speeds up throughput

Today (FY 2015) DAS 90% utilized, reaching 90% LRR not feasible at current length of stay

Dog Kennel Days

<table>
<thead>
<tr>
<th>Kennel Days</th>
<th>0</th>
<th>50,000</th>
<th>100,000</th>
<th>150,000</th>
<th>200,000</th>
<th>250,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euthanized</td>
<td>5</td>
<td>0</td>
<td>50,000</td>
<td>100,000</td>
<td>150,000</td>
<td>200,000</td>
</tr>
<tr>
<td>RTO</td>
<td>4</td>
<td>0</td>
<td>50,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred</td>
<td>10</td>
<td>0</td>
<td>50,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopted</td>
<td>11</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Breakdown of Kennel Days Needed for 90% LRR in 2015

- Used capacity: 139,703
- Existing capacity: 127,593
- New capacity needed: 37,178

Used capacity

- Open capacity
- Open but unusable due to special status

Source: Estimates based on DAS FY 14/15 actual expenditures, DAS cost study, DAS June 2016 organizational structure, DAS Chameleon database, and BCG analysis

1. Includes contagious, injured, isolated, protective custody, and quarantine; Note: Assumes fixed costs allocated over more days while per dog cost estimates stay the same.
38% of stray, chipped dog intake RTO, with 97% RTO in 10 days

9% of stray dog intake chipped...

...80% realize live outcome...

...97% of stray, chipped RTO occur within 10 legal hold

Note: Data represented for calendar year 2015
Source: DAS Chameleon database, BCG analysis

Shortening legal hold is not a black or white decision as RTOs "trickle in" up to and past legal hold deadline
Microchipped dogs more likely to be RTO, but legal hold requirements for chipped dogs necessitates more kennels.

14% of current dog intake chipped, dogs with microchips much more likely to be RTO...

...however, as chipped intake rises, minimal LRR impact seen and increased capacity required

Initiatives increasing population microchipped should be weighed against increased operational strain for DAS

1. If animal is licensed, tattooed, or microchipped, it must be held for 10 days. DAS must hold an animal for 3 days if it is unlicensed or otherwise unidentifiable. Shifting dogs from non-chipped to chipped increases length of stay for dogs not RTO (e.g., adopted, transferred, euthanized)

Source: DAS Chameleon database and BCG analysis
Today ~60% of dogs achieve positive outcomes
In past five years, adoptions have grown 25% annually, transfers +15% amid flat volumes

Outcomes for Dogs Entering DAS

# of Dogs

<table>
<thead>
<tr>
<th>Year</th>
<th>Adopted</th>
<th>Transfer</th>
<th>Euthanized</th>
<th>RTO</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>20,829</td>
<td>2,444</td>
<td>1,811</td>
<td>133</td>
<td>760</td>
</tr>
<tr>
<td>2012</td>
<td>20,103</td>
<td>2,637</td>
<td>1,475</td>
<td>144</td>
<td>726</td>
</tr>
<tr>
<td>2013</td>
<td>21,141</td>
<td>2,863</td>
<td>1,178</td>
<td>156</td>
<td>660</td>
</tr>
<tr>
<td>2014</td>
<td>21,346</td>
<td>2,844</td>
<td>1,103</td>
<td>156</td>
<td>663</td>
</tr>
<tr>
<td>2015</td>
<td>20,807</td>
<td>2,657</td>
<td>1,227</td>
<td>156</td>
<td>721</td>
</tr>
<tr>
<td>TTM As Of May 2016</td>
<td>20,159</td>
<td>2,834</td>
<td>1,227</td>
<td>156</td>
<td>721</td>
</tr>
</tbody>
</table>

Each year DAS has increased live outcomes

1. Other includes animals that died in or were lost at the shelter including those that were dead on arrival (DOA).
2. CAGR = compound annual growth rate.
3. TTM = trailing twelve months.

Source: DAS Chameleon database, BCG analysis
High intake does not necessarily lead to low LRR...

Animal intake versus LRR

1. Live release rates correspond to either 2014 or 2015 depending on figures most recently reported by each shelter; 2. Intake includes all animals; Note: Live release rates correspond to either 2014 or 2015 depending on figures most recently reported by each shelter. Dallas figures are for DAS only. Remaining data represented for municipal shelters only.

Source: Respective websites of each city and BCG analysis.

Other cities have balanced high intake with high LRR.
Relationship observed dog's health and outcome

Nevertheless, more 'Treatable-Rehab' dogs are euthanized than 'Untreatable' given scale

% of TTM as of May 2016 Dog Intake (health category based on intake categorization)

- **Healthy**: 77% (47% in Treatable-Manageable), 2% in Treatable-Rehabilitatable, 1% in Other
- **Treatable-Rehabilitatable**: 41% (30% in Treatable-Rehabilitatable), 2% in Treatable-Rehabilitatable, 7% in Other
- **Treatable-Manageable**: 22% (47% in Treatable-Manageable), 2% in Treatable-Rehabilitatable, 9% in Other
- **Unhealthy & Untreatable**: 10% (66% in Unhealthy & Untreatable), 10% in Treatable-Manageable, 8% in Other

**Totals**
- Healthy: 1,784
- Treatable-Rehabilitatable: 11,497
- Treatable-Manageable: 3,393
- Unhealthy & Untreatable: 3,485

1. Other includes dead on arrival, died in shelter, missing, or no outcome categorization specified in data; Note: TTM = trailing twelve months; Asilomar health assessment taken upon intake to the shelter; Source: DAS Chameleon database, BCG analysis.

Saving all Treatable-Rehab dogs from euthanasia would improve LRR to ~80%
"Bully breeds" most likely to be euthanized – and also largest share (~22%) of dog intake.

Top 10 dog breeds for DAS 2014 & 2015 intake

Source: DAS Chameleon database, BCG analysis

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Adoptions and RTOs place >50% of dogs in southern Dallas

Most adoptions/RTOs to southern Dallas

<table>
<thead>
<tr>
<th>% of TTM as of May 2016 Adoption/RTO</th>
<th>Adoption &amp; RTO</th>
<th>Adoptions</th>
<th>RTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>8,766</td>
<td>6,947</td>
<td>1,819</td>
</tr>
<tr>
<td>80%</td>
<td>28%</td>
<td>32%</td>
<td>12%</td>
</tr>
<tr>
<td>60%</td>
<td>34%</td>
<td>34%</td>
<td>32%</td>
</tr>
<tr>
<td>40%</td>
<td>38%</td>
<td>34%</td>
<td>55%</td>
</tr>
<tr>
<td>20%</td>
<td>55%</td>
<td>34%</td>
<td>12%</td>
</tr>
<tr>
<td>0%</td>
<td>12%</td>
<td>32%</td>
<td>28%</td>
</tr>
</tbody>
</table>

RTO % to southern Dallas has declined

<table>
<thead>
<tr>
<th>% of RTO</th>
<th>100%</th>
<th>2014</th>
<th>2015</th>
<th>TTM as of May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
<td>1,816</td>
<td>2,026</td>
<td>1,819</td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td>13%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>60%</td>
<td></td>
<td>30%</td>
<td>30%</td>
<td>32%</td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td>57%</td>
<td>58%</td>
<td>55%</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td>31%</td>
<td>33%</td>
<td>34%</td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Adoption % to southern Dallas has increased

<table>
<thead>
<tr>
<th>% of Adoption</th>
<th>100%</th>
<th>2014</th>
<th>2015</th>
<th>TTM as of May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
<td>6,712</td>
<td>6,830</td>
<td>6,947</td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td>35%</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>60%</td>
<td></td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Note: TTM = trailing twelve months; Note: Used only outcomes that were coded with addresses. 1-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. southern Dallas includes districts 1,3,4,5,7,8. Outcome mix for dogs already left DAS during TTM assumed to be the same for dogs that have not left shelter yet during TTM period. Source: DAS Chameleon database, BCG analysis.
DAS charges, on average, $34.25 per dog adoption—less than large pet rescues in the DFW area

DAS distribution of adoption prices

<table>
<thead>
<tr>
<th>% of Total Dog Adoptions in TTM as of May 2016</th>
<th>$ per Adopted Dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free</td>
<td>Avg $/Adoption: $34.25</td>
</tr>
<tr>
<td>$1 - 10</td>
<td>16%</td>
</tr>
<tr>
<td>$10 - 20</td>
<td>12%</td>
</tr>
<tr>
<td>$20 - 30</td>
<td>12%</td>
</tr>
<tr>
<td>$30 - 40</td>
<td>61%</td>
</tr>
<tr>
<td>$40 - 50</td>
<td>61%</td>
</tr>
<tr>
<td>$50 - 60</td>
<td>68%</td>
</tr>
<tr>
<td>$60 - 70</td>
<td>76%</td>
</tr>
<tr>
<td>$70 - 80</td>
<td>79%</td>
</tr>
<tr>
<td>$80 - 90</td>
<td>79%</td>
</tr>
<tr>
<td>$90+</td>
<td>79%</td>
</tr>
</tbody>
</table>

Approximate price per dog adoption

<table>
<thead>
<tr>
<th>Adoption Price</th>
<th>% of Total Dog Adoptions in TTM as of May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free</td>
<td>16%</td>
</tr>
<tr>
<td>$1 - 10</td>
<td>12%</td>
</tr>
<tr>
<td>$10 - 20</td>
<td>12%</td>
</tr>
<tr>
<td>$20 - 30</td>
<td>61%</td>
</tr>
<tr>
<td>$30 - 40</td>
<td>61%</td>
</tr>
<tr>
<td>$40 - 50</td>
<td>68%</td>
</tr>
<tr>
<td>$50 - 60</td>
<td>76%</td>
</tr>
<tr>
<td>$60 - 70</td>
<td>79%</td>
</tr>
<tr>
<td>$70 - 80</td>
<td>79%</td>
</tr>
<tr>
<td>$80 - 90</td>
<td>79%</td>
</tr>
<tr>
<td>$90+</td>
<td>79%</td>
</tr>
</tbody>
</table>

Note: TTM = trailing twelve months
Source: DAS Chameleon database and rescue websites, BCG analysis

~65% of adoptions for less than $50

Avg. Adoption Price ($)

- DAS: 34
- SPCA of Texas: 100
- Rockwall Pets: 125
- Operation Kindness: 185

Note: TTM = trailing twelve months
Source: DAS Chameleon database and rescue websites, BCG analysis

16% of dog adoptions free

Avg. Adoption Price:

- Free
- $1 - 10
- $10 - 20
- $20 - 30
- $30 - 40
- $40 - 50
- $50 - 60
- $60 - 70
- $70 - 80
- $80 - 90
- $90+
Return rate by type of adoption

San Diego Humane Society recidivism rate of intake was ~4% prior to increasing adoption efforts rising to ~8% after increase adoptions; anecdotally other cities have rates ~6% to ~10%

<table>
<thead>
<tr>
<th>% of 2014 Intake Previously in DAS</th>
<th>Transfers</th>
<th>RTO</th>
<th>Adoptions</th>
<th>Free</th>
<th>&gt;$0 - $20</th>
<th>&gt;$20 - $30</th>
<th>&gt;$30</th>
<th>EAC</th>
<th>Westmoreland</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of dogs</td>
<td>8%</td>
<td>20%</td>
<td>18%</td>
<td>18%</td>
<td>32%</td>
<td>17%</td>
<td>14%</td>
<td>13%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Note: Data from dog 2014 intake into and 2014 dog departures from DAS
Source: DAS Chameleon database, BCG analysis

Departing DAS in 2014 with microchip

<table>
<thead>
<tr>
<th>Returning to DAS between Jan 2014 – May 2016</th>
<th>9</th>
<th>338</th>
<th>1,184</th>
<th>265</th>
<th>275</th>
<th>178</th>
<th>466</th>
<th>164</th>
<th>1,020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departing DAS in 2014 with microchip</td>
<td>467</td>
<td>1,680</td>
<td>6,650</td>
<td>1,488</td>
<td>873</td>
<td>1,051</td>
<td>3,238</td>
<td>1,264</td>
<td>5,386</td>
</tr>
</tbody>
</table>
Top 10 partners account for ~70% of volume, yet ~140 total transfer partners received dogs from DAS in 2015\(^1\)

![Graph showing 2015 DAS Dogs Transferred with Top 5 and other ranges.]

1. Among smaller volume rescues are organizations that focus only on a specific breed or have much smaller kennel capacity than other rescues.

Source: DAS Chameleon database, BCG analysis

\(^1\) Represents ~70% of dog transfers.
From '13 to '14, ~50 partners stopped transferring from DAS, but largely offset by growth from ~25 large partners

2013 to 2014 DAS Dog Transfers

Net volume from partner changes: -244
Net volume from existing base: 168

Source: DAS Chameleon database, BCG analysis
From '14 to '15 DAS increased transfers 31% through new partners and partner expansion, despite ~50 'lost' partners

2014 to 2015 DAS Dog Transfers

- Net volume from partner changes: 320
- Net volume from existing base: 379

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>119</td>
<td>2,246</td>
<td>122</td>
<td>442</td>
<td>393</td>
<td>716</td>
<td>56</td>
<td>2,945</td>
</tr>
</tbody>
</table>

| Avg # Dogs  | 18.9                | 2.4             | 6.2          | 21.6              | 41.6            | 48.7              | 21.2              |

Source: DAS Chameleon database, BCG analysis
Dallas rescue organization landscape concentrated with large organizations rescuing majority of dogs

Self-reported total intake of Dallas area rescue organizations

Reported 2015 Dog Intake

- Top 3 Rescues: 20,373
- Rescues 4-15: 5,290
- Rescues 16-55: 4,879
- Total: 30,542

Top 3 rescues account for 67% of surveyed volume

Over 100+ transfer partners work with DAS. Those that did not respond to survey were not included in total.

1. Includes all rescue organizations that took the Rescue and Animal Organization Survey; Note: Gini coefficient is .76; Note: Question: Approximately how many dogs did your organization take in during 2015? (n=58)
Source: Rescue and Animal Organization survey, BCG analysis
EAC accounts for ~25% of DAS dog adoptions

~25% of DAS adoptions placed by the EAC

DAS Adoptions

TTM as of May 2016

6,947

EAC

24%

Westmoreland

76%

EAC accounts for ~25% of DAS dog adoptions placed by the EAC.

EAC >20% of adoptions since opening in fall 2013

DAS Adoptions

2014

6,712

20%

2015

6,830

25%

TTM as of May 2016

6,947

24%

EAC

Main location has ~6X dog adoption kennels

Adoption Dog Kennels

TTM as of May 2016

Westmore

6,947

76%

Westmoreland

76%

EAC

Main location has ~6X dog adoption kennels.

Source: DAS Chameleon database, BCG analysis

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Dogs adopted through EAC have similar length of stay as other dogs, but are adopted quickly once at EAC

Could moving dogs to EAC sooner reduce length of stay and thereby increase shelter capacity?

Source: DAS Chameleon database, BCG analysis
Dogs sent to EAC slightly healthier, with similar breeds most likely to be adopted at EAC or Westmoreland

Dogs adopted from EAC are healthier than dogs adopted from Westmoreland

EAC and Westmoreland adoptions have the same top 6 dog breeds

Source: DAS Chameleon database, BCG analysis
~10% of DAS dog intake has previously gone through DAS

Majority of repeat dogs are OTC owner surrenders and were adopted out after prior stay

~10% of dog intake from dogs previously in DAS...

% of dog intake

\[ \text{# Dogs at shelter 2 or more times} \]

<table>
<thead>
<tr>
<th>Year</th>
<th>&gt;3 Times</th>
<th>3rd Time</th>
<th>2nd Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>2015</td>
<td>10%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>TTM as of May 2016</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

...75% of repeat dogs are brought back OTC...

% of repeat dog intake channel since 2014

<table>
<thead>
<tr>
<th>Source</th>
<th>Field - Pick up</th>
<th>Field - Capture</th>
<th>OTC - Stray</th>
<th>OTC - Owner Sur</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>3%</td>
<td>22%</td>
<td>1%</td>
<td>56%</td>
</tr>
<tr>
<td>2015</td>
<td>1%</td>
<td>19%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>TTM as of May 2016</td>
<td>1%</td>
<td>10%</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

...most were adopted out after previous stay

% of repeat dogs leaving DAS

<table>
<thead>
<tr>
<th>DAS visit</th>
<th>1st Time</th>
<th>2nd Time</th>
<th>3rd Time+ Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTO</td>
<td>17%</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>Adopted</td>
<td>82%</td>
<td>48%</td>
<td>43%</td>
</tr>
<tr>
<td>Euthanized</td>
<td>1%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Transferred</td>
<td>3%</td>
<td>25%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>24%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: DAS Chameleon database and BCG analysis
'Clear The Shelter' (CTS) is a coordinated event held once a year to drive animal adoptions

CTS has been held each summer since 2014 and originated in Dallas

Initial CTS held on August 16, 2014
  • DAS adopted 152 dogs & cats

Second CTS held August 15, 2015
  • DAS adopted 198 dogs & cats

Third CTS held July 23, 2016
  • DAS adopted 264 dogs & cats

Numerous animal shelters and rescues participate across the nation

Over 50 participants in Dallas

Participants from nearly every major city across the United States
  • Nearly 700 shelters across the country

Adoption fees waived during CTS

Dallas participants

Cities with participants

Source: Dallas Animal Services, DAS Chameleon database, BCG analysis
Dog demand wanes following CTS, with dogs adopted during CTS ~75% more likely to return to DAS than other adoptions

Fewer adoptions/day during 2 weeks after CTS relative to prior 2 weeks

August 2014 daily dog adoptions

- CTS August 16, 2014: 120 dog adoptions
- 2 weeks prior: 22 dog/day
- 1 week prior: 21.6 dog/day
- Week after CTS: 15.7 dog/day
- 2 weeks after CTS: 18.9 dog/day

August 2015 daily dog adoptions

- CTS August 15, 2015: 147 dog adoptions
- 2 weeks prior: 18.1 dog/day
- 1 week prior: 19.4 dog/day
- Week after CTS: 12.0 dog/day
- 2 weeks after CTS: 19.1 dog/day

Adoptions during CTS ~75% more likely to return to DAS than rest of adoptions

% of adoptions returning to DAS

2014
- 17.6%

2015
- 30.8%

+76%

Measured based on return window of ~2 years

2014
- 17.3%

2015
- 30.6%

+77%

Measured based on return window of ~1 year

1. Return rates for respective specified groups from indicated time through May 2016
Source: DAS Chameleon database and BCG analysis
CTS total impact is limited by reduced adoptions following CTS and higher return rates for dogs adopted on CTS

In 2014, CTS net impact on dog adoptions 84% lower than perceived

In 2015, CTS net impact on dog adoptions 62% lower than perceived

1. Difference in average daily adoptions leading up to CTS and average daily adoptions after (2 weeks after) when dogs available have mostly been adopted during CTS; 2. Dogs returned and adopted on respective CTS through May 2016; 3. Dogs that would have been returned to DAS at the normal return rate for respective year. 4. Average daily adoptions leading up to CTS

Source: DAS Chameleon database, BCG analysis
Across open admission shelters, those with higher levels of 'Unhealthy & Untreatable' intake tend to have lower LRRs.

Health at Intake vs. LRR for Open Admission Shelters

Note: Shelters are predominantly 'open admission' meaning they do not turn animals away. Majority of LRR and health status data from 2013 report. DAS, San Antonio and Houston LRR and health status from 2015.

Source: Maddie's Fund "Comparative Database Full Dataset" and shelter websites, BCG analysis.
4 Benchmarks
Three questions served as basis for approach to understand how other cities approach animal control

<table>
<thead>
<tr>
<th>Key questions</th>
<th>Our approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How do other US cities structure their animal control agencies?</strong></td>
<td>• Benchmark interviews</td>
</tr>
<tr>
<td></td>
<td>• Secondary research</td>
</tr>
<tr>
<td><strong>How have comparable cities overcome similar dog issues?</strong></td>
<td>• Benchmark interviews</td>
</tr>
<tr>
<td></td>
<td>• Secondary research</td>
</tr>
<tr>
<td><strong>What best practices can be applied in Dallas?</strong></td>
<td>• Benchmark interviews</td>
</tr>
<tr>
<td></td>
<td>• Secondary research</td>
</tr>
</tbody>
</table>
DAS operates with budget ~10% below peer average...

**Municipal Spending on Animal Services for Benchmark Cities**

...and significantly below cities with explicit 501(c)(3)s partnerships which provide ancillary funding

100% of partner budget shown to demonstrate potential; partnerships enable shelters to transfer activities and costs to their partner

Municipal and Non-Profit Spending on Animal Services for Benchmark Cities

Municipal Animal Services Budget + Major 501(c)(3)¹ partner budget ($/person)

<table>
<thead>
<tr>
<th>City</th>
<th>Municipal Budget</th>
<th>501(c)(3) Budget</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washoe County (Reno)²</td>
<td>22.13</td>
<td>20.27</td>
<td>15.13</td>
</tr>
<tr>
<td>Austin³</td>
<td>18.77</td>
<td>17.38</td>
<td></td>
</tr>
<tr>
<td>Los Angeles⁴</td>
<td>17.62</td>
<td>16.85</td>
<td></td>
</tr>
<tr>
<td>Fulton County (Atlanta)⁵</td>
<td>13.24</td>
<td>10.22</td>
<td></td>
</tr>
<tr>
<td>San Antonio⁶</td>
<td>8.63</td>
<td>7.84</td>
<td></td>
</tr>
<tr>
<td>Jacksonville⁷</td>
<td>8.01</td>
<td>7.01</td>
<td></td>
</tr>
<tr>
<td>County of San Diego⁸</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+76%

Reaching average would require $8M/yr in funding

ASOs earn more than national and Texas averages

Dallas ASOs make 11% more than national average

Mean Salary ($)

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Dallas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>35,330</td>
<td>39,045</td>
</tr>
<tr>
<td>+11%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

...and 17% more than the Texas average

Mean Salary ($)

<table>
<thead>
<tr>
<th></th>
<th>Texas</th>
<th>Dallas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>33,270</td>
<td>39,045</td>
</tr>
<tr>
<td>+17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Animal Control’s perceived performance based on community input has decreased year over year

~30% decrease in city's Animal Control performance in the last 5 years

Respondents who rated Animal Control as "excellent" or "good" (excluding don't knows)

<table>
<thead>
<tr>
<th>Year</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>43</td>
</tr>
<tr>
<td>2013</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>36</td>
</tr>
<tr>
<td>2016</td>
<td>30</td>
</tr>
</tbody>
</table>

-30%

Dallas falls significantly behind when comparing to Texas peers

Respondents who rated item as a 4 or 5 on 5 point scale (excluding don't knows)

<table>
<thead>
<tr>
<th>City</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin 2012</td>
<td>64</td>
</tr>
<tr>
<td>San Antonio 2014</td>
<td>48</td>
</tr>
<tr>
<td>Dallas 2016</td>
<td>30</td>
</tr>
</tbody>
</table>

+113%  +60%

Note: Not all cities perform community services or conduct them yearly. City of Austin Community Survey Findings (2012). City of San Antonio Community Survey (2014). Source: 2014 City of Dallas Community Survey (n=1,523), 2016 City of Dallas Community Survey (n=11,512), BCG analysis.
San Antonio: plan for municipal animal shelter 90% LRR

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Antonio Animal Care Services is the largest open admission shelter in South Texas.</td>
</tr>
<tr>
<td>San Antonio's ACS' strategic priorities include enhanced enforcement, control of the roaming animal population, increasing the live release rate (LRR), and engaging and educating the community.</td>
</tr>
</tbody>
</table>

San Antonio Key Historical Milestones

- In 2011, San Antonio's Animal Control took in 28,000 animals with a live release rate (LRR) of 32%
- In 2012, San Antonio revised their Strategic Plan focusing on three strategic priorities: enforcement, stray animal control, and live release
  - Animal Control Services recently added a fourth strategic priority: education and outreach
- In fiscal year 2015, the city was a record-breaking year for San Antonio with the city achieving:
  - 85% LRR, with a total of 24,535 live outcomes, and 3,667 return to owner's
  - 3,558 Free Registered Microchips distributed
  - 18,810 homes visited through the comprehensive neighborhood sweeps initiative
- 90% LRR was reached in December 2015 and has stayed constant through February 2016
- San Antonio is the largest city in the nation to reach 90% LRR

100+ rescues/shelters including:

<table>
<thead>
<tr>
<th>Key Levers Utilized By San Antonio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spay and Neuter</td>
</tr>
<tr>
<td>Targets 41 pet spay and neuters per 1,000 residents</td>
</tr>
<tr>
<td>Adoption/Foster</td>
</tr>
<tr>
<td>Increase volume of adoptions across coalition partners</td>
</tr>
<tr>
<td>Foster pets for animal's chance to grow before finding homes</td>
</tr>
<tr>
<td>Transport</td>
</tr>
<tr>
<td>5 large rescue groups provide transport services out of state</td>
</tr>
<tr>
<td>Volunteers &amp; Donations</td>
</tr>
<tr>
<td>Volunteers power the shelter</td>
</tr>
<tr>
<td>Donations needed to fund pet pantry, daily items, and strategic initiatives</td>
</tr>
</tbody>
</table>

Source: My San Antonio, City of San Antonio Animal Care Services, Expert Interviews, BCG analysis

Copyright © 2016 by The Boston Consulting Group, Inc. All rights reserved.
San Antonio realized 49% increase in dog LRR since FY 2011
Dog LRR increased to 84% while dog attacks decreased 7% since 2012 (2% CAGR decline)

San Antonio dog intake slightly increased since 2011, LRR up to 84%...

San Antonio City Shelter Dog Intake

San Antonio USPS Dog Attacks

...with dog bites indicators in slight decline

Source: USPS dog attack data, San Antonio Animal Care Services, BCG analysis

Positive outcomes realized from strategic plan

Working materials – not validated with all parties
No-Kill Los Angeles: coalition plan to city-wide 90% LRR

**Description**

No-Kill Los Angeles ("NKLA") is an initiative, established in 2011 and led by Best Friends Animal Society, to turn Los Angeles into a no-kill\(^1\) city by the year 2017.

NKLA aims to be a model for city-wide cooperation to reach a position in which no healthy or treatable animal ever has to die or be euthanized across all 6 city animal shelters.

**NKLA Key Historical Milestones**

- In 2011, the Los Angeles City Council signed off on a ‘No Kill Los Angeles’ pledge to make L.A. an official ‘no kill’ animal shelter town by 2017.
- At time NKLA began, 42.2% of animals who entered the city’s publicly operated shelters were euthanized (57.8% LRR).
- In FY 2012, L.A. city animal shelters took in 57,275 dogs/cats and 21,620 were euthanized (62% LRR).
- In FY 2016, L.A. city animal shelters took in 45,608 dogs/cats, 8,748 were euthanized (81% LRR).
- NKLA coalition helped ~27,100 dogs and cats find new homes in 2015.
- In 2016, L.A. realized 89% LRR for dogs.
- Since the launch of NKLA in 2012, the number of pets being killed in L.A. across the six city shelters has decreased by 66%.

**Key Levers Utilized By NKLA**

<table>
<thead>
<tr>
<th>Spay and Neuter</th>
<th>Adoption/Foster</th>
<th>Transport</th>
<th>Volunteers &amp; Donations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targets 5 pet S/N of low-income residents per 1,000</td>
<td>Increase volume of adoptions across coalition partners</td>
<td>~1,000 transports/year to North West and North East</td>
<td>Volunteers power the NKLA initiative</td>
</tr>
<tr>
<td>Realize 30% decline in intake over 5 years</td>
<td>Foster to increase adoptability of animals</td>
<td></td>
<td>Donations needed to fund initiatives</td>
</tr>
</tbody>
</table>

---

1. A shelter or rescue policy that any healthy or treatable animal will be given the opportunity and resources to live until adopted; Source: No-Kill Los Angeles website, BCG analysis

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L.A. realized 27% decline in dog intake since NKLA started
Dog LRR increased to 89% while dog attacks decreased 19% since 2012 (7% CAGR decline)

L.A. dog intake decrease 27% since 2012, LRR up to 89%...

...while indicator of dog attacks is down

L.A. City Shelters Dog Intake

L.A. USPS Dog Attacks

Positive outcomes realized from NKLA efforts

Source: No-Kill Los Angeles website, L.A. Animal Services, USPS dog attack data, BCG analysis
20160826_BCG_DallasDog_WorkingMaterials_vPublic.pptx
Benchmark: Clark County, Nevada (Las Vegas)

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: Clark County Animal Control, Animal Foundation

Relationships

Clark County Animal Control contracts the Animal Foundation to provide all shelter operations for Clark County, leaving collection and field intake to the county.

Key Facts

Clark County Animal Control
- Governance: Subdivision within department of Administrative Services, partially privatized
- Dispatch: Animal call center
- Volunteers: Does not use because Clark County only performs collection and field intake
- Animal Officers: 16
- Budget: ~$5.3MM
- Animal Intake: ~18k
- Live Release Rate: ~64%

Community-Wide Operations:
- Spay and neuter surgeries estimate: 20k yearly
- Budget: ~$16MM
- Volunteers (people): ~1.3k

1. Clark County Animal Control privatizes shelter operations and performs collection and field intake; Note: Community-wide operations include Clark County Animal Control and Animal Foundation. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Clark County Animal Control and Animal Foundation. Most recently available 990 Tax Forms for Animal Foundation, BCG analysis

Contractually obligated to Clark County
Not contractually obligated to Clark County
Benchmark: San Antonio, Texas

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: San Antonio Animal Care Services, San Antonio Humane Society

San Antonio Animal Care Services contracts with the Animal Defense League and San Antonio Humane Society to assist the city with shelter operations.

Additionally, Animal Care Services has a memorandum of understanding with San Antonio Pets Alive! to also assist the city in shelter operations.

San Antonio Animal Care Services:
- Governance: Standalone department
- Dispatch: 311 or equivalent
- Volunteers (people): ~500
- Animal Officers: 26
- Budget: ~$13MM
- Animal Intake: ~30k
- Live Release Rate: ~90%

Community-Wide Operations:
- Spay and neuter surgeries estimate: 58k yearly
- Budget: ~$24MM
- Volunteers (people): ~5.5k

San Antonio Humane Society

Animal Care Services

Animal Defense League

San Antonio Pets Alive!

Relationships

Contract

Memorandum of understanding

Key Facts

Contractually obligated to San Antonio

Not contractually obligated to San Antonio

Note: Community-wide figures include Animal Care Services, San Antonio Pets Alive!, Animal Defense League, and San Antonio Humane Society. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with San Antonio Animal Care Services and San Antonio Humane Society. Most recently available 990 Tax Forms for San Antonio Pets Alive! and Animal Defense League. BCG analysis
Benchmark: Los Angeles, California

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: Los Angeles Animal Services, Best Friends Animal Society, Found Animals

Relationships

Los Angeles Animal Services contracts one of their shelter facilities to Best Friends Animal Society.

Additionally, Los Angeles Animal Services has an informal, but significant relationship with Found Animals.

Key Facts

Los Angeles Animal Services
- Governance: Standalone department
- Dispatch: Animal call center
- Volunteers (people): ~5k
- Animal Officers: 50
- Budget: ~$23MM
- Animal Intake: ~45k
- Live Release Rate: ~84%

Community-Wide Operations:
- Spay and neuter surgeries estimate: 51k yearly
- Budget: ~$44MM
- Volunteers (people): ~11.7k

1. Los Angeles Animal Services contracts one of their shelter facilities to Best Friends Animal Society. Note: Community-wide operations include Los Angeles Animal Services, Best Friends Animal Society, and Found Animals. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Los Angeles Animal Services and Found Animals.

Contractually obligated to Los Angeles
Not contractually obligated to Los Angeles
**Benchmark: County of San Diego, California**

*Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city*

**Interviews: County of San Diego Animal Services, San Diego Humane Society**

**Relationships**

*The County of San Diego Animal Services has a memorandum of understanding with all of the "Get to Zero" coalition members. One of those members is the San Diego Humane Society, which also performs collection, field intake, and shelter operations in the San Diego area.*

<table>
<thead>
<tr>
<th>County of San Diego Animal Services</th>
<th>San Diego Humane Society</th>
</tr>
</thead>
</table>

**Key Facts**

**County of San Diego Animal Services**

- Governance: Standalone department
- Dispatch: Animal call center
- Volunteers (people): ~700
- Animal Officers: 32
- Budget: ~$17MM
- Animal Intake: ~45k
- Live Release Rate: ~81%

**Community-Wide Operations:**

- Spay and neuter surgeries estimate: 40k yearly
- Animal Officers: 54
  - Humane Society has 22 "Humane Law Enforcement Officers"
- Budget: ~$41MM
- Volunteers (people): ~5900

---

Note: Community-wide operations include County of San Diego Animal Services and San Diego Humane Society. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with County of San Diego Animal Services and San Diego Humane Society. BCG analysis.
Benchmark: Austin, Texas

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: Austin Animal Center, Austin Humane Society, Austin Pets Alive!

Relationships

Austin Animal Center has a license agreement with Austin Pets Alive! for facility use.

Additionally, Austin Animal Center has a memorandum of understanding with the Austin Humane Society to assist shelter operations.

Key Facts

Austin Animal Center
- Governance: Standalone department
- Dispatch: 311 or equivalent
- Volunteers (people): ~700
- Animal Officers: 20
- Budget: ~$11.5MM
- Animal Intake: ~18,000
- Live Release Rate: ~96%

Community-Wide Operations:
- Spay and neuter surgeries estimate: 40k yearly
- Budget: ~$18.5MM
- Volunteers (people): ~3625

1. Austin Animal Center has a license agreement, which functions as a contract between the animal center and Austin Pets Alive!; Note: Community-wide operations include Austin Animal Center, Austin Humane Society, and Austin Pets Alive! Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Austin Animal Center, Austin Humane Society, and Austin Pets Alive! BCG analysis
## Benchmark: Jacksonville, Florida

### Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

**Interviews:** Jacksonville Animal Care and Protective Services, Jacksonville Humane Society, Friends of Jacksonville Animals

### Relationships

<table>
<thead>
<tr>
<th>Friends of Jacksonville Animals</th>
<th>Jacksonville Animal Care and Protective Services contracts with the Jacksonville Humane Society to assist shelter operations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Relationship</td>
<td>Additionally, Jacksonville has a memorandum of understanding with First Coast No More Homeless Pets and an informal relationship with Friends of Jacksonville Animals.</td>
</tr>
<tr>
<td>Jacksonville Animal Care and Protective Services</td>
<td>Jacksonville Humane Society</td>
</tr>
<tr>
<td>Memorandum of understanding</td>
<td>First Coast No More Homeless Pets</td>
</tr>
</tbody>
</table>

### Key Facts

#### Jacksonville Animal Care and Protective Services
- **Governance:** Subdivision within Neighbors Department
- **Dispatch:** 311 or equivalent
- **Volunteers (people):** ~100
- **Animal Officers:** 14
- **Budget:** ~$4MM
- **Animal Intake:** ~13k
- **Live Release Rate:** ~90%

#### Community-Wide Operations:
- **Spay and neuter surgeries estimate:** 39k yearly
- **Budget:** ~$13.7MM
- **Volunteers (people):** ~1k

---

1. City department; Note: Community-wide operations include Humane Society and First Coast No More Homeless Pets. Community budget also includes Friends of Jacksonville Animals. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Jacksonville Animal Care and Protective Services and Jacksonville Humane Society. 990 Tax Form for First Coast No More Homeless Pets (2014). BCG analysis.
## Benchmark: Washoe County, Nevada (Reno)

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

### Interviews: Washoe County Regional Animal Services, Nevada Humane Society

### Relationships

- **Washoe County Regional Animal Services** contracts the Nevada Humane Society to provide all shelter operations for Washoe County, leaving collection and field intake to the county.

### Key Facts

#### Washoe County Regional Animal Services

- **Governance**: Standalone department
- **Dispatch**: Animal call center
- **Volunteers (people)**: ~10
- **Animal Officers**: 16
- **Budget**: ~$5.3MM
- **Animal Intake**: ~14k
- **Live Release Rate**: ~90%

#### Community-Wide Operations:

- **Spay and neuter surgeries estimate**: 15k yearly
- **Budget**: ~$9.6MM
- **Volunteers (people)**: ~810

---

- □ Contractually obligated to Washoe County
- □ Not contractually obligated to Washoe County

Note: Community-wide figures include Washoe County Regional Animal Services and Nevada Humane Society. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Washoe County Regional Animal Services and Nevada Humane Society. BCG analysis
Benchmark: Miami-Dade County, Florida

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: Miami-Dade County Animal Services, Humane Society of Greater Miami

Relationships

Miami-Dade Animal Services contracts with the Humane Society to provide ~4k spay and neuter surgeries a year. Collection, field, and shelter operations are all mainly performed by Miami-Dade County.

Miami-Dade County Animal Services  Contract  Humane Society of Greater Miami

Key Facts

Miami-Dade County Animal Services
- Governance: Standalone department
- Dispatch: 311 or equivalent
- Animal Officers: 14
- Budget: ~$17.6MM
- Animal Intake: ~30k
- Live Release Rate: ~90%

Community-Wide Operations:
- Spay and neuter surgeries estimate: 35k yearly
- Budget: ~$24MM
- Volunteers (people): ~300

Contractually obligated to Miami-Dade County
Not contractually obligated to Miami-Dade County

Note: Community-wide figures include Miami-Dade County Animal Services and Humane Society of Greater Miami. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Miami-Dade Animal Services, Humane Society of Greater Miami. BCG analysis
Benchmark: Houston, Texas

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: Houston BARC

Relationships

Houston's BARC Animal Shelter & Adoptions provides collection, field intake, and shelter operations. BARC contracts the Rescued Pets Movement to transport thousands of animals outside of Houston.

Key Facts

Houston BARC Animal Shelter
- Governance: Subdivision within Administration and Regulatory Affairs Department
- Dispatch: 311 or equivalent
- Volunteers (people): ~615
- Animal Officers: 27
- Budget: ~$13MM
- Animal Intake: ~26k
- Live Release Rate: ~75%

Community-Wide Operations:
- Spay and neuter surgeries estimate: 16k yearly
- Budget: ~$13.5MM

Note: Community-wide figures include Houston BARC Shelter. Community budget also includes Rescued Pets Movement and Houston BARC Foundation. Not representative of entire community. Other key organizations may not have been included; Source: Interviews with Houston BARC. Most recently available 990 Tax Forms for Houston BARC Foundation and Rescued Pets Movement.

Contractually obligated to Houston
Not contractually obligated to Houston

BARC
Shelter
Contract
Rescued
Pets
Movement
Memorandum of understanding
Houston
BARC
Foundation

Contract
Not contractually obligated to Houston

Contract
Contractually obligated to Houston
Benchmark: Fulton County, Georgia (Atlanta)

Based on expert interviews and in-depth research, but not reviewed or confirmed by benchmark city

Interviews: Fulton County Animal Services

Key Facts

Fulton County Animal Services
- Governance: Subdivision within Health Department
- Dispatch: Animal call center
- Animal Officers: 16
- Budget: ~$3MM
- Animal Intake: ~15k
- Live Release Rate: ~85%

Community-Wide Operations:
- Spay and neuter Surgeries Estimate: 10k yearly
- Budget: ~$17MM

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Fulton County Animal Services contracts shelter operations for the county to Lifeline Animal Project. The county still performs field collection and intake. Additionally, in interviews, Atlanta Humane Society was described as an integral partner that has no formalized contract with the county.

- Contractually obligated to Fulton County
- Not contractually obligated to Fulton County

Note: Community-wide figures include Fulton County Animal Services, Lifeline Animal Project, and Humane Society of Atlanta. Not representative of entire community. Other key organizations may not have been included. Source: Interview with Fulton County Animal Services. Most recently available 990 Tax forms for Lifeline Animal Project and Humane Society of Atlanta. BCG analysis.
Appendix: Rescue and Animal Welfare Organization Survey
Survey was issued to animal welfare groups in Dallas

**Purpose**
- To get a picture of the landscape of animal-related organizations in the Dallas area
- To dive deeper into dog rescues capacity and extent to which they can pull more dogs from DAS

**Survey structure**
- **Section 1: What does the Dallas animal welfare landscape look like?**
  - Basic information on each animal-related organization incl. size, mission, and purpose
- **Section 2: What impact are dog rescue organizations having today?**
  - Dog intake, daily capacity, growth, source of dogs
- **Section 3: To what extent/under which conditions could partners transfer more DAS dogs?**
  - DAS satisfaction level, reasons for DAS dog increase or decrease

**Outreach**
- Utilized all DAS channels including Facebook pages and rescue group email lists
- Reached out personally to every organization interviewed
- Cold-called 60+ organizations
- Sent cold emails to ~100 organizations
- Attended rescue summit in southern Dallas

**Response**
- 72 unique orgs. (via execs or board members) took the survey, and 65 completed all
- 58 respondents were rescue organizations that transfer, foster, or shelter dogs
Rescue and Animal Organization Survey findings

There are many animal welfare organizations that provide a great deal of support to the city of Dallas

- Annual budget of survey respondents is $28MM+, and they serve 149k animals
- 74% of survey respondents are growing
- Surveyed organizations perform multiple and overlapping missions and are focused on short-term, rather than long-term solutions
  - E.g., 63% focus on adoptions and fosters while only 3% focus on spay and neuter

Rescue organizations—non-profit groups that house and adopt out dogs—provide much needed support for the city

- Rescues are estimated to have a 2016 annual intake of ~46,000 dogs and on any day have the capacity to house ~4k dogs
- Currently, rescues get 10% of dogs from DAS, 25% from other city shelters, 42% from owner surrenders, 13% from street rescue, 10% from other sources such as cruelty cases and fosters
- Rescue organizations are concentrated in size
  - ~20% of rescue organizations have ~80% of annual dog intake

To increase number of transfers, DAS can improve the areas of operation that matter most to transfer partners

- Large partners care most about 1.) their personal needs being met, 2.) improving the tagging/pulling progress, and 3.) getting better information on the dogs at DAS
- Smaller partners care most about 1.) building stronger relationships with DAS, 2.) improving the tagging/pulling process, and 3.) increasing access to dog information
Animal welfare groups can help Dallas control its dog population with both short-term and long-term solutions

Long-term solutions

While long term solutions that address root cause of loose dog population take several years to bear fruit...

- Provides low-cost surgeries
- Offers door-to-door education and resources
- Provides pet food to owners in need
- Pet owner education
- Spay and neuter efforts
- Pet owner assistance

Short-term solutions

...must simultaneously focus resources on short term solutions to ensure immediate public safety and high LRR

- Collects loose dogs directly from the street
- Collects more loose dogs
- Increase adoptions and transfers
- Fosters dogs from DAS until they are adopted

- Increase adoptions and transfers
- Collect more loose dogs

Animal welfare groups can help Dallas control its dog population with both short-term and long-term solutions
Animal orgs. have significant and growing capacity

$28MM+ in annual budget to serve 148k+ animals

Question: What is the annual budget for your organization? (n=72); Question: Approximately how many animals did your organization impact in 2015 through fostering, boarding, owner education, etc? (n=72); Question: How has your organization changed over the last three years in terms of how many animals it has impacted through fostering, boarding, owner education, etc.? (n=72); Source: Rescue and Animal Organization survey (n=72), BCG analysis
Animal organizations have 15+ missions

1. Place animals with new owners through adoption
2. Operate a network of foster homes
3. Provide pet ownership education
4. Rescue strays directly from the streets
5. Transport animals to different cities and states
6. Provide financial support to pet owners in need
7. Advocate for animal-related legislative issues
8. Provide low-cost behavioral training
9. Perform discounted spay and neuter
10. Operate a shelter for animals
11. Other: humane investigations, emergency rescue
12. Trap-neuter-release
13. Host vaccination clinics
14. Host microchip clinics
15. Provide low-cost veterinary care
16. Go door-to-door in some communities to offer education, spay and neuter information, pet care etc.

On average, one organization participates in 6 different missions

Number of functions

<table>
<thead>
<tr>
<th>Number of functions</th>
<th>1-3</th>
<th>4-6</th>
<th>7-9</th>
<th>10-12</th>
<th>13-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td></td>
<td>34%</td>
<td></td>
<td>25%</td>
<td>13%</td>
</tr>
<tr>
<td>6 = average no. functions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question: Which of the following activities does your organization participate in? (n=71)

Source: BCG rescue survey (N=72), BCG analysis
Most perform functions related to immediate positive outcomes for dogs rather than long-term solutions.

**Orgs. perform multiple functions**

- Place animals with new owners through adoption: 89%
- Operate a network of foster homes: 77%
- Provide pet ownership education: 76%
- Rescue strays directly from the streets: 57%
- Transport animals to different cities: 43%
- Provide financial support to pet owners in need: 43%
- Advocate for animal-related legislative issues: 34%
- Provide free/low-cost behavioral training: 33%
- Perform free/low-cost spay-neuter surgeries: 26%
- Operate a shelter for animals: 23%
- Go door-to-door to offer education, etc.: 19%
- Other: 14%

**Orgs. focus on similar functions**

- 63% focus on adoptions and fostering
- 42% focus on other functions

**Question:** Which of the following activities does your organization participate in? (n=71)
**Source:** Rescue and Animal Organization survey (n=72), BCG analysis

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**Working materials – not validated with all parties**

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Rescue orgs. have annual dog intake of 30k and the ability to hold 4k dogs on any given day

In 2015, rescue dog intake was 30k

- Partner intake: 30,876
- DAS intake: 20,807

At any one time, rescue have ~4k dogs

- Foster: 2,208 (57%)
- Shelter: 1,372
- Boarding: 164
- Other: 108
- Total partner capacity: 3,851
- DAS capacity: 600

Avg. length of stay
- Partner intake: ~8 weeks
- DAS intake: ~1 week

Avg. cost/dog
- Partner intake: ~$443
- DAS intake: ~$440

Rescues are not open access so dogs can stay with them longer.

1. See below for questions. Includes average of all 57 organizations that answered the question; Question: Approximately how many dogs did your organization take in during 2015? (n=58); Question: On average, on any given day, how many total dogs do you have in your organization? (n=57); Question: On average, how many weeks is a dog with your organization before it leave (is adopted, transferred, etc.)? (n=57); Question: What is the average cost of stay for a dog in your organization including medical, food, etc. before it leaves? (n=57)

Source: Rescue and Animal Organization survey (n=72), DAS Chameleon database, BCG analysis
Dallas rescue organization landscape concentrated with large organizations rescuing majority of dogs

Reported 2015 Dog Intake

1. Includes all rescue organizations that took the Rescue and Animal Organization Survey; Question: Approximately how many dogs did your organization take in during 2015? (n=58); Note: Gini coefficient is .76; Note: Large rescue organizations defined as having 2015 intake > 400

Source: Rescue and Animal Organization survey (n=72), BCG analysis
Rescue organizations want more funding, volunteers, and public awareness to grow

**Orgs. want more funding...**

**Organizations need more funding to cover medical costs**
- "In other words, more financial resources"
- "More funding to help with medical cost"
- "Reduced or waived adoption fees would help. When we take dogs, we adopt them from the shelter. We get all of their vetting for the adoption fee, which is a GREAT deal, but pulling 20—30 dogs at a time is still expensive."

**...And more capacity through fosters**

**Organizations want to grow their foster base to grow their capacity**
- "As with most rescue groups, we need dedicated fosters"
- "Most of our marketing budget is spent on trying to attract new fosters"
- "More foster homes and we would love to rent/build a facility so we can rescue even more animals. That would give us the ability to pull faster while waiting for a foster home to open up"

**There is a desire to find "permanent" fosters for the dogs that are un-adoptable**
- "The biggest concern is that many of our rescues are seniors and special-needs dogs that become permanent fosters (sanctuary dogs). They place the average stay time much higher than would 2 otherwise be the case, and make it impossible for those fosters to take any new/other dogs. If there were more organizations specifically geared to sanctuary and senior care we could take more animals"

**Public awareness could increase impact**

**Some orgs feel that the public is not aware of their missions**
- "More networking. Not many people know [we are] here. We are overshadowed by the SPCA of Texas’ funding and networking."

**More publicity could increase funding, volunteers, and positive outcomes for animals**
- "More publicity. Getting the dogs out in front of people who can adopt them"

Question: Do you have anything else you would like to say about what it would take for our organization to rescue even more dogs? (n=54); Source: Rescue and Animal Organization Survey (n=72), BCG analysis
Rescue organizations take 35% of all of their intake from municipal shelters—10% from DAS and 25% from other shelters

Reported Jan-July 2016 dog intake of rescue orgs.¹

<table>
<thead>
<tr>
<th>Source of Intake</th>
<th>Non-DAS</th>
<th>DAS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Shelters</td>
<td>7,287</td>
<td>10%</td>
<td>21,208</td>
</tr>
<tr>
<td>Owner Surrender</td>
<td>8,987</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Street Rescue</td>
<td>2,708</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2,226</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

¹ According to rescue survey, 58 orgs. have had a total intake of 21,208 as of the time of this survey; Question: What percentage of your 2016 intake came from [source]... (n=48)
² Source: Rescue and Animal Organization survey (n=72), BCG analysis
Large rescues get 8% of their dogs from DAS, small 17%

i  Large rescues pull 8% dogs from DAS

Reported Jan. - Jul. 2016 dog intake of large rescue orgs.¹

<table>
<thead>
<tr>
<th>Source of Intake</th>
<th>DAS</th>
<th>Non-DAS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal shelters</td>
<td>4,689</td>
<td>19%</td>
<td>8%</td>
</tr>
<tr>
<td>Owner surrender</td>
<td>8,562</td>
<td>49%</td>
<td>12%</td>
</tr>
<tr>
<td>Street rescue</td>
<td>2,006</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>2,083</td>
<td>12%</td>
<td>92%</td>
</tr>
</tbody>
</table>

ii  Small rescues pull 17% dogs from DAS

Reported Jan. - Jul. 2016 dog intake of small rescue orgs.¹

<table>
<thead>
<tr>
<th>Source of Intake</th>
<th>DAS</th>
<th>Non-DAS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal shelters</td>
<td>2,598</td>
<td>50%</td>
<td>17%</td>
</tr>
<tr>
<td>Owner surrender</td>
<td>425</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Street rescue</td>
<td>702</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>143</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

1. According to rescue survey, 58 orgs. have had a total intake of 21,208 YTD; Note: Large rescue organizations defined as having 2015 intake > 400; Question: What percentage of your 2016 intake came from [source]... (n=48)

Source: Rescue and Animal Organization survey (n=72), BCG analysis
~40% orgs. have decreased intake from DAS; 30% have increased

How has the total number of dogs you have pulled from Dallas Animal Services changed in the past 3 years?

Segment of rescue org.

- All orgs.
  - Many fewer dogs than in previous years: 29%
  - Slightly fewer dogs than in previous years: 10%
  - About the same amount of dogs as in previous years: 31%
  - Slightly more dogs than in previous years: 19%
  - Many more dogs than in previous years: 12%

- Large orgs.
  - Many fewer dogs than in previous years: 27%
  - Slightly fewer dogs than in previous years: 9%
  - About the same amount of dogs as in previous years: 18%
  - Slightly more dogs than in previous years: 36%
  - Many more dogs than in previous years: 9%

- Small orgs.
  - Many fewer dogs than in previous years: 29%
  - Slightly fewer dogs than in previous years: 10%
  - About the same amount of dogs as in previous years: 34%
  - Slightly more dogs than in previous years: 15%
  - Many more dogs than in previous years: 12%

Question: How has the total number of dogs you have pulled from Dallas Animal Services changed in the past 3 years? (n=52); Note: Large organizations defined as having >400 dog intake in 2015; Source: Rescue and Animal Organization survey (n=72), BCG analysis.
Unique reasons and personal relationships most frequent causes for decrease in DAS transfers

Factors causing decrease in DAS transfers

<table>
<thead>
<tr>
<th>Reason</th>
<th>Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other (unique reasons)</td>
<td>60</td>
</tr>
<tr>
<td>Poor relationship with DAS staff</td>
<td>35</td>
</tr>
<tr>
<td>Process of pulling dogs from DAS was too difficult</td>
<td>20</td>
</tr>
<tr>
<td>You weren't able to pull the types of dogs that you wanted</td>
<td>15</td>
</tr>
<tr>
<td>Negative media attention around DAS</td>
<td>10</td>
</tr>
<tr>
<td>An overall decrease in size of your organization</td>
<td>5</td>
</tr>
<tr>
<td>Information that you receive from DAS was too difficult to access</td>
<td>5</td>
</tr>
<tr>
<td>Health condition of the animals at DAS was too much of a risk for your organization</td>
<td>0</td>
</tr>
<tr>
<td>Health/behavior information posted on the dogs was inaccurate</td>
<td>0</td>
</tr>
</tbody>
</table>

Of organizations that have decreased number of DAS transfers in the last 3 years, 35% claim poor relationships were a driving factor.

Unique reasons

- "We focus efforts in Grayson County"
- "Greater need in surrounding areas and fewer rescues working with those facilities; DAS seems to have some very large groups who have picked up the slack"
- "They don't respond to emails or phone messages"
- "Other groups pulling [the specific breed] first"
- "I can't get certificates of sterilization from DAS"
- "I got behind on sending in proof of spay and neuter and just don't have the time to do all that paperwork"

Question: What factors have most contributed to the decrease in the number of dogs you pulled from DAS? (n=20)

Source: Rescue and Animal Organization survey (n=20), BCG analysis

Working materials – not validated with all parties
Question: What factors have most contributed to the increase in the number of dogs you pulled from DAS? (n=16)
Source: Rescue and Animal Organization survey (n=72), BCG analysis

<table>
<thead>
<tr>
<th>Reason</th>
<th>Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>You developed personal relationships and trust with the DAS staff</td>
<td>69</td>
</tr>
<tr>
<td>Process of pulling dogs from DAS got easier</td>
<td>31</td>
</tr>
<tr>
<td>Information that you receive from DAS became easier to access</td>
<td>31</td>
</tr>
<tr>
<td>Health condition of the animals at DAS improved</td>
<td>25</td>
</tr>
<tr>
<td>Increase in size of your overall organization</td>
<td>19</td>
</tr>
<tr>
<td>You were able to pull more of the dogs that you wanted</td>
<td>19</td>
</tr>
<tr>
<td>Other (unique reasons)</td>
<td>19</td>
</tr>
<tr>
<td>Information you received on a dog's behavior/health became more accurate</td>
<td>13</td>
</tr>
</tbody>
</table>

Of organizations that have increased number of DAS transfers, 69% claim personal relationships a driving factor.

Other unique reasons:
- "We were granted extra time by Danielle to get a foster in place which helped tremendously."
- "The ability to transport out of state."
- "Fantastic volunteers... [they have] helped [us] by notifying us of Labs in the shelter."
Respondents indicated better processes, relationships, and information on dog can increase DAS transfers

Choose up to three changes that DAS can make to get you to pull more dogs from DAS

<table>
<thead>
<tr>
<th>Actions</th>
<th>All respondents</th>
<th>i Large orgs.</th>
<th>ii Small orgs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve process for tagging/reserving dogs (e.g., self-service online tagging)</td>
<td>46</td>
<td>45</td>
<td>46</td>
</tr>
<tr>
<td>Build stronger personal relationships with its rescue partners</td>
<td>44</td>
<td>27</td>
<td>49</td>
</tr>
<tr>
<td>Provide more access to information regarding the dogs</td>
<td>38</td>
<td>18</td>
<td>44</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>55</td>
<td>26</td>
</tr>
<tr>
<td>Assist in transporting dogs to organizations within the Dallas area</td>
<td>24</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>Improve the quality of information posted about a dog’s health/behavior</td>
<td>22</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Lower the cost of adopting a dog from DAS</td>
<td>16</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>Improve overall health of the dogs in the shelter</td>
<td>14</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Allow your organization to pull more types of dogs that you prefer</td>
<td>10</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

Question: Choose up to three changes that DAS can make to get you to pull more dogs from DAS (n=52); Note: Large organizations defined as having >400 dog intake in 2015
Source: Rescue and Animal Organization survey (n=72), BCG analysis
**Detail:** Customer satisfaction scores for large vs. small rescues

Q: Please rate the following statements about Dallas Animal Services

1. N=11; 2. N=41; Question: Please rate the following statements about Dallas Animal Services (n=52); Note: Large organizations defined as having >400 dog intake in 2015; Note: Excludes “no opinion”; Source: Rescue and Animal Organization survey (n=72), BCG analysis

<table>
<thead>
<tr>
<th>Statement</th>
<th>Large rescue orgs.</th>
<th>Small rescue orgs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The team at DAS is helpful and supportive of our work</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>Dogs I pull from DAS are comparable in health to those I pull from other shelters</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>DAS has improved over the last 3 years</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>I am satisfied with the level of health assessments at DAS</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>I am satisfied with the type of info I have about the dogs I am trying to network or foster</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>The process for a rescue organization to tag or pull dogs from DAS is well organized</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>The process for a rescue organization to tag or pull dogs from DAS is fair</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>I am able to pull the types of dogs I want from DAS</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>I am satisfied with DAS overall</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>The process for a rescue org. to tag or pull dogs from DAS is easy</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>I am satisfied with the level of behavior evaluations at DAS</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>I believe that DAS provides adequate animal enrichment activities for the dogs</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
<tr>
<td>DAS receives enough resources to perform its mission</td>
<td><img src="chart_large" alt="Bar chart for large organizations" /></td>
<td><img src="chart_small" alt="Bar chart for small organizations" /></td>
</tr>
</tbody>
</table>
Many rescue orgs. have seen improvement in DAS but still want more leadership

Rescues noticed a recent improvement
- "In the last 3 years DAS has improved dramatically, not only with its "live release rate", but by building relationships with legitimate rescue organizations"
- "We are starting to focus more of our efforts with DAS due to the cleanliness of the facility, the quick processes and decent vetting."

Rescues pointed to current transfer coordinator as a strength and a resource that is needed
- "I work with both transfer coordinators to rescue dogs from DAS. The process has become easier to deal with recently."
- "[The transfer coordinator] is so great to work with! She allows us to come in and always helps us pull animals."
- "transfer coordinator... is AMAZING. When she is off, emails sometimes go unanswered and it is much more difficult for us to tag dogs at the speed that is required to ensure a dog is not euthanized. ...The need is there for at LEAST 2 people to do it full time. They need to approve new groups applying to rescue, evaluated and network the dogs, etc."

Some rescues pointed to the need for better leadership

Identified a need for stronger leadership at DAS
- "DAS is seriously lacking in direction from leadership. ...Who is actually running the facility? No one seems to know the answer."
- "DAS is severely underfunded and without leadership that makes rescue easy. If the transfer coordinator is not involved, the process to pull for rescue is not well known."
Rescue orgs. want clearer transfer guidelines and more access to better info on dogs

Orgs. have noticed preferential treatment of some transfer partners
- "To be fair, we don't normally seek out dogs from the shelter as it appears that only a few rescue groups are given priority to pulling dogs and we assume, though not proven to us, that it would be difficult to join in to pull dogs as quickly and easily as smaller shelters that have developed a personal relationship with us"
- "There is a group who gets preferential treatment. Example: they can tag dogs earlier after the stray hold than other groups because they're expected to pull more. They don’t pull more, but still have that benefit."

In order to address preferential treatment, need to have state guidelines around transfers
- "They need to have stated policies and allow first come, first take."

Rescues want more access to more information on dogs
- "We need more information about the dogs in a timely manner"
- "I would like to see DAS use their computer system more. There is so much flexibility that isn't being used. The intake computer doesn't talk to the sterilization desk who doesn't communicate with the internal system. things are disseminated via sticky notes and by word of mouth - not acceptable"

Organizations also want to know when dogs are euthanized
- "I think DAS tries hard by the Urgent Transfer Partner page but we need to know how much time they actually have if possible."
- "My biggest complaint is not having easy access to the urgent immediate need or the medical need dogs. Also having a fully vetted dog and pledges would help."

Question: Do you have anything else you would like to say about your satisfaction with Dallas Animal Services (n=54)
Source: Rescue and Animal Organization Survey (n=72), BCG analysis
Appendix: Dallas Community Survey
**Interview Guide: Dallas Community Survey**

### Loose Dog Sightings
1.1 Approximately how often do you see a loose dog in your neighborhood?
1.2 Approximately how often do you see packs (groups) of 3 or more loose dogs?
1.3 I am comfortable with the current number of loose dogs in my neighborhood.
1.4 I believe loose dogs are a safety problem in my neighborhood.
1.5 I believe there are more loose dogs today than one year ago.
1.6 What do you believe is the main cause of loose dogs in your neighborhood?

### Loose Dog Reporting
2.1 When I see a loose dog, I usually report it to 311 or 911.
2.2 When I report a loose dog to 311, I believe that it is quickly and effectively dealt with.
2.3 If it were easier to report loose dogs, I would notify the city more often.
2.4 If the city responded to my loose dog reports better, I would notify the city more often.
2.5 When you do not report loose dogs to 311, what is the primary reason?

### Preferences
3.1 I would be in favor of picking up all loose dogs no matter what happens to the dog (even if some must be put down).
3.2 I would be in favor of picking up all loose dogs if no dogs or only very sick/aggressive dogs are put down.
3.3 If offered, I would allow the city to set a loose animal trap on my property (to catch the loose dogs).
3.4 It is important for the city to have programs and services that contribute to animal welfare.
3.5 It is important that the city investigate and prosecute animal cruelty.

### Demographics
4.1 Please enter your address (or a nearby address or intersection).
4.2 Do you live in Dallas?
4.3 What is your racial or ethnic background?
4.4 What is your household income?
4.5 Do you work or regularly volunteer at an animal shelter, rescue organization, or other animal welfare group?
Survey respondents in southern Dallas see dogs more often than the north

Results are based on open access survey and subject to participation bias. Duplicate responses removed.

Of the 276 District 1 respondents, 45% see loose dogs daily

Note: Q: Approximately how often do you see a loose dog in your neighborhood? Often is at least once per day. ; Note: Only used residents that provided addresses. All n=2594. North Dallas n=665. southern Dallas n=299; Source: Community Survey June 2016, BCG analysis

% of survey respondents that see dogs often based on input from citizen survey
Beliefs regarding dogs: Public views animal welfare and a priority for city

Q: It is important for the city to have programs and services that contribute to animal welfare.

City of Dallas

- Strongly Agree: 64%
- Agree: 27%
- Neutral: 14%
- Disagree: 6%

North Dallas

- Strongly Agree: 68%
- Agree: 24%
- Neutral: 12%
- Disagree: 6%

Southern Dallas

- Strongly Agree: 60%
- Agree: 29%
- Neutral: 19%
- Disagree: 7%

Q: It is important that the city investigate and prosecute animal cruelty.

City of Dallas

- Strongly Agree: 81%
- Agree: 14%
- Neutral: 5%
- Disagree: 0%

North Dallas

- Strongly Agree: 82%
- Agree: 12%
- Neutral: 5%
- Disagree: 0%

Southern Dallas

- Strongly Agree: 72%
- Agree: 19%
- Neutral: 6%
- Disagree: 3%

Results are based on open access survey and subject to participation bias. Duplicate responses removed.

Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8. Only used residents that provided addresses. All n=2673. North Dallas n=1222. Southern Dallas n=637; Source: Community Survey June 2016, BCG analysis.
Southern Dallas residents cite high frequency of loose dogs, which are perceived to be a threat in public survey

~90% of southern Dallas residents see loose dogs frequently

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>All</th>
<th>North</th>
<th>Southern</th>
</tr>
</thead>
<tbody>
<tr>
<td>% regularly see packs</td>
<td>25%</td>
<td>10%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Southern Dallas residents perceive loose dogs to be dangerous and growing

<table>
<thead>
<tr>
<th>% of southern Dallas respondents</th>
<th>N/A</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q: I believe loose dogs are a safety problem in my neighborhood.</td>
<td>0%</td>
<td>44%</td>
<td>25%</td>
<td>14%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Q: I believe there are more loose dogs today than one year ago.</td>
<td>2%</td>
<td>30%</td>
<td>28%</td>
<td>22%</td>
<td>12%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Note: Frequently is at least once per week. Very Frequently is at least once per day; Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8. Only used residents that provided addresses. All n=2673. North Dallas n=1222. Southern Dallas n=637.

Source: Community Survey June 2016, BCG analysis

Results are based on open access survey and subject to participation bias. Duplicate responses removed.
**Loose dog sightings**: Southern Dallas residents perceive loose dogs to be dangerous

Results are based on open access survey and subject to participation bias. Duplicate responses removed.

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**City of Dallas**

Q: I believe loose dogs are a safety problem in my neighborhood.

- Strongly Disagree: 22%
- Disagree: 19%
- Neutral: 13%
- Agree: 21%
- Strongly Agree: 25%

Q: I believe there are more loose dogs today than one year ago.

- Strongly Disagree: 15%
- Disagree: 17%
- Neutral: 28%
- Agree: 20%
- Strongly Agree: 17%

---

**North Dallas**

Q: I believe loose dogs are a safety problem in my neighborhood.

- Strongly Disagree: 30%
- Disagree: 28%
- Neutral: 12%
- Agree: 15%
- Strongly Agree: 13%

Q: I believe there are more loose dogs today than one year ago.

- Strongly Disagree: 9%
- Disagree: 14%
- Neutral: 25%
- Agree: 44%
- Strongly Agree: 0%

---

**Southern Dallas**

Q: I believe loose dogs are a safety problem in my neighborhood.

- Strongly Disagree: 5%
- Disagree: 12%
- Neutral: 22%
- Agree: 28%
- Strongly Agree: 30%

Q: I believe there are more loose dogs today than one year ago.

- Strongly Disagree: 2%
- Disagree: 7%
- Neutral: 14%
- Agree: 25%
- Strongly Agree: 44%

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Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2, 6, 9, 10, 11, 12, 13, 14. Southern Dallas includes districts 1, 3, 4, 5, 7, 8. Only used residents that provided addresses. All n=2673. North Dallas n=1222. Southern Dallas n=637; Source: Community Survey June 2016, BCG analysis

Results are based on open access survey and subject to participation bias. Duplicate responses removed.
**Loose dog reporting:** Reporting behaviors varies, residents will report if it were easier and city responded

Results are based on open access survey and subject to participation bias. Duplicate responses removed.

**Q: When I see a loose dog, I usually report it to 311 or 911.**

- City of Dallas:
  - Strongly Disagree: 15
  - Disagree: 27
  - Neutral: 22
  - Agree: 22
  - Strongly Agree: 9
  - N/A: 4

- North Dallas:
  - Strongly Disagree: 19
  - Disagree: 33
  - Neutral: 20
  - Agree: 17
  - Strongly Agree: 5
  - N/A: 6

- Southern Dallas:
  - Strongly Disagree: 12
  - Disagree: 30
  - Neutral: 20
  - Agree: 26
  - Strongly Agree: 11
  - N/A: 1

**Q: When I report a loose dog to 311, I believe that it is quickly and effectively dealt with.**

- City of Dallas:
  - Strongly Disagree: 23
  - Disagree: 23
  - Neutral: 36
  - Agree: 1
  - Strongly Agree: 6
  - N/A: 11

- North Dallas:
  - Strongly Disagree: 18
  - Disagree: 17
  - Neutral: 40
  - Agree: 1
  - Strongly Agree: 19
  - N/A: 5

- Southern Dallas:
  - Strongly Disagree: 33
  - Disagree: 27
  - Neutral: 28
  - Agree: 26
  - Strongly Agree: 5
  - N/A: 5

**Q: If it were easier to report loose dogs, I would notify the city more often.**

- City of Dallas:
  - Strongly Disagree: 6
  - Disagree: 6
  - Neutral: 26
  - Agree: 29
  - Strongly Agree: 7

- North Dallas:
  - Strongly Disagree: 6
  - Disagree: 8
  - Neutral: 32
  - Agree: 22
  - Strongly Agree: 20
  - N/A: 13

- Southern Dallas:
  - Strongly Disagree: 3
  - Disagree: 18
  - Neutral: 27
  - Agree: 44
  - Strongly Agree: 3

**Q: If the city responded to my loose dog reports better, I would notify the city more often.**

- City of Dallas:
  - Strongly Disagree: 7
  - Disagree: 10
  - Neutral: 28
  - Agree: 18
  - Strongly Agree: 6

- North Dallas:
  - Strongly Disagree: 7
  - Disagree: 13
  - Neutral: 32
  - Agree: 26
  - Strongly Agree: 12
  - N/A: 10

- Southern Dallas:
  - Strongly Disagree: 4
  - Disagree: 7
  - Neutral: 24
  - Agree: 34
  - Strongly Agree: 29
  - N/A: 2

Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2, 6, 9, 10, 11, 12, 13, 14. Southern Dallas includes districts 1, 3, 4, 5, 7, 8. Only used residents that provided addresses. All n=2673. North Dallas n=1222. Southern Dallas n=637; Source: Community Survey June 2016, BCG analysis

20160826_BCG_DallasDog_WorkingMaterials_vPublic.pptx

Working materials – not validated with all parties
Beliefs regarding dogs: Public want positive outcomes for dogs and will allow trapping

Results are based on open access survey and subject to participation bias. Duplicate responses removed.

Q: I would be in favor of picking up all loose dogs no matter what happens to the dog.

Q: I would be in favor of picking up all loose dogs if no dogs or only very sick dogs are put down.

Q: If offered, I would allow the city to set a loose animal trap on my property.

Note: I-30 used to separate North from southern Dallas. North Dallas includes districts 2,6,9,10,11,12,13,14. Southern Dallas includes districts 1,3,4,5,7,8. Only used residents that provided addresses. All n=2673. North Dallas n=1222. Southern Dallas n=637; Source: Community Survey June 2016, BCG analysis

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Thank you