The Fiscal Impact of Breed Discriminatory Laws at the Dawn of Doggy DNA

By Ledy VanKavage, Katie Barnett and Lauren A. Gallagher
On January 7, 2010, The Colbert Report aired an entertaining piece on the death penalty fading from use. In 2009, 106 death sentences were issued, down from a high of 295 in the 1990s. Barry Scheck, co-director of the Innocence Project, explained the importance of scientific advances in trials, and Colbert, like many prosecutors, blamed the “CSI effect” as the cause for the decrease. ¹

Colbert, of course, was half-joking, but jurisprudents are indeed finding DNA evidence more persuasive than eyewitness testimony. Science is favored over subjective identifications for good reason: according to Scheck, since DNA was first admitted to exonerate inmates, 249 convictions have been overturned nationwide because of DNA evidence. ²

Now science has gone to the dogs with the canine genome project. Canine DNA is being used to exonerate dogs in the cities and counties that have enacted breed discriminatory laws (BDL). Hundreds of cities and counties have enacted such legislation. Because of scientific advances, it is becoming even more expensive for municipalities to successfully prosecute or bring civil actions under BDL. ³ Given these difficult economic times, it makes good fiscal sense to review programs, practices and policies, such as BDL, that could impact a municipality’s bottom line.

**Brief History of Canine Profiling**

According to author Karen Delise, canine profiling is nothing new, and over the years various breeds have been considered dangerous. ⁴ In the 1800s, for example, bloodhounds and Newfoundlands were considered dangerous dog breeds. By 1920, the German shepherd usurped the larger dogs and was deemed a “bad breed.” The media then focused in turn on the St. Bernard, Doberman, rottweiler, and American pit bull terrier as their popularity and numbers increased.⁵

Since the 1980s, the most frequently targeted “breed” has been the pit bull. In fact, “pit bull” is not a breed of dog but a common name encompassing a range of purebreds, including American Staffordshire terriers, American pit bull terriers and Staffordshire bull terriers and sometimes even totally different breeds. ⁶

Despite the recent targeting of pit bull breeds, their status as inherently dangerous is contradicted by canine authorities. The official American Kennel Club (AKC) breed standard for Staffordshire bull terriers states thus: “With its affection for its friends, and children in particular, its off-duty quietness and trustworthy stability, the Staffordshire bull terrier is a foremost all-purpose dog.” ⁷ Similarly, the United Kennel Club (UKC) says that the characteristics of the American pit bull terrier make them excellent family companions and observes that they “have always been noted for their love of children.” ⁸

Little Rascals fans would probably agree with the AKC since Pete, the show’s token mascot, was a registered American Staffordshire terrier.⁹

Nor does the National Animal Control Association (NACA) support discriminatory measures that target pit bulls or any other breeds. NACA’s policy states that [dangerous and/or vicious animals should be labeled as such as a result of their actions or behavior and not because of their breed. Any animal may exhibit aggressive behavior regardless of breed. Accurately identifying a specific animal’s lineage for prosecution purposes may be extremely difficult. Additionally, breed specific legislation may create an undue burden to owners who otherwise have demonstrated proper pet management and responsibility.]¹⁰

**Difficulties of Enforcement**

Animal control officers, police officers, and municipal lawyers often spend hundreds of man-hours enforcing BDL because of the complexity of issues that surround these cases in the age of DNA. Canine-profiling measures often include both civil and criminal components. Municipalities that enact BDL have the burden of proving that a dog is of the outlawed breed either through a preponderance of the evidence in most civil cases or beyond a reasonable doubt in criminal cases.¹¹

Registered purebreds may be easy for officials to label, but what about identifying the breed of a mutt? In the case of a mixed-breed dog, the “predominant breed” is frequently determined by municipal officials. But doggy identification isn’t taught at the police academies, and there is no standardized training in dog breed identification for animal control wardens. Veterinarians also lack such training even though some cities with BDL employ veterinarians to determine a dog’s heritage.¹²

In a recent article, Dr. Victoria Voith found that in 87.5 percent of adopted dogs, breeds identified by
DNA analyses were not the breeds stated by the adoption agencies. In other words, animal shelter staff members were correct in their visual identification of breeds only 12.5 percent of the time. Given the discrepancies between opinions of animal shelter workers and identification by DNA analysis, the paper suggests reevaluating the reliability of non-DNA breed identification and calls into question current public and private policies based on dog breeds. 

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An Emerging Canine Innocence Project

Courts usually use one of two tests to evaluate the admission of scientific evidence, i.e., the Frye test or the Daubert test, depending on the jurisdiction. Because of the general acceptance of canine DNA testing in the scientific community and its testability and reliability, it is inevitable that canine DNA will be admissible for breed identification.

The methods and techniques used to extract and analyze canine DNA are the same methods and techniques used to extract and analyze human DNA. Currently, the Mars Wisdom Panel Professional™ test, formerly known as the Mars Wisdom Panel MX test, has a DNA database comprising more than 200 AKC and UKC registered dog breeds. It is the only identification kit that requires a blood sample taken by a licensed veterinarian. The cost of DNA testing varies from $125 to $200.

The Mars Wisdom Panel Professional™ DNA test has already been used as evidence in some municipal court breed identifications. Most recently, in 2009, an officer visually identified the dog Lucey as a "pit bull" in Salina, Kansas, which has BDL. The dog's owners challenged the officer's visual identification. DNA testing revealed that Lucey was 25 percent Bernese mountain dog, 12.5 percent Staffordshire bull terrier, 12.5 percent bull terrier, 12 percent boxer and 12.5 percent unknown.

Lucey was a lucky dog—because she was determined to be predominantly Bernese mountain dog, the city dropped all criminal charges and civil penalties, and she lived another day.

Fiscal Bite: BDL Costs Communities

Because of the rising costs of enforcing breed-discriminatory measures in these austere times, officials need to contemplate the fiscal impact of enacting BDL. A study entitled "The Fiscal Impact of Breed Discriminatory Legislation in the United States" was prepared for Best Friends Animal Society by economist John Dunham on May 13, 2009. The study estimated that there were 72,114,000 dogs in the United States, with an estimated 5,010,934 pit bull-type dogs. The model was based on data provided by the federal government, national dog-bite victim groups, national media reports, animal activist groups, court transcripts, animal welfare publications and canine registers. Using non-linear programming to determine the number of dogs in an area based on demographic data about the population (number of households, population, area, structural type of housing, gender, poverty rate, ethnicity, and married rate), the model evaluated the average proportion of pit bull-type dogs to total dogs to estimate the number of dogs affected by BDL.

According to the study, if the United States were to enact BDL, it would cost approximately $459,138,163 to enforce annually. To cite a single community, the economic impact of BDL in Chicago is estimated to be $3,950,530 annually. (The cost to other individual cities and counties can be determined online by using the study's fiscal impact calculator at www.guerilla-economics.biz/bestfriends.)

The costs include those related to animal control and enforcement, kenneling and veterinary care, euthanasia and carcass disposal, litigation from residents appealing or contesting the law, and DNA testing. Other costs, depending on current resources available to a specific community's animal control program, may include additional shelter veterinarians, increased enforcement staffing, and capital improvements associated with increased shelter space needed.

Barking Up the Wrong Tree

Even though BDL poses a substantial fiscal impact, some communities may believe that the cost is justified by the result. But do breed-specific laws actually increase public safety? Only two published studies exist on the topic. Studies from Spain and the United Kingdom compared dog-bite data before and after breed-discriminatory provisions were enacted, and both studies showed that breed-specific provisions failed to reduce dog bites.

Twelve states now prohibit breed-discriminatory provisions. The new ABA publication A Lawyer's Guide to Dangerous Dog Issues recommends against breed discrimination. This trend runs counter to the International Municipal Lawyers Association model ordinance, which classifies any dog with the characteristics of "pit bulls" as dangerous. So what's a municipal lawyer to do?

Problem-Oriented Animal Control

Herman Goldstein, a law professor at the University of Wisconsin, wrote the book on problem-oriented policing. In his 1979 article "Improving Policing: A Problem-
Oriented Approach, 27 Goldstein articulated the key principles that formed “the core of the changes that are required in the way we think about the police job”:

- Grouping incidents
- Focus on substantive problems
- Concern with effectiveness
- Systematic inquiry and analysis
- Tailor-made responses
- Evaluation of results

Evidence from several jurisdictions demonstrates that a problem-oriented approach yields favorable results with animal control, too.

The city of Calgary, Alberta, has taken just such a tack. Instead of discriminating against breeds of dogs, Calgary protects the public from all aggressive dogs, regardless of breed. Using the problem-oriented model, the city’s animal control wardens focus on public education and stiff fines. 28 According to the Calgary Herald, aggressive dog attacks are at the lowest level they’ve been in 25 years despite a steady population growth.

Problem-oriented animal control effectively targets reckless owners. Like reckless drivers, reckless owners are often recidivists: you take away one dog, and they simply get another. In 2007, St. Paul, Minnesota, passed an ordinance that addressed such reckless dog owners. 29 St. Paul pet owners cited more than once for abusing or neglecting an animal can’t legally own another pet under the ordinance. Dog bites are down in St. Paul. 30 Similarly, Tacoma, Washington, created an ordinance regulating “problem pet owners.” 31 A person who commits three or more animal control violations in a 24-month period can be declared a problem pet owner and forced to surrender all of his animals.

Other effective laws address aspects of pet ownership that affect dog behavior. According to the National Canine Research Council, in 2006, 97 percent of fatal dog attacks involved unsterilized dogs. 32 Because of this, the state of Illinois enacted a statute that prevents convicted felons from owning unsterilized dogs or dogs that have been deemed “vicious” by a court because of temperament. 33 According to Delise, 25 percent of all fatal attacks since the 1960s have been inflicted by chained dogs. 34 Some states and cities are enacting tethering restrictions to address this problem. 35

The Illinois Animal Control Act 36 addresses packs of dogs and also uses “microchipping.” The law defines a “potentially dangerous dog” as one that is unsupervised and found running at large with three or more other dogs. 37 Potentially dangerous dogs have to be sterilized and microchipped. A microchip, about the size of a grain of rice, is implanted between a dog’s shoulder blades for permanent identification. Once in place, the microchip can be detected with a handheld device that uses radio waves to read the chip. The cost of microchipping an animal usually varies from $15 to $60.

Knox County, Tennessee, which also has a good generic dangerous dog ordinance, took a further step. In addition to the spaying/neutering and microchipping of Level II Dangerous Dogs, Knox County requires that a sample from the “dangerous dog” be preserved for possible DNA testing and delivered to the animal control division. 38

The Future: Repeals and Rethinking

In our lifetime, dogs have gone from the backyard to the bedroom. Surveys indicate that 71 percent of dog owners consider their pets to be like a child or family member, and 93 percent believe companionship, love, company and affection are some of the benefits that their pets provide. 40 No doubt because of the strong connection between owners and their pets, a recent poll by Parade Magazine showed that 76 percent of respondents did not support breed bans. 41 Not surprisingly, more and more dog owners are willing to litigate to save their companions. As of September 2008, approximately 100 law schools in the United States have offered an animal law course, so finding a lawyer to litigate animal issues will become increasingly easy. 42

This evolution has caused many communities to decide against breed-discriminatory measures, and some have repealed existing canine-profiling provisions, replacing them with generic dangerous dog laws. In 2009, several communities repealed their BDL, including Westland, Michigan; Greenwood, Missouri; and Oak Harbor, Washington. 43 Italy also repealed its breed-specific law. 44 Because BDL is increasingly recognized as expensive, ineffective and unfair, more repeals are likely to follow.

Endnotes

2. Id.
5. Id.
7. Dias v. City of Denver, 567 F. 3d