

SENATOR JEFF FLAKE  
PRESENTS

# Wastebook



# PORKemon



JANUARY 2017



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The end of the year brings big promises for a new year and an even bigger pile of bills racked up during the season that has just passed. This is particularly true in our nation's capital.

Within mere days, the national debt will top \$20 trillion, the largest amount ever owed by any nation in history, and the federal government's authority to borrow expires in March. But rather than making a long overdue resolution to be fiscally responsible, the promises from Washington are to spend even more.

In Congress, politicians in both parties are pushing to further loosen bipartisan budget caps and revive the corrupt practice of earmarking tax dollars for pork projects. And while the incoming president's agenda includes \$1 trillion for infrastructure, \$5 trillion in tax cuts, and nearly \$500 billion more for defense, he promises to tackle the deficit by doing what most in Washington have long refused to do-- go after waste, fraud, and abuse in every agency.

By stopping unnecessary expenditures, more resources will be freed up for our true national priorities. The U.S. is now paying more than \$284 billion just in interest payments on the debt every year. This is more than the amount spent on transportation, education, and the environment combined.

We can do more without spending more by simply making better sense out of how we spend every cent.

As an example, this past year the outgoing Administration requested that Congress provide billions of dollars in additional money to pay for efforts to address the spread of Zika, a virus transmitted by mosquitos that can cause birth defects. At the same time, the nation's most prestigious science agencies were squandering resources already available by investigating matters most would consider obvious or even absurd.

Researchers were literally playing with dolls to prove what every child already knows—girls are more likely to play with Barbie dolls than boys—with support from National Science Foundation (NSF) and National Institutes of Health (NIH) grants totaling \$300,000.

Studies on the habits of college students funded with \$5 million of NIH grants found fraternity brothers drink, smoke and generally party more than other students. They also sleep in later, which led the researchers to speculate "one explanation for this finding is that Greeks students recognize their sleep needs." Perhaps a more likely reason is that they are sleeping off their party lifestyle.

NIH is also drilling down to determine why some people are afraid of the dentist as part of another \$3.5 million research project. The researchers found "fear of pain has been shown to be a critical component."



The monkey business doesn't end there. NIH spent nearly \$1 million to study the evolution of monkey drool and another \$230,000 to determine if the color red makes female monkeys feel more romantic.

NSF is spending more than \$40 million to investigate a made-up disease called "Fearbola," a term for the hysteria spread over social media about Ebola.

But the fishiest study of them all tested how long a fish could run on a treadmill. Mudskippers, which possess the ability to live out of water for extended periods of time and use their fins like legs, were forced to run for as long as 15 minutes at a time as part of a study paid for with a \$565,000 grant from NSF.

While NSF tried to catch the popularity of Pokémon Go by claiming credit for funding research that made the game possible,<sup>1</sup> it is unlikely any such impact will result from racing fish on a treadmill especially when there are bigger fish to fry.

The same upside down spending priorities can be found nearly anywhere you look within the federal government.

Washington tried to wash away its role in Flint, Michigan's unsafe drinking water crisis by simply opening the money spigot. The Environmental Protection Agency (EPA) was alerted to the problem two years ago but chose to ignore it while it misspent funds on unnecessary and possibly illegal activities. The agency provided \$570,000 for a Washington state lobbying campaign that may have broken state and federal laws and another \$40,000 to develop a version of the Minecraft video game exclusively for the well-to-do Berkshires.

With the highway trust fund running on empty, the Department of Transportation (DOT) is wasting billions of dollars that could fix crumbling roads and bridges and aging airports.

Six years after awarding more than \$3 billion to build a high-speed passenger train in California, not a single track has been laid. Billions over budget and years behind schedule, the only thing high-speed about this train is how quickly it is *chew chewing* taxpayer dollars.

Likewise, while thousands of airline passengers missed flights this year due to delays caused by long waits in security lines, the Federal Aviation Administration spent more than \$700,000 renovating a little-used airport in Illinois from which just 20 flights depart a week.

Instead of filling pot holes, DOT spent \$35,000 to display a giant, glow-in-the-dark doobie in Denver to serve as a dubious reminder to pot-smoking motorists not to drive while stoned.

Ending projects like these could help offset the cost of the new president's infrastructure plan. The same approach could free up resources to pay for new spending priorities within the Department of Defense (DOD).

DOD is sinking more than \$80 million into a "spaceport" in Alaska that is not even equipped for the rockets that the Pentagon is planning to launch there. Derided as "space pork," Congress forced DOD to build the launch site as part of an illegal kick-back scheme over the objections of the military.

As part of an effort by DOD and NSF to teach computers how to understand human behavior, the machines were programmed to watch television shows. After viewing over 600 hours of "Desperate Housewives," "The Office," and other programs, the computers were still unable to predict how humans would behave in most situations. Spending nearly a half-a-million dollars to turn computers into couch potatoes does not compute.

Similar savings can be found in other government agencies and programs.

A comedy club in New York is laughing all the way to the bank with \$1.7 million from the Economic Development Administration (EDA) that will bring Lucille Ball and other classic comedians who are no longer with us back to the stage as holograms. There's nothing funny about this transparent waste of tax dollars.

NASA is spending more than more than \$1 million to prepare the world's religions for the possible discovery of extraterrestrial lifeforms. The space agency also gave lovers of French wine reasons to toast global warming, finding that climate change was improving the quality and taste of wine.

Participants in a workshop entitled "How Does the Cookie Crumble?" supported by a \$150,000 grant from the Institute of Museum and Library Services designed earthquake-proof gingerbread houses that were tested on a "shake table" to see if they could survive "the Big One."

A nutty U.S. Department of Agriculture (USDA) program that allows taxpayer-backed loans to literally be paid with peanuts shelled out \$74 million for a pile of peanuts so big the government couldn't even give them away.

To cut the largest cheese stockpile ever recorded, USDA purchased 11 million pounds of surplus cheese for \$20 million. If that doesn't smell bad enough, USDA spent another \$2 million to produce even more government cheese!

And with trust in government at its lowest level in the past half-century, nearly \$1.5 billion was spent on government public relations this year. Federal agencies could improve their standing with the public at no cost whatsoever by simply conducting themselves

efficiently and effectively. This includes Congress, which should be focused on how to save rather than spend money so we can pay off the debts of the past and offset the costs of the new administration’s agenda.

Just like the monsters in the Pokémon Go game that took America by storm this past year, government boondoggles come in all shapes and sizes and pop up just about everywhere.

“Wastebook PORKémon Go” provides an index of just some of the questionable expenditures lurking throughout the federal budget that collectively cost taxpayers more than \$5 billion.

Gotta catch them all!



## Spaceport to Nowhere

**\$80.4 million**

**Alaska**

**Department of Defense**

A rarely used rocket launch facility in Alaska that was constructed as part of an illegal kickback scheme between midlevel Department of Defense (DOD) employees and contractors,<sup>2</sup> is being kept in business by a “sole source” contract awarded by the Missile Defense Agency (MDA) that “could total up to \$80.4 million.”<sup>3</sup>

The MDA will not even be using the existing launch structure at the site, which was created 20 years ago with an \$18 million congressional earmark slipped into a bill to fund the nation’s military at the last minute over the objections of Pentagon officials.<sup>4</sup>

While the construction of the original launch site was paid for by DOD, it was deeded to the state upon completion.<sup>5</sup> The launch range, known as the Pacific Spaceport Complex-Alaska (PSCA), is operated by the Alaska Aerospace Corporation (AAC), a state agency previously known as the Alaska Aerospace Development Corporation (AADC).<sup>6 7</sup>

MDA “won’t use the structure that’s there now,” according to Craig Campbell, the CEO of the AAC,<sup>8</sup> “because it needs facilities that are very different from what’s there now.”<sup>9</sup> MDA, therefore, will “bring their own launch equipment to the complex”<sup>10</sup> and “plans to build a new launch structure on the grounds of the complex” next to the existing launch pad.<sup>11</sup>

Located on Kodiak Island,<sup>12</sup> the PSCA had previously been called the Kodiak Launch Complex (KLC). It was renamed in 2015 to reflect what the agency says is a “broader aerospace commitment to the Pacific region” that is “beyond the fixed location in Kodiak.”<sup>13</sup>

Noting the PSCA “is actually not anywhere near the Pacific Ocean,” local critics contend the name change “is simply a PR ploy”<sup>14</sup> to obscure the facility’s long sordid history of waste and corruption and short list of successful launches. A Web blog derides the newly renamed “spaceport” as “space pork” since it is a congressional pork project.<sup>15</sup> Opponents have also questioned the safety and environmental impact of the launch site as well as “the corporation’s lack of clear vision or business plan.”<sup>16</sup>

There has been only one launch from the site in the last five years, and that was a disastrous failure.<sup>17</sup> On August 25, 2014, a rocket went off course and had to be “blown to bits by flight controllers” just four seconds into flight.<sup>18</sup> The explosion caused “serious damage” to “several key buildings” and the launch tower.<sup>19</sup> The site has sat unused ever since.<sup>20</sup> A similar failure occurred in 2001 when another military rocket blew up less than a minute after take-off.<sup>21</sup>

With only 17 launches from Kodiak since 1998, the site manages to remain open the same way it started—government subsidies.<sup>22</sup>



*The Alaska “Spaceport,” derided as “Space Pork” and a monument to government waste and corruption, has stood idle for two years since its last rocket launch, which exploded just four seconds after take-off.*

AADC was established as an independent state agency in 1991<sup>23</sup> to foster “space-related economic development” in Alaska, “but the customers never turned up.”<sup>24</sup> DOD objected to funding requests from the state, because “the military already had rocket launching sites around the globe.”<sup>25</sup> Air Force General Lester L. Lyles, who ran the missile defense program at the time, “had no intention of spending money on another one.”<sup>26</sup> The Air Force made it very clear it did not want to fund the project “due to higher priority requirements and limited budgets.”<sup>27</sup>

But then an illegal scheme orchestrated by DOD employees and defense contractors was launched to hoodwink Congress into forcing the Pentagon to build the site.<sup>28</sup>

Michael Cantrell, an engineer at the Army Space and Missile Defense Command headquarters in Huntsville, Alabama and his deputy Doug Ennis, used their positions “to turn

America's missile defense programs into a personal cash machine."<sup>29</sup> The two midlevel employees eventually pleaded guilty to collecting \$1.6 million in kickbacks for steering \$350 million to contractors for projects that the Pentagon did not want, including the Kodiak Launch Complex.<sup>30</sup>

"The lobbyists are getting their fees, and the contractors and lobbyists are writing out campaign checks to the politicians. Everybody is making money here — except us," observed Cantrell, who wanted a cut.<sup>31</sup>

So Cantrell and Ennis set up a system to do just that. For six years, the two of them successfully manipulated Congress to force the Pentagon to fund unnecessary parochial projects. In return, they received personal checks from contractors and once even picked-up a briefcase stuffed with \$75,000.<sup>32</sup> When one of his supervisors tried "to kill our programs," Cantrell admits he would get a member of Congress "to whack him."<sup>33</sup>

Cantrell and Ennis viewed the Kodiak launch site as an "ambitious project that would all but guarantee sustained financing."<sup>34</sup> Cantrell reveals the AADC's attorney at the time was a lobbyist who happened to be the brother-in-law of Alaska's senior senator, who was the chairman of the Senate Appropriations Committee which controls the budget of the Pentagon. He was used "to work" in the senator's office.<sup>35</sup>

Whatever internal resistance to the launch site he encountered at DOD, Cantrell passed along to the office of the Alaska senator. The senator then "chewed out Pentagon officials who opposed" the project, which made them back down.<sup>36</sup> "I got hammered pretty hard," recalls Rear Admiral Richard West, who was against the project when he served as deputy director of the Pentagon missile defense program.<sup>37</sup>

"I was opposed to using missile defense money for the Kodiak facility only because we already had our launch facilities that we were using for missile testing," explains West.<sup>38</sup> "Congress has the right to put money into programs that they think are important to the nation," West says, but "in this particular case, we didn't think we needed that facility and could use the money for something else."<sup>39</sup> He points out, "we were using White Sands and Kwajalein (launch facilities), which were already developed and paid-for launch facilities that were sufficient for our testing."<sup>40</sup>

The \$18 million earmark that paid for the initial construction was airdropped into a defense appropriations bill during a House-Senate conference in 1996.<sup>41</sup> The Alaska media reported that the state's senior senator "not only pulled, but pushed, strong-arming Missile Defense commanders on behalf of," the AADC.<sup>42</sup>

"I went up there to get the money," Cantrell explains referring to his dealings with Congress, "and we got what we needed."<sup>43</sup> He says "there was so little oversight that no one

noticed.”<sup>44</sup> But eventually the scheme was noticed and both Cantrell and Ennis were sentenced to prison and ordered to pay restitution.<sup>45</sup>

Cantrell “acknowledges his crime but he ticks off the failings of the system that he exploited: lawmakers who are eager to please contractors and campaign donors; unwillingness by the Army to push back against members of Congress whose agendas were at odds with those of the military; and little scrutiny.”<sup>46</sup>

Cantrell confesses building the Kodiak launch facility was wasteful. “It doesn’t make sense,” he says, “the economics of it, they just don’t work.”<sup>47</sup> He concedes “we just paid for meaningless work.”<sup>48</sup>

Similarly, the AAC’s CEO admits it was “a mistake” to “focus on launching small rockets” because “the corporation was not intended to be a Kodiak Launch Complex. The mission was to focus on aerospace development and work with the university system.”<sup>49</sup>

The cost of those realities became very clear to both federal and state officials who moved to end financial support for the facility once the entrenched forces that had long protected funding for the launch site were thrown into jail or out of office.

After the defeat of the powerful Alaska senator who championed funding for the site in 2008, the MDA did not renew its contract to use the KLC in 2010.<sup>50</sup> The MDA decided instead to launch test target missiles from Kwajalein in the Marshall Islands, Richard Lehner, the agency spokesman, explained at the time, “to make it more operationally realistic.”<sup>51</sup>

One of the first actions taken by newly sworn-in Governor Bill Walker in 2014 was to pull the plug on state funding for the site. The Alaska governor issued an administrative order to “immediately cease all discretionary spending” for the launch complex along with five other billion dollar budget busting boondoggles, including one of the state’s infamous bridges to nowhere, in December 2014.<sup>52</sup>

The AAC has received about \$50 million from the state since its creation in 1992,<sup>53</sup> and the MDA had been its “most valuable customer.”<sup>54</sup>

The governor began pushing for privatization of the AAC, but “there has been no private sector interest in buying the corporation and the launch complex.”<sup>55</sup> In fact, Campbell says “if the state put the facility up for sale, as some have suggested, it would probably be disappointed in the response.”<sup>56</sup>

Even still, repairs began to be slowly made to the damaged launch site. Regardless of the governor’s decree, \$23 million was spent for repairs to the site paid for by a state insurance policy.<sup>57</sup> The AAC was quick to announce that despite the governor’s order, the KLC facilities

damaged by the failed launch were being rebuilt with insurance funds, which are “not part of the state discretionary capital projects budget.”<sup>58</sup>

Campbell says there was “no rush” to repair the buildings damaged by the explosion of the failed 2014 rocket launch “because no other launches are pending.”<sup>59</sup>

MDA threw the AAC a life-line that will keep the site in business until at least 2022.<sup>60</sup> The six-year contract has helped attract at least one other potential customer. Vector Space Systems plans to launch micro satellites “on the other side of the complex from where preparations for upcoming Missile Defense Agency launches are taking place.”<sup>61</sup> Campbell says “that kind of explains why we’re building the gravel pads a couple hundred yards away from that launch site.”<sup>62</sup>

As part of the MDA contract, AAC will provide support for “two flight tests” and “site preparation” for two Terminal High Altitude Area Defense (THAAD) anti-missile launch pads<sup>63</sup> that are being set up “near existing launch facilities.”<sup>64</sup> It will also cover “range support services,”<sup>65</sup> such as “infrastructure development, including a gravel road.”<sup>66</sup>

Why DOD would build a new launch site on Kodiak Island is difficult to understand since the Pentagon already has an 800-acre base in Alaska that has missile defense as its “sole purpose.”<sup>67</sup> Fort Greely has been called “America’s last line of defense” against a possible Intercontinental Ballistic Missile launched from North Korea or Iran.<sup>68</sup> Rick Lehner, an MDA official, previously “insisted” the missile interceptors at Fort Greely “would be able to protect the entire country from a missile attack.”<sup>69</sup>

Alaska is also home to Poker Flat Research Range, “the largest land-based rocket research range in the world,”<sup>70</sup> which was built “solely to support the launch” of rockets for the DOD.<sup>71</sup>

Outside of Alaska, THAAD launchers are currently set up at Fort Bliss, Texas, and in Guam.<sup>72</sup> While the THAAD system is different than the mid-course missile interceptors at Fort Greely,<sup>73</sup> these bases are already equipped with THAAD launchers.<sup>74</sup>

The Pentagon could have selected any one of these or other existing sites for the project rather than steering it to AAC.

The millions spent to date on this launch complex have not made America safer from potential missile attacks from foreign adversaries. To the contrary, it has siphoned away tens of millions of dollars that could have been better spent on more promising initiatives.

The no-bid contract for the use of PSCA<sup>75</sup> appears to be just the latest shady sweet heart deal to prop up this monument to waste and corruption that should have been shot down long ago.

## **Hologram Comedy Club Laughing All The Way To The Bank**

**\$1.7 million**

**New York**

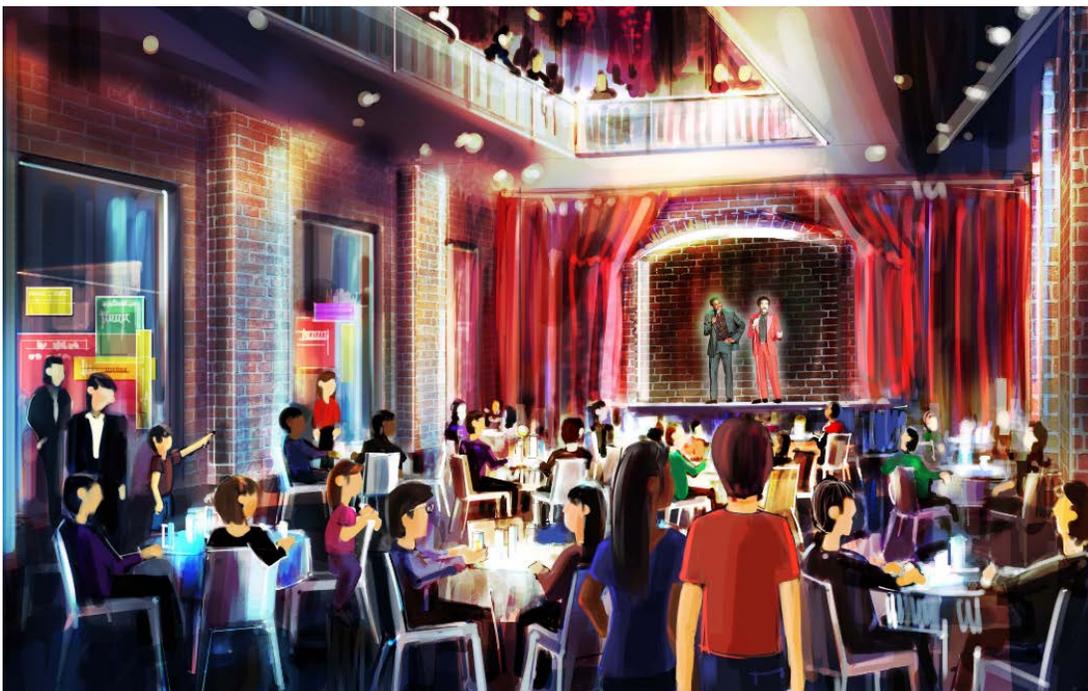
**Department of Commerce**

The National Comedy Center is laughing all the way to the bank.

The non-profit received a \$1.7 million grant from the U.S Department of Commerce's Economic Development Administration<sup>76</sup> to help construct a comedy museum in Jamestown, New York that will "resurrect" dead comedians as holograms.<sup>77</sup> A hologram is a three-dimensional illusion, in this case of a human likeness, formed by light beams from a laser.

"The award will be used to fund new attractions and the related construction during the expansion process at the National Comedy Center," according to the grant announcement issued by the area's congressman.<sup>78</sup>

"The National Comedy Center will take guests on a high tech experiential journey that will at once be unique, educational and fun," says Chairman of the Board Tom Benson. The center's "hologram comedy club will transport guests back in time as a part of this journey which will allow them to experience and enjoy classic performances as if they were seeing them live. This is a perfect example of what the National Comedy Center is all about."<sup>79</sup>



*An artistic rendition of the hologram comedy club at the National Comedy Center.*

“Through this award, the Federal government has sent a clear signal that it recognizes and endorses the National Comedy Center as a world class attraction,” says Benson.<sup>80</sup>

Jamestown is currently home to the Lucy and Desi Museum & Center for Comedy, which is less than a block from the site of the National Comedy Center.<sup>81</sup> Comedian Lucille Ball was born in nearby Celoron and grew up in Jamestown.<sup>82</sup> Opened in 1996, the museum includes sets, props, displays, costumes, recordings, and other memorabilia associated with the life and performances of the iconic comedians.<sup>83</sup>

While the new comedy museum “would probably have an ‘I Love Lucy’ component,” Benson “emphasized that the center itself had a broader mission of celebrating comedy.”<sup>84</sup>

Kliph Nesteroff, the chief curator, says “the main gimmick to bring people to Jamestown— which you may imagine is not an easy thing to convince people to do— are the holograms of comedians.”<sup>85</sup>

“We think it’ll be an important experience to feel what it would’ve been like to sit in the audience at these iconic performances,” explains the center’s executive director Journey Gunderson.<sup>86</sup> To do that, the holograms will “grace the stage throughout the day in a classic comedy club environment so that audiences can have a lifelike experience with these acts that no archival film clip can give.”<sup>87</sup>

The hologram stand-up shows will be held in the Blue Room in the basement, “which will be adults-only,” says Nesteroff. “You’ll get a real taste of subversive comedy: your Richard Pryors, your Lenny Bruces, your George Carlins doing dirty-words-you-can’t-say-on-television-type stuff.



The Blue Room will give people a chance to see the stuff that maybe they don’t want their kid to see, and still honor comedy by not sanitizing it. There will be a bar, there will be shows down there, and the hologram.”<sup>88</sup>

A hologram of Lucille Ball performing the Vitameatavegamin scene from the television show “I Love Lucy” is “the first-ever

*Lucille Ball, appearing here with the chairman of the National Comedy Center, is the first comedian to be resurrected as a hologram.*

comedy-based hologram” developed by the National Comedy Center with Hologram USA and Dream No More Studios.<sup>89</sup>

The identities of the other holograms to be featured have not yet been revealed.<sup>90</sup> The center is in discussions with the estates of a number of late comedians, including Richard Pryor, about creating holograms.<sup>91</sup>

Existing audio recordings will be used to create the sets and the performers’ outfits will be developed with the families.<sup>92</sup> Product placement by brands may also be incorporated. “If a sponsor wants to work with us to integrate a product into the show, and they are critical to drive the economics of this, then we will incorporate a sponsor-based design. But mostly we will base the outfit on original clothing,” says Alki David, CEO of Hologram USA, the company creating the holograms for the National Comedy Center.<sup>93</sup>

Current comedians may also take the stage in laser light form, including live performances beamed from other locations by Hologram USA’s “telepresence” capabilities.<sup>94</sup> “We are working on a special that will include all of the comedy greats, and it’ll also include several living legends as well,” promises David.<sup>95</sup>

Hologram USA “hopes to offer a pay-per-view program” of the holograms “for those unable to make it to the shows in Jamestown,” according to David.<sup>96</sup>

In addition to the hologram comics, the museum is planning to include a comedy “boot camp” on how to deliver jokes and “perhaps a heckle booth for the brave who, after being given jokes, think they could resist being thrown off their stand-up game.”<sup>97</sup>

The fear of being heckled for spending tax dollars on a high-tech comedy center has not dissuaded local officials from lobbying federal agencies for more financial support for the facility.

The area’s congressman is pledging to “continue to advocate for the resources that this site needs to be completed.”<sup>98</sup>

The state’s senior senator said he “will be fighting tooth and nail” to “secure approximately \$3 million in federal funds to aid the construction of the National Comedy Center.”<sup>99</sup> In a letter to the Secretary of Commerce urging financial support for the project, the senator writes, “with funding, the National Comedy Center will begin the fourth phase of their ambitious construction project. This phase will utilize both new and existing infrastructure to create a unique comedy destination. The enhancements in this phase will be centered around the design and creation of fixtures which will facilitate live comedy acts, digital projection, and other state-of-the-art inclusions that promise to make this a one-of-a-kind destination. I applaud the National Comedy Center for their foresight and sincerely hope the application meets with your approval.”<sup>100</sup>



*The National Comedy Center is still under construction in Jamestown, New York.*

These grants may not be the last laugh the National Comedy Center has on taxpayers. Benson is hoping to syndicate federal New Market Tax Credit allocations for the National Comedy Center “in 2016 and/or 2017 that would provide up to \$3 million of net equity for the project.”<sup>101</sup>

The Comedy Center is “based around” the Jamestown Gateway Train Station,<sup>102</sup> which has also been the destination of millions of dollars from multiple federal departments. The train station has received \$12 million in federal spending in recent years including funds from the Federal Transit Administration and the Department of Housing and Urban Development Community Development Block Grant program.<sup>103</sup>

In addition to this federal aid, the National Comedy Center has received more than \$3.5 million from the state of New York.<sup>104</sup>

The opening of the museum was originally scheduled for August 2016,<sup>105</sup> but has been delayed until 2017 or 2018.<sup>106</sup>

Spending millions for a comedy center with holograms of stand-up comedians makes Washington yet again the punchline, and that’s no laughing matter for taxpayers.

## **Paid With Peanuts**

**\$74 million**

**Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Texas, Virginia**  
**U.S. Department of Agriculture**

A nutty government program allows federal farm loans to literally be repaid with peanuts.<sup>107</sup>

Rather than making payments with cash, peanuts can be forfeited to the U.S. Department of Agriculture (USDA) as collateral to fulfill farmers' financial obligations for marketing loans. When payment is made with peanuts, the producer keeps the original loan value while USDA's Commodity Credit Corporation (CCC) "takes ownership of the crop."<sup>108</sup>

The USDA peanut payback program cost taxpayers \$74 million this last year.<sup>109</sup>

Because the government pays a rate greater than the market price for the peanuts,<sup>110</sup> the crop has become a "safety net" for many agricultural operations.<sup>111</sup> The Marketing Assistance Loan rate for peanuts is \$355 per ton or equivalently, 17.75 cents per pound.<sup>112</sup>



*Peanuts being stored in a warehouse.*

As set up, peanut farmers can game the system to guarantee they are not working for peanuts. The non-partisan Congressional Research Service (CRS) explains, "if a farmer puts their crop under a marketing loan, then they receive loan proceeds equal roughly to the

quantity of peanuts placed under loan times the loan rate. Farmers then closely watch the relationship between market prices and the loan rate. In the case of peanuts, USDA estimates and announces a weekly national posted price to be used in determining the marketing loan repayment rate and other benefits. Prior to loan maturity, a farmer may repay the loan principal and interest if the posted price is at or above the loan rate. As a result, the loan provides interim financing, allowing the farmer to receive cash as soon as the crop is harvested and avoiding sale of the crop during harvest when prices tend to be at their seasonal low. The program essentially provides a price floor for producers because the government will take ownership of the loan collateral (i.e., the pledged crop) if prices drop below the statutory loan rate.”<sup>113</sup>

The payouts provide “significant incentives” to plant more peanuts, which drives up costs to taxpayers and government holdings of peanuts.<sup>114</sup> The federal government had about 383 million pounds of surplus peanuts piled up in storage at the beginning of this year.<sup>115</sup>

While some of the CCC-owned peanuts are used for domestic nutrition programs,<sup>116</sup> more peanuts are being grown than the U.S. can consume. Peanut butter is already in the pantry in 94 percent of U.S. homes.<sup>117</sup> Bob Parker, President and Chief Executive Officer of the National Peanut Board, asks “how do you improve on that?”<sup>118</sup> Furthermore, a sell-off of the government-held peanuts domestically could depress the market price. This, in turn, would increase the amount forfeited by farmers to USDA.

Trying to unload the surplus for a seemingly noble purpose, USDA announced plans to send 500 metric tons of the peanuts to Haiti to feed nearly 140,000 school kids.<sup>119</sup>



*USAID distanced itself from the unloading of surplus peanuts in Haiti by USDA.*

Haitian farmers and some humanitarian organizations protested the move, claiming the “agricultural surplus aid and heavily subsidized food imports do more harm than good by undercutting local farmers and pushing

the hemisphere’s poorest nation farther from self-sufficiency.”<sup>120</sup> Haitian peanut farmer Francois Merilus, who plows his fields by oxen and cannot afford pesticides or chemical fertilizers, worries “foreign peanuts can only make things harder for us.”<sup>121</sup> The move caused an intergovernmental rift between USDA and the U.S. Agency for International Development (USAID) that went public. In a tweet, USAID made clear it “is not involved in importing peanuts. We are supporting #haitian farmers to boost their production!”<sup>122</sup>

Fortunately, large purchases by China and Vietnam this year dramatically reduced the supply of surplus peanuts.<sup>123</sup> These record exports along with an increase in domestic usage temporarily brought down the surplus supply and the peanut program's costs, which are expected to increase again.<sup>124</sup>

The CRS analysis cautions, however, "if future U.S. peanut supplies are large enough to depress prices for successive years, a large amount of peanuts could go under loan and forfeitures could accumulate. In a severely depressed market, USDA might have difficulty finding a buyer without offering a deep discount, which would result in large net outlays for the government. USDA could wait for a price recovery, but doing so would result in additional storage charges. Sufficient storage capacity might also be an issue if stocks increase substantially."<sup>125</sup> If this does occur, storage costs for the excess peanuts could cost \$1 billion a year by the USDA's own calculations.<sup>126</sup>

In addition to these peanut payouts, USDA separately awarded a \$50,000 Value-Added Producer grant "to market and process" chocolate covered peanuts and "other peanut products."<sup>127</sup>

In a nutshell, subsidizing surplus supplies of peanuts is just plain nuts and makes taxpayers salty.



*Taxpayers shelled out \$74 million and got peanuts in return.*

## **Fish On A Treadmill**

**\$1.5 million**

**California**

**National Science Foundation**

A fish needs a treadmill like a fish needs a bicycle. But if a fish finds itself on a treadmill, what it really does need is an abundance of oxygen— to both exercise longer and recover faster.

That was the finding of a study measuring the endurance of mudskipper fish (*Periophthalmus modestus*) on a treadmill. The experiment was conducted at the University of California-San Diego Scripps Institution of Oceanography with funding from a \$560,000 stimulus grant from the National Science Foundation (NSF).<sup>128</sup>

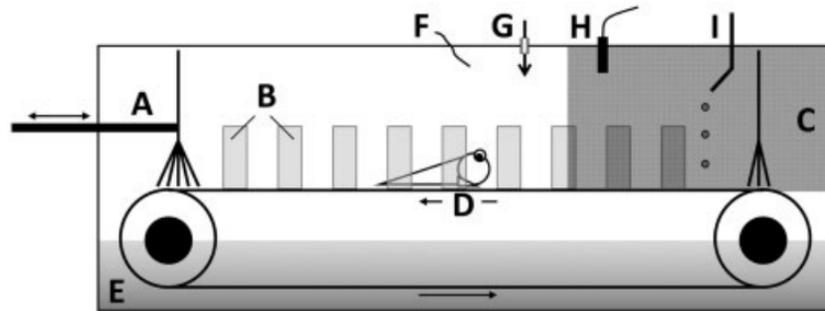


*Overhead view of a fish on treadmill, funded with a National Science Foundation grant.*

How does a fish even use a treadmill? Mudskippers possess remarkable abilities both to live out of water for long periods of time and use their fins like legs.

In this study, mudskippers were placed on a miniature “terrestrial treadmill enclosed in an atmospheric chamber.” The fish were given one minute “to acclimate to the treadmill environment,” the

treadmill was set to a speed of 5.5 centimeters per second, or about 2 inches per second.<sup>129</sup> <sup>130</sup> The mudskippers were then “encouraged to ‘skip’ and ‘crutch’ forward by shading the front of the treadmill with black plastic (to simulate a refuge) and by prodding them with a plastic-bristled brush from behind.”<sup>131</sup> The treadmill “was kept moist by a drip tube in the roof of the enclosure.”<sup>132</sup>



**Fig. 1** Enclosed terrestrial treadmill used to exercise mudskippers. (A) Moveable plastic bristle brush used to prod mudskippers forward, (B) vertical bars painted on the side of the enclosure to help mudskippers visually maintain their position on the treadmill, (C) shaded “refuge” created by black plastic, (D) tread surface (arrows indicate direction of tread rotation), (E) warm water reservoir at 25°C, (F) thermocouple to monitor atmospheric temperature, (G) gas input valve to adjust atmospheric concentration of oxygen, (H) Clark-type electrode used to monitor atmospheric concentration of oxygen, (I) drip tube to keep tread moist.

*Diagram of a mudskipper fish on a treadmill.*<sup>133</sup>

The mudskippers “were exercised to exhaustion, defined by when a fish would fall against the brush at the back of the treadmill and no longer respond to prodding, or for a maximum of 15 min. Each fish was exercised three or more times at each oxygen concentration in random order to determine mean individual endurance under each condition.”<sup>134</sup> The fish were given at least 48 hours to recover “between trials.”<sup>135</sup>

The study found mudskippers “can exercise longer and recover quicker under higher oxygen concentrations.” The researchers say these findings “support the hypothesis that the rise in atmospheric oxygen” hundreds of millions of years ago hastened the emergence of animal life from water onto land.<sup>136</sup>

While mudskippers may provide able test subjects for such studies, exercising on a treadmill for most fish is literally like being a fish out of water. But another project funded with a \$650,000 NSF grant is “placing bluegill fish in tanks of water with treadmill-like swim tunnels to observe how they swim under various conditions. The scientists will ultimately collect about 100 fish from different environments for various analyses.”<sup>137</sup>

The NSF funds will be spent to purchase what one of the researcher jokingly refers to as “all the toys” as well as travel costs for junkets to conferences.<sup>138</sup>

This study is testing the hypothesis that the “body shape and physiology” of a bluegill sunfish adapts to where it lives and to “answer other questions.”<sup>139</sup> One of those questions is what maneuvers do bluegill sunfish perform to escape a predator in still-water versus flowing-water.<sup>140</sup> The researchers promise the experiments “will provide unprecedented insight into the complex interrelationships of body form, swimming and feeding performance and fitness in fish.”<sup>141</sup> The project is being funded into 2018.<sup>142</sup>



*The fish were paced at two inches per second on a treadmill for 15 minutes.*<sup>143</sup>

Another ongoing study funded with a \$273,000 NSF grant is testing if low levels of oxygen and pH affect the performance of juvenile rockfish “in flow tanks with progressively faster currents—a fish treadmill—as well as their ability to detect predators and exhibit escape behaviors.”<sup>144</sup> <sup>145</sup> The researchers say this experiment “will be used as a model for other marine organisms.”<sup>146</sup> In other words, since there are more fish in the sea, there will be more fish on treadmills.

## **GREEK 101: Intro To Frat Life**

**\$5 million**

**Rhode Island**

**National Institutes of Health**

Fraternities and sororities like to party, especially on the day of a big sporting event.

This is among the findings of numerous studies funded as part of a \$5 million grant provided by the National Institute on Alcohol Abuse and Alcoholism at the National Institutes of Health (NIH) to a Brown University researcher.<sup>147</sup>

Nearly all of the studies' conclusions are fairly obvious, even to those with whom frat life is totally Greek.

Perhaps the only surprise finding is that fraternity brothers and sorority sisters are even "more likely to report consuming alcohol" after participating in an alcohol abuse intervention.<sup>148</sup>



*More than 500 different drinking games are popular on college campuses," according to taxpayer-funded research which found "all of these games have the same goal—causing participants to become intoxicated."*

“Extant alcohol interventions show limited efficacy in reducing consumption and problems among fraternity and sorority members,” concluded a meta-analysis of 21 interventions intended to reduce drinking that was funded by the grant and published this year in the journal *Health Psychology*.<sup>149</sup> More than 6,000 members of Greek letter organizations participated in the interventions studied between 1987 to 2014.<sup>150</sup> Several intervention components affected the “frequency of heavy drinking but not in the expected direction,” according to the researchers.<sup>151</sup> “Interventions that included moderation strategies, identification of high-risk drinking situations, and skills training were *less* successful than control conditions in reducing the frequency of heavy drinking among members of Greek letter organizations.”<sup>152</sup>

The researchers point out “drinking is integrated into Greek social functions (e.g., fraternity parties) as well as hazing and pledging rituals. Members of Greek letter organizations consume higher quantities of alcohol, report more frequent drinking, and experience more alcohol-related consequences relative to non-Greek peers.”<sup>153</sup>

Frat parties are also a bad influence on the drinking habits of guests. “Non-Greek affiliated students consume more alcohol at Greek functions than at other college events, supporting the view of the enabling function,” the researchers say.<sup>154</sup>

Some of the other findings from studies funded, in part, by the grant include:

- Members of fraternities and sororities drink more and smoke more than other college students. “Greek members engaged in more risky health behaviors (e.g., alcohol use, cigarette smoking, sexual partners, and sex under the influence of alcohol or drugs) than non-Greek members.”<sup>155</sup>



*College students drink more on the day of a big sporting event, like a March Madness championship game, according to government studies.*

- College students drink more on game days. More than 200 Syracuse University college students received course credit for keeping a Daily Drinking Dairy to record how many drinks each consumed “in a waking day” over a four week period during March Madness.<sup>156</sup> The “data document heavier drinking associated with high-profile athletic events.”<sup>157</sup> On a typical Saturday, nearly half of the students reported drinking, consuming an average of three beverages.<sup>158</sup> On the Saturday Syracuse played and won a semi-final game, however, almost 70

percent of the students recorded drinking.<sup>159</sup>

- The students averaged nearly six drinks each.<sup>160</sup> On a typical Monday, less than ten percent of the students recorded drinking and those who did said they didn't even finish an entire alcoholic beverage.<sup>161</sup> "On the day of the championship game (a Monday), more than 8 times as many students consumed alcohol than normally would."<sup>162</sup> About two-thirds of the students drank the Monday of the championship game, consuming about five beverages each.<sup>163</sup> Coincidentally, Syracuse won that national championship game, giving students all the more reason to celebrate.
- Members of fraternities and sororities sleep in later than other college students. Greek students reported nearly 8 hours of sleep a day whereas non-Greeks reported about 7 hours.<sup>164</sup> The authors propose "one explanation for this finding is that Greeks students recognize their sleep needs and make sleep hygiene a priority; alternatively, this somewhat atypical finding might be explained using anecdotal evidence suggests that many students 'sleep in' following alcohol and other drug use. Our data do not allow us to determine the accuracy of either interpretation."<sup>165</sup>



*Members of fraternities sleep in later than other college students. "One explanation for this finding is that Greeks students recognize their sleep needs," says a government funded researcher.*<sup>166</sup>

- College students don't always view the consequences of drinking negatively, but do look down on friends who become aggressive and annoying when intoxicated. NIH research previously found some college students actually view some consequences of drinking positively, including waking up in someone else's bed, having a hangover, being late to work or class, blacking out, vomiting, and even being arrested.<sup>167</sup> The researcher notes "no qualitative studies" have "examined the unappealing behaviors or actions displayed while drinking, that students perceive negatively, or that 'cross

the line' into being unacceptable."<sup>168</sup> As part of this grant, "students' opinions of when drinking 'crosses the line' from acceptable to unacceptable" were explored.<sup>169</sup>

- Both male and females found losing control and aggressive behavior as a result of drinking to be unattractive, whether it was being belligerent, making derogatory comments, starting a fight, or making unwelcome sexual advances. For example, students said they would lose respect for drunk friends who were out of control, which one female student described as "just being like sloppy or throwing up or just being like annoying, or like yeah just basically annoying." Other unacceptable behaviors identified by female students include "saying stupid things" or doing embarrassing things "like dancing on a table." Male students looked down on drunk friends "taking advantage of women," which one participant described as "not cool." Others said they would lose respect for friends "starting fights for no reason."<sup>170</sup>
- Nearly two-thirds of incoming college students have played drinking games. "We found that the most commonly endorsed motive to play drinking games was to get drunk," according to the researchers.<sup>171</sup> The study found "currently, more than 500 different drinking games are popular on college campuses. They involve verbal skills (eg, tongue twisters), physical ability (eg, beer pong), or group activities such as drinking whenever a certain phrase or word is mentioned in a song or television show. All of these games have the same goal—causing participants to become intoxicated."<sup>172</sup>

While many studies focus solely on fraternities, no interventions targeted specifically to sororities have been studied, the researchers note.<sup>173</sup>

Substance abuse is a very serious problem, especially among college students involved in Greek life, that deserves thoughtful attention. The studies highlighted here are not finding solutions to drinking-related problems, but simply retelling what is already widely known about Greek life. As they say at the frat house, "cool story, bro."



*NIH found that some college students view consequences of drinking positively, including being arrested, but lose respect for drunk friends who become sloppy or annoying by dancing on a table, for example.*

## **High Speed Train Going Nowhere Fast**

**\$3.1 billion**

**California**

**Federal Railroad Administration**

Six years have chugged by since the federal government awarded billions of dollars for California's high-speed passenger train but not a single track has been laid.

The "bullet train" promised to make the 520 mile trip from San Francisco to the Los Angeles area in less than three hours by traveling over 200 miles per hour.<sup>174 175</sup> But the only thing high-speed about this train is how quickly it is *chew chewing* taxpayer dollars.

With a price tag of nearly \$100 billion, this rail system is the single largest public works project currently underway in the U.S.<sup>176</sup>

Already billions of dollars over budget and years behind schedule, the only ones being taken for a ride by the train are taxpayers.

The original plan had a cost of \$64 billion with passenger service beginning by 2020.<sup>177</sup> That amount jumped to \$98 billion and the departure time for passengers was delayed an additional 13 years to 2033.<sup>178</sup>

The initial 118-mile track segment of rail structures was to be completed next year, but this year the Federal Railroad Administration extended the deadline to 2022.<sup>179</sup> As of May, the rail authority still had fewer than half of the parcels of land needed to construct the segment.<sup>180</sup>

In February, the rail authority redirected the first segment to head north to San Jose rather than south to the San Fernando Valley.<sup>181</sup> With the new end point in an empty lot near Bakersfield, the train is being ridiculed as "a high-priced train to nowhere."<sup>182</sup> *The Bakersfield Californian* editorialized, "the California High Speed Rail Authority's new plan to drop southbound passengers at a dusty rural junction 23 miles from Bakersfield is nuttier than a pistachio orchard— which, perhaps appropriately, is what that land was destined to become."<sup>183</sup>

The federal government is largely to blame for the project getting off track.

Federal funding for the bullet train comes from two separate grants: \$2.25 billion from the American Recovery and Reinvestment Act, or stimulus, awarded in January 2010 and another \$901 million federal grant provided in October 2010.<sup>184</sup>

A September 30, 2017 deadline was set for spending the stimulus money.<sup>185</sup> The Obama Administration demanded the first segment of the railroad be built in the Central Valley believing that the less-populated farmland was the most “shovel ready.”<sup>186</sup>



*Not a single track has been laid on the high-speed California bullet train six years after the federal government awarded billions of dollars for what is the largest ongoing public works project in the U.S.*

But construction began two years behind schedule because political, legal, logistical, environmental, and financial problems stopped the project in its tracks.<sup>187</sup> Lawsuits have hindered the acquisition of the 1,400 parcels the state is attempting “to purchase or seize through eminent domain.”<sup>188</sup>

These setbacks “have forced contractors to leave equipment idle, which is likely to result in multimillion-dollar claims of losses,” according to the *Los Angeles Times*.<sup>189</sup> “Construction experts are projecting the first 29 miles of construction alone could be as much as \$400 million over budget.”<sup>190</sup>

As of February, \$1.1 billion of the \$2.5 billion grant had been spent.<sup>191</sup> The rail authority “is accelerating its pace after a painfully slow start, with a half dozen construction crews now building overpasses, relocating utilities, and demolishing structures.”<sup>192</sup> No tracks, however, are being laid yet.<sup>193</sup>

Public and private support for the train is declining, increasing the need for more government support.

The train was sold to voters, who approved a \$9.95 billion bond referendum in 2008 to get the project started, with rosy projections and a stipulation that the system would operate without additional public subsidies.<sup>194 195</sup>

Today, fewer than half of California voters—44 percent—favor building the high-speed rail system, according to a Public Policy Institute of California survey taken in March.<sup>196</sup>

Despite the billions of dollars provided by the federal government, the rail system is struggling to attract capital and is \$43.5 billion short.<sup>197</sup> Private investors have shown little interest in the project.<sup>198</sup> Financial support from the state has also been lagging, in part because the federal government waived the requirement for the state to make an upfront dollar-for-dollar match.<sup>199</sup> The unusual agreement allows California to spend federal dollars first before putting up any of its own money.<sup>200</sup> Money raised from state greenhouse gas fees was expected to bring in \$150 million for the project this year, but only provided \$2.5 million.<sup>201</sup>

The Spanish construction firm Ferrovial, selected to build the train, cautioned on its winning bid application that “more than likely, the California high speed rail will require large government subsidies for years to come.”<sup>202</sup> The conclusion was based upon reviews of 111 high-speed train lines around the world.<sup>203</sup> The rail authority, however, tried to bury its tracks by deleting this warning when the proposal was posted online for the public.<sup>204</sup>

While the stimulus provided \$8 billion to support high speed rail projects in the U.S., California was the only state to get aboard this gravy train.<sup>205</sup> A similar high speed passenger train that had been planned in Florida never left the station precisely because Governor Rick Scott worried such a train would take taxpayers for a ride. In 2011, he rejected \$2.4 billion offered by the federal government for the project, explaining that it “would be far too costly to taxpayers and I believe the risk far outweighs the benefits.”<sup>206</sup>

There is no way to get the bullet train back on track. Unless California derails it altogether, taxpayers in the state and across the country are going to be railroaded for years to come by this train wreck.

## **The Losers Fund**

**\$1.2 million**

**Nationwide**

**Federal Election Commission**

Martin O'Malley, the former governor of Maryland, failed to win even one percent of the vote in Iowa's Democratic Caucuses, but his campaign did win a bigger prize from taxpayers: A check for more than \$1 million.

In total, O'Malley collected \$1,088,929.29 for his failed presidential campaign from the presidential public funding program administered by the Federal Election Commission (FEC).<sup>207</sup> The money couldn't buy votes however.

On January 20, 2016, the FEC approved the bulk of the public funds for the O'Malley campaign.<sup>208</sup> Mere days later, the candidate dropped out of the race on February 1 after a dismal showing in the Iowa caucuses.<sup>209</sup>

The presidential campaign fund is an antiquated leftover from the scandal-plagued Watergate era. It was created to limit the influence of big money in presidential campaigns by enticing candidates to accept free money in exchange for limiting private donations and campaign spending.

A check-off on individual tax returns allows taxpayers to voluntarily direct \$3 of their federal tax bill to the fund.<sup>210</sup> While checking the box doesn't increase the amount collected by the IRS, it does reduce revenue available for other government missions—such as defense, medical research, education, or housing—to essentially provide welfare for politicians running for office. In 1976, nearly 28 percent of taxpayers checked the box to finance the fund.<sup>211</sup> Just six percent did so in 2013.<sup>212</sup>

From 1976 until 2008, most major party candidates participated in the program. While George W. Bush opted out of public financing during the 2000 primary campaign, Barack Obama became the first president elected since Richard Nixon to reject public funding in the general election. This allowed him to amass larger amounts of private donations and outspend his Republican opponent Senator John McCain, who participated in the program, four to one.<sup>213</sup>

In 2016, O'Malley was the only major party candidate in an exceptionally crowded field to accept public funding.<sup>214</sup>

Green Party candidate Jill Stein also took \$100,000 in public funding for her presidential campaign.<sup>215</sup> Stein ended up receiving just one percent of the more than 122 million votes cast for president in November.<sup>216</sup>

<b>Form 1040</b>		Department of the Treasury—Internal Revenue Service (99)	<b>2014</b>	OMB No. 1545-0074	IRS Use Only—Do not write or staple in this space.
For the year Jan. 1–Dec. 31, 2014, or other tax year beginning			, 2014, ending	, 20	See separate instructions.
Your first name and initial		Last name		Your social security number	
If a joint return, spouse's first name and initial		Last name		Spouse's social security number	
Home address (number and street). If you have a P.O. box, see instructions.				Apt. no.	<b>Presidential Election Campaign</b> Check here if you, or your spouse if filing jointly, want \$3 to go to this fund. Checking a box below will not change your tax or refund. <input type="checkbox"/> You <input type="checkbox"/> Spouse
City, town or post office, state, and ZIP code. If you have a foreign address, also complete spaces below (see instructions).					
Foreign country name		Foreign province/state/country		Foreign postal code	
<b>Filing Status</b>	1 <input type="checkbox"/> Single	2 <input type="checkbox"/> Married filing jointly (even if only one had income)		3 <input type="checkbox"/> Married filing separately. Enter spouse's SSN above and full name here. ▶	
Check only one box.	4 <input type="checkbox"/> Head of household (with qualifying person). (See instructions for the qualifying person is a child but not your dependent, enter this child's name here. ▶		5 <input type="checkbox"/> Qualifying widow(er) with dependent child		

Derided as welfare for politicians and the “loser’s fund,” this check off allows taxpayers to direct \$3 from their federal tax bills to presidential candidates with little very chance of winning.

According to the FEC, “to become eligible for matching funds, candidates must raise a threshold amount of \$100,000 by collecting \$5,000 in 20 different states. Although an individual may contribute up to \$2,700 to a primary candidate in the current election cycle, only a maximum of \$250 per individual is matched with funds from the Presidential Election Campaign Fund. Other requirements to be declared eligible include agreeing to an overall spending limit, abiding by spending limits in each state, using public funds only for legitimate campaign-related expenses, keeping financial records and permitting an audit of campaign financial activity.”<sup>217</sup>

Most modern candidates find the limits to be unrealistic to run a winning campaign. Even while deriding what he called the “corrupt campaign-finance system undermining American democracy,” Senator Bernie Sanders, who challenged Hillary Clinton for the Democratic Party nomination, called the public financing system “a disaster.” Sanders, an avowed Socialist, rejected the public funding, saying “nobody can become president based on that system.”<sup>218</sup>

In 2016, primary candidates were eligible for a maximum payment of \$24 million from the campaign fund, but had to agree to limit total expenditures to less than \$58 million.<sup>219</sup> The campaigns of Hillary Clinton, Sanders, Donald Trump, Ted Cruz, and Ben Carson all had budgets exceeding that cap.<sup>220</sup>

If a major party candidate chose to accept public funds in the general election in 2016, the total payment from FEC would have been \$96 million.<sup>221</sup>

While that is a large sum, it is not close to enough to compete in a national contest that now costs \$1 billion per candidate. In 2012, the campaigns of both Obama and Republican presidential nominee Mitt Romney spent more than \$1.1 billion.<sup>222</sup>

The system has “come to be derided as the ‘loser’s fund,’” notes Marilyn Thompson, a 2016 fellow at the Shorenstein Center on Media, Politics and Public Policy at the Harvard Kennedy School.<sup>223</sup> “No one wants to touch it,” she says.<sup>224</sup>

As a result, more than \$300 million lay dormant in the fund and that amount could increase to \$450 million before the next presidential election in 2020.<sup>225</sup>

Instead of providing pay outs for politicians, perhaps money from the check-off could go to paying off some of the \$20 trillion national debt.

## **Computers Try To Learn Human Behavior By Binge Watching “Desperate Housewives”**

**\$460,000**

**Massachusetts**

**National Science Foundation and Department of Defense**

“Desperate Housewives” and other television shows like “The Office” are being used by researchers attempting to train computers to understand and predict human behavior.<sup>226</sup>

“Desperate Housewives” is a fictitious comedy/drama about a group of self-centered, superficial, well-to-do women living on Wisteria Lane whose seemingly perfect lives are filled with devious schemes, indecent conduct, horrific tragedies, salacious secrets, and conniving cover-ups.

The computer couch potato project was conducted, in part, with funding from a \$460,000 grant from the National Science Foundation<sup>227</sup> and additional support from the Department of Defense’s Office of Naval Research.<sup>228</sup>

The researchers programmed the computer algorithm to watch and observe the visual data.<sup>229</sup> The computers then binge watched 600 hours of television shows and 400 hours of on-line videos.<sup>230</sup>



*Even after watching the marathon of television shows, the computer algorithm was still unable to accurately predict how humans would act when greeting one another in most scenarios.*

A different set of videos were then used to test the computers to determine if they could predict how people would greet one another—with a hug, kiss, hand shake, or a high five slap.<sup>231</sup> When people in the videos were one second away from performing one of the four actions, the algorithm guessed what action would occur.

The computer systems were unable to accurately predict how humans would interact in most of the scenes presented. The right action was selected by the computers just 43 percent of the time.

By comparison, human subjects correctly predicted the action 71 percent of the time, while existing algorithms scored an accuracy rate of 36 percent.<sup>232</sup>

In another test, the artificial intelligence attempted to anticipate what object would appear in a video five seconds later. “For example, seeing someone open a microwave might suggest the future presence of a coffee mug.” The algorithm only had “an average precision of 11 percent.”<sup>233</sup>

“While the algorithms aren’t yet accurate enough for practical applications,” the study’s lead author Carl Vondrick, says he is “excited to see how much better the algorithms get if we can feed them a lifetime’s worth of videos.”<sup>234</sup>

Improving the ability of artificial intelligence to better understand human actions certainly would have useful applications, but this effort did not dramatically improve the ability to predict human actions.

Perhaps a marathon of soap operas and sitcoms is not the best way to teach computers, robots, or any other form of intelligence—real or artificial—to understand human behavior.



*Researchers are attempting to train a computer system to understand human behavior with television shows like “Desperate Housewives.”*

## **NASA Gives French Wine Lovers Reason To Toast Global Warming**

**\$88,000**

**NASA**

**New York**

Lovers of French wine have reason to toast global warming.

Toastier temperatures are improving the quality and taste of wine produced in France, according to a study conducted by the National Aeronautics and Space Administration (NASA).<sup>235</sup> As temperatures in France rise—about 1.8 degrees Fahrenheit since pre-industrial times— the quality of wine is improving.<sup>236</sup>

“In recent years, French vintners have produced a number of exceptional vintages.”<sup>237</sup> The study’s co-author, ecologist Elizabeth Wolkovich of Harvard University, “says climate change is part of the reason why.”<sup>238</sup>

To reach these conclusions, hundreds of years of climate data and trends in harvest dates were “compared with shifts in wine quality in the Bordeaux and Burgundy regions of France based on the ratings of vintages during the past 100 years.”<sup>239</sup>

Much of the information was collected from French monasteries, which “weren’t just for prayer and contemplation. Monks tended large vineyards and kept meticulous records.”<sup>240</sup> In fact, the researchers located records going back to the 1300s.<sup>241</sup> “These are some of the longest human records we have where people are actually writing down data year after year,” says Wolkovich. “Originally, it was the church that was keeping track of these records... so our data goes back to 1300, but our analysis starts at 1600.”<sup>242</sup>

“Long-term grape harvest records and wine quality estimates demonstrate that warm temperatures have been a consistent driver of early harvests and higher-quality wines,” according to the study.<sup>243</sup>

The review found harvests began “dramatically earlier during the latter half of the 20th century.” NASA points out this “finding is important because higher-quality wines are typically associated with earlier harvest dates in cooler wine-growing regions, such as France and Switzerland. The best years for wine grape quality typically have warm summers with above-average rainfall early in the growing season and late-season drought.”<sup>244</sup>

But drought no longer may be necessary for producing better vintages.

“Thanks to climate change, grape growers don’t need drought to get these very warm temperatures,” says the study’s lead author Ben Cook, a scientist at NASA’s Goddard Institute for Space Studies.<sup>245</sup>

“The results indicate a fundamental shift in the role of drought and moisture as large-scale drivers of harvest time and wine quality,” according to NASA. “While warm temperatures have consistently led to earlier harvests and higher-quality wines, in recent decades the impact of drought has largely disappeared as a result of large-scale shifts in climate.”<sup>246</sup>

Wolkovich explains “hotter summers are usually higher-quality wines in France, and so we do actually have higher-quality wines on average with climate change.”<sup>247</sup> Harvest times for grapes are shifting “earlier across France about two weeks, so a really big change in when we harvest wine grapes,” according to Wolkovich.<sup>248</sup>



*Global warming is improving the quality of French wines, according to a study by NASA’s Institute for Space Studies.*

“From 1950 to 1999 the majority of the world’s highest quality wine-producing regions experienced growing season warming trends. Vintage quality ratings during this same time period increased significantly while year-to-year variation declined,” according to the research cited in the study.<sup>249</sup>

“At the heart of a good wine is climate,” Wolkovich says.<sup>250</sup> “You want to harvest when the grapes are perfectly ripe, when they’ve had enough time to accumulate just the right balance between acid and sugar,” she explains. “For much of France, there have been times when it’s difficult to get the exact harvest date growers want because the climate wasn’t warm enough that year... but climate change means the grapes are maturing faster.”<sup>251</sup>

These weather conditions are having an impact on winemaking beyond France. “Vintners around the globe are buying up land in places that used to be considered too cool for winegrowing,” reports National Public Radio.<sup>252</sup> “Places like Tasmania, even in Montana where people are starting to grow wine grapes, and the crop model suggests that those areas will become really good for growing wine,” says Lee Hannah, an ecologist with Conservation International.<sup>253</sup>

“Our results do not necessarily presage an inevitable future where wine quality is dominated by environmental changes. In reality, grape harvest date and wine quality depend on a number of factors beyond climate — including wine grape varieties, soils, vineyard management, and winemaker practices,” the researchers note.<sup>254</sup>

Wolkovich does caution, “there is a threshold we will probably cross in the future where higher temperatures will not produce higher quality” wine.<sup>255</sup>

The study cost approximately \$10,000 to conduct.<sup>256</sup>

This is not NASA’s first voyage exploring the world of winemaking.

NASA is partnering with the Virginia Wine Board to create digitized maps of 250 Virginia vineyards from a satellite to both gather more accurate information of the number of vineyards and provide vintners with suggestions on where to plant.<sup>257</sup>

In California, scientists from NASA teamed up with the Robert Mondavi Winery to use a sophisticated airborne sensor to identify the best grapes in Napa Valley for making wine.<sup>258</sup>

These vineyard monitoring projects were undertaken as part of the DEVELOP program with a total cost of \$78,040 over a three-year period.<sup>259</sup>

Even if these endeavors lead to the discovery of an out-of-this-world vintage, it is not likely to be served to astronauts aboard the International Space Station. NASA has a strict policy prohibiting the consumption of wine and other alcoholic beverages in space.

## **Seeing Red Makes Monkeys Randy**

**\$230,000**

**New York**

**National Institutes of Health**

The color red makes female monkeys go bananas for male monkeys. A study found female rhesus macaques spent more time checking out the hindquarters of male monkeys presented in front of a red colored background.<sup>260</sup>

The research was conducted with backing from the National Institutes of Health (NIH), including a \$230,000 grant from the National Institute on Drug Abuse (NIDA) and additional support from the National Center for Research Resources and the Office of Research Infrastructure Programs.<sup>261</sup>

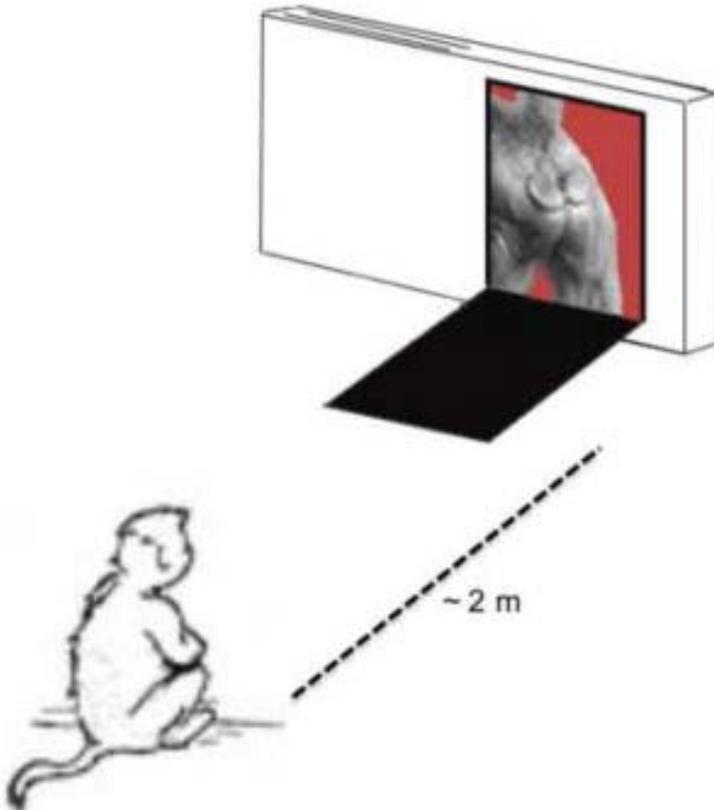
Wearing red has been demonstrated to make people more attractive to the opposite sex. Red's romantic allure is so powerful, in fact, that simply being in close proximity to the color increases one's sex appeal.<sup>262</sup>

This randy response to red could have a biological basis, some researchers theorize. "Is this just because every year on Valentine's Day we see these red things everywhere and it creates a link for us between the color red and romance, or is it really a fundamental thing rooted in our biology," asks Benjamin Y. Hayden, a coauthor of the NIH supported study.<sup>263</sup> Hayden pondered, "what if we could test this in someone who is not even human, but was exposed to a lot of the same evolutionary pressures? Well, that would be a monkey. So, we conducted experiments to see if monkeys would have similar biases as humans, and in a nutshell the answer is, yes, it seems like they do."<sup>264</sup>

To perform the test, a series of black and white photographs with red or blue backgrounds was presented to rhesus macaques at the Cayo Santiago field site in Puerto Rico.<sup>265</sup> The photos were of the hindquarters of same and opposite sex monkeys as well as seashells.<sup>266</sup> The researchers selected "a large seashell" as the comparison object because it is "organically shaped, like body parts" and also familiar to the monkeys "as there are many seashells on the beaches of the island" of Cayo Santiago. To select the shade of red used in the study, the cheeks of monkeys in more than 450 images were analyzed to calculate the average color.<sup>267</sup>

The pictures were displayed in a box made of white foamcore. The side facing the monkey would open and close to reveal the pictures inside, which were alternated. One researcher worked the box while another recorded the monkeys with a video camera.<sup>268</sup> The experiments involved 57 female and 54 male monkeys.<sup>269</sup>

**Apparatus**



*This sketch demonstrates how a test subject was presented a photograph of the hindquarters of another monkey against a red background.*

The amount of time the monkeys spent looking at a picture was used to determine interest.<sup>270</sup>

The researchers report, “we found that female monkeys looked longer at a picture of a male scrotum, but not a seashell, on a red background.”<sup>271</sup> While the female monkeys spent more time looking at the picture of the male monkey against the red background, the male monkeys showed no bias when presented with the same pictures.<sup>272</sup> Even with a red background, the male monkeys did not spend more time staring at pictures of the female hindquarters.<sup>273</sup>

Because female rhesus macaques seemed more interested at peeking at pictures of male monkeys with a red background, the researchers conclude “the extraneous color effect in humans is not unique.”<sup>274</sup>

Female monkeys find male monkeys with darker red faces more attractive, according to another NIH

supported study by some of the same researchers.<sup>275</sup> “Results show that dark red males received more sexual solicitations, by more females, than pale pink ones,” according to the study.<sup>276</sup>

In a twist, monkeys are more likely to steal food from someone wearing a green or blue shirt and less likely to take from someone dressed in red, found a study conducted by a different group of researchers who were also supported by NIH.<sup>277</sup>

Taxpayers have had enough of this monkey business which shouldn't be provided another red cent.

## **Carbon Capture Project Captures Nothing But Taxpayer Dollars**

**\$450 million**

**Texas**

**Department of Energy**

A clean energy project intended to capture man-made carbon dioxide (CO<sub>2</sub>) has been successful in capturing only one thing: taxpayer dollars. Not even the Department of Energy (DOE), which is funding the project, can escape the clutches of the boondoggle.

The Summit Power Group LLC's Texas Clean Energy Project (TCEP), located near Penwell, Texas, was expected to capture CO<sub>2</sub> emitted during the production of energy from coal, a process known as carbon capture and sequestration, or storage (CCS).<sup>278</sup> The compressed gas would then be used for "enhanced oil recovery," which pushes more crude out of the ground.<sup>279</sup> If successful, TCEP "would be one of the first global demonstrations of CO<sub>2</sub> capture from a coal plant" and the only one in the United States.<sup>280</sup>

The project, however, is six years behind schedule. It remains stuck in the first phase--the project definition phase when needs, costs, and schedules are determined.<sup>281</sup> This was supposed to be finalized in December 2010. As a result, no ground has been broken for the power plant<sup>282</sup> even though construction was to be completed in June 2014.<sup>283</sup>



*The 600-acre site for the Texas Clean Energy Project power plant, which was supposed to be completed in 2014, remains undeveloped.<sup>284</sup>*

The overall price tag has more than doubled from \$1.9 billion in 2010 to \$3.9 billion today.<sup>285</sup> DOE initially committed \$350 million for the project.<sup>286</sup> This amount includes \$216 million from the American Recovery and Reinvestment Act, or stimulus.<sup>287</sup> The Department has since increased its obligation to \$450 million.<sup>288</sup> When delays cost the project more than \$100 million of stimulus funds, which expired in September 2015, DOE made up for the loss with other funding.<sup>289</sup>

The delays and cost overruns prompted the DOE Office of Inspector General (OIG) to issue an unusual special report in April admonishing the department for its continued involvement in the project and recommending that DOE “take actions to protect taxpayer funds.”<sup>290</sup>

“Over the course of the Project, the Department has taken actions that increased its financial risk without assurances that the Project would succeed,” according to the OIG.<sup>291</sup> “In particular, the Department provided multiple extensions to the period of performance for the project definition phase, extending it by more than five years. Furthermore, the Department accelerated the use of Recovery Act funds and reduced Summit’s Project cost-share requirement to help it with liquidity needs, both of which put more taxpayer funds at risk if the Project does not move forward. The Department additionally shifted about \$90 million in Federal funds earmarked for detailed engineering activities in phase 2 to the project definition phase. These funds were used for additional expenses associated with the delays, such as legal and consultant fees incurred to renegotiate or extend existing agreements and to support ongoing financing efforts.”<sup>292</sup>

Efforts to reduce the cost of the project ended up increasing the costs. “More than \$32 million was spent by Summit to conduct an updated engineering study to identify ways to reconfigure the plant design in an effort to reduce the overall cost by up to a billion dollars,” according to the OIG.<sup>293</sup> “While this effort identified some savings, they were offset by the reconfiguration of the plant that resulted in an increase in the cost of the Project. Despite this result, the Department continued its support of the Project and allowed Summit to spend more than \$17 million in additional Federal funds for phase 1 activities.”<sup>294</sup>

When the department finally moved to pull its support for the project in July, the company invoked a federal regulation initiating an informal dispute resolution process that in effect halted DOE from stopping federal funding.<sup>295</sup>

Before the regulation was invoked, DOE was preparing to stop subsidizing the flailing project unless it received financial backing from private lenders and investors.<sup>296</sup> Instead, the department now says it will “continue to work with the company to figure out the best next steps.”<sup>297</sup> DOE says, “we have been working with the project as we understand how important it is to move this technology forward.”<sup>298</sup>

The discouraging—and costly—string of failures of TCEP and other carbon capture projects<sup>299</sup> along with the availability of cheap natural gas have diminished the promise of CCS. Overall, more than \$7 billion has been appropriated for CCS activities at DOE since Fiscal Year 2008, with nearly half of that funding, \$3.4 billion, provided by the stimulus.<sup>300</sup>

Despite these significant expenditures, “carbon capture would still add 30 to 40 percent to the cost of power generation from coal plants—a nonstarter if it’s to be competitive with inexpensive natural gas,” notes *MIT Technology Review*.<sup>301</sup> “Changing market conditions have strained that business model,” *Bloomberg* explains.<sup>302</sup> “The collapse in crude prices has diminished the value of carbon dioxide for enhanced oil recovery at the same time that gas has become cheaper than coal for power generation.”<sup>303</sup>

The OIG continues its audit but says the project’s failures and the changing energy market “raise serious doubts about the continuing viability of the Project” and “the Department’s continued involvement” with it.<sup>304</sup>

“The fact of the matter is,” Secretary of Energy Ernest Moniz admitted at a congressional hearing in March, “critical milestones are way overdue and are still not met.”<sup>305</sup> A bipartisan chorus in Congress, however, objected to a recommendation in the President’s Fiscal Year 2017 budget proposal to terminate the project.<sup>306</sup>

The 600-acre site for the TCEP power plant remains “undeveloped”<sup>307</sup> but continues to capture taxpayer money.

## **The Airport With No Long Lines. Ever.**

**\$200 million**

**Illinois**

**Federal Aviation Administration**

Long waits in security lines at airports around the country caused tens of thousands of airline passengers to miss flights this year. The delays were blamed on Transportation Security Administration (TSA) staffing shortages, tougher security standards, and a near-record number of travelers.<sup>308</sup> O'Hare International Airport in Chicago, Illinois, was derided as "Oh Wait" because getting through its long, winding lines could take as long as three hours.<sup>309</sup>

But not too far from O'Hare, another airport has been avoiding the frustration of long lines of passengers. For MidAmerica St. Louis Airport in Mascoutah, Illinois, the problem is just the opposite—not enough passengers to form a line long enough to fill a plane.

The airport has been the final destination for millions of dollars of federal funds even though it is home to just one airline which serves very few passengers. The airport even received a make-over this year. And despite the airport losing money every year, the director is still awarded big bonuses and is a frequent flyer himself.

The federal government paid for about two-thirds of the airport's \$313 million construction costs.<sup>310</sup> This year, the Federal Aviation Administration picked up the cost of 90 percent<sup>311</sup> of the \$835,000 renovation of the 53,400-square-foot terminal.<sup>312</sup> Improvements include upgrades to its announcement system and replacement of the entrance door.<sup>313 314</sup>

MidAmerica was planned to accommodate hundreds of flights every day, but has had difficulty attracting and keeping airlines.<sup>315</sup> Opened in 1997, the airport was mostly unused in its first two years. Pan America offered flights for 16 months to Gary, Indiana,<sup>316</sup> but abandoned the airport after 16 months due to "sluggish ticket sales."<sup>317</sup> Great Plains Airlines provided service from the airport for just three months before going bankrupt.<sup>318</sup> No airline offered flights from the airport for three years, until Allegiant Air began offering service again in 2012.<sup>319</sup>

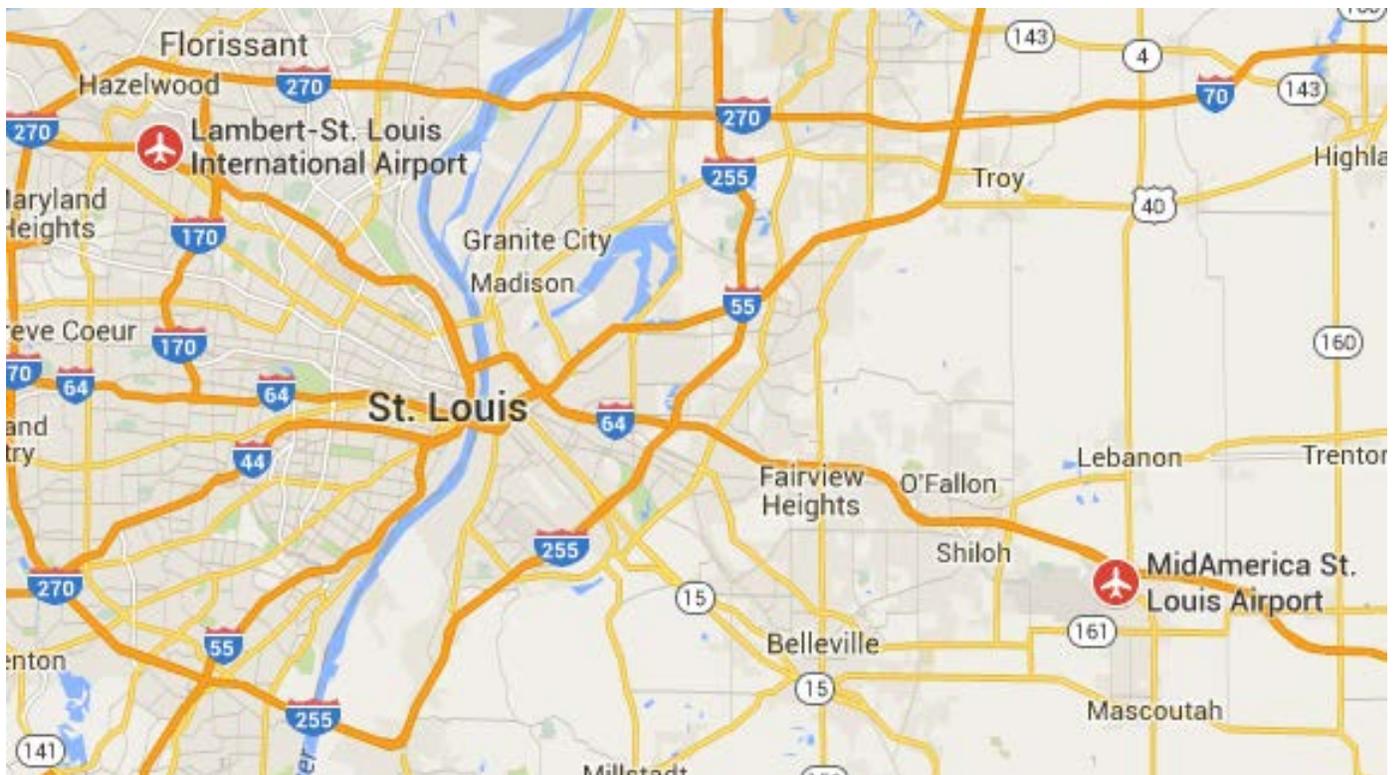


*There are never long lines at MidAmerica Airport.*

Today, Allegiant Air remains the only airline to provide service at MidAmerica, offering only 20 flights to six destinations each week.<sup>320</sup> There are no flights at all on some days, and the airport’s 10,000-foot runway remains unused most of the time.<sup>321</sup>

“No other traditional airline would get within a galaxy of serving the place,” points out Michael Boyd, an aviation consultant who advised against building MidAmerica.<sup>322</sup> Boyd says “it was a mistake to start with, and it’s a mistake today.”<sup>323</sup>

MidAmerica St. Louis Airport is less than 40 miles away from Lambert–St. Louis International Airport, which serves over 12.5 million passengers every year.<sup>324</sup> By comparison, a total of 31,458 passengers took flights from MidAmerica last year.<sup>325</sup>



*The little used MidAmerica St. Louis Airport is less than 40 miles away from Lambert–St. Louis International Airport.*<sup>326</sup>

Even with heavily discounted flights to popular get-a-ways like Las Vegas and Florida, planes are not filled. One-way flights to Destin-Fort Walton Beach out of MidAmerica Airport were being sold for only \$39.<sup>327</sup> Flights to Las Vegas started at \$49.<sup>328</sup> With flights out being 85 percent full on average for all routes, passengers don’t have to worry about being assigned the dreaded middle seat.<sup>329</sup>

Besides avoiding frustrating check-in lines, MidAmerica passengers have little problem finding parking. The airport boasts “one of our best features that we can offer our traveling

passengers is our FREE parking lot! The parking lot is located directly in front of the passenger terminal.”<sup>330</sup> The airport spent more than \$550,000 this year to add 277 new parking spaces, bringing the total number of spaces to 841.<sup>331</sup>

MidAmerica has never made a profit.<sup>332</sup> It lost \$12 million in 2014, according to a county audit.<sup>333</sup> That same year, the airport director, Tim Cantwell, was awarded a \$16,000 bonus on top of his regular pay.<sup>334</sup> Last year, he was paid a \$124,207 salary plus a \$20,458 bonus.<sup>335</sup>

Cantwell also charged \$64,000 for international junkets he took to Asia and Europe. He claims the trips were “to drum up business,” and estimated his four trips China trips brought in between \$15,000 and \$20,000.<sup>336</sup>

Although he originally supported the airport, St. Clair County Commissioner Ed Cockrell, now concedes it was a bad decision. “It’s not that public officials don’t make bad decisions. That happens every day,” he says. “We just have to step up and say we made a bad decision.”<sup>337</sup>

But Cantwell remains optimistic the turbulence will settle. “It takes time,” he explains. “Businesses have to grow. The commercial value is going to be so great here in the next 10 to 15 years.”<sup>338</sup>

While he waits for the mostly empty and deserted airport to take-off, other airports with long lines of passengers are being shortchanged federal funds that could help expedite security checks. Those funds are instead being rerouted to MidAmerica for renovations few will ever see.

## **Jaws Music Takes A Bite Out Of Sharks' Reputation**

**\$3 million**

**California**

**National Science Foundation**

Da nuh. Da nuh. DA NUH. DANADADANADANADANA!!!

Is the iconic theme music from the movie *Jaws* composed by John Williams that slowly builds using mostly just two notes<sup>339</sup> to blame for the bad reputation of sharks?

That is the conclusion of a study published in August funded, in part, from a \$3 million National Science Foundation grant.<sup>340</sup>

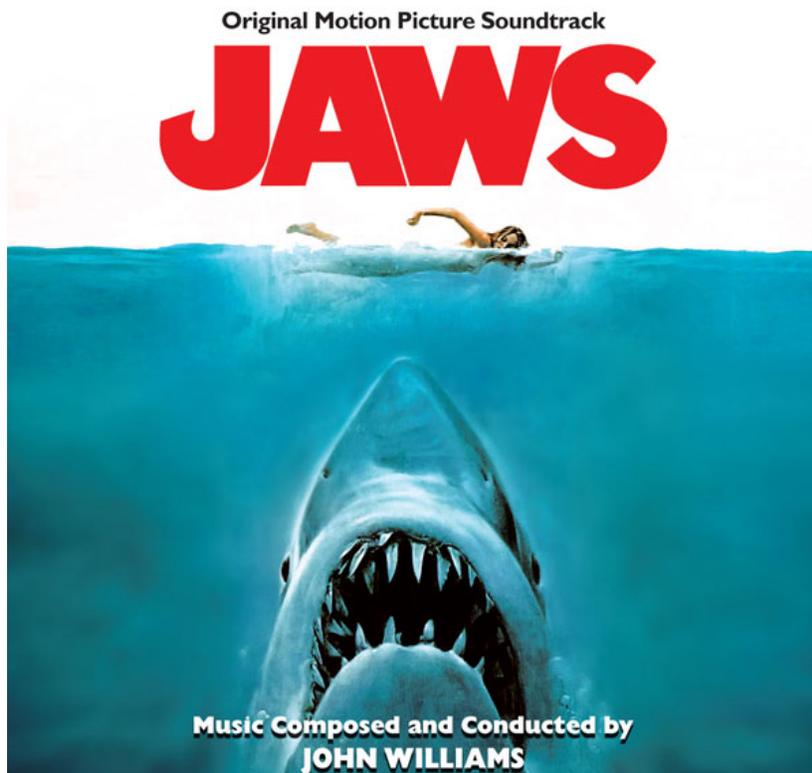
“In this paper, we consider a subtler, yet powerful source of fear that has heretofore been overlooked: the ominous background music (a la *Jaws*) that often accompanies shark footage in documentaries,” the authors of the study write. “In fact, many people trace their fear of sharks to the 1975 blockbuster *Jaws*, whose redolent soundtrack has become deeply rooted in popular culture.”<sup>341</sup>

The researchers point out the theme music for “*Jaws* epitomized the use of leitmotif, a short, recurring musical phrase that is continuously paired with a character such that eventually, the theme alone conjures up that character. Just as the leitmotif of the Wicked Witch of the West from *The Wizard of Oz* might evoke images of its cackling, green-skinned character, the ominously quickening motif that typifies the *Jaws* soundtrack may similarly evoke haunting images of surfacing dorsal fins, swimmers’ legs underwater, and the histrionic combination of blood and bubbles.”<sup>342</sup>

To test their hypothesis, a 60-second video of sharks that was either silent or set to ominous or uplifting music was shown to more than 2,000 viewers. The participants were then asked to rate how well six words described sharks. Three of the words were negative adjectives (scary, dangerous, and vicious) and three were positive (peaceful, beautiful, and graceful).<sup>343</sup>

Sharks were ranked “more negatively and less positively” by those who watched the video with the ominous background music than those who saw the same clip set to uplifting background music or to silence.<sup>344</sup>

Despite more than 40 years of frightened audiences to attest to the music’s impact, this study “is the first to demonstrate empirically that the soundtrack accompanying shark documentary footage can affect viewers’ perceptions of sharks,” according to the researchers.<sup>345</sup>



*The ominous soundtrack music accompanying videos of sharks is partially responsible for the underwater predators' bad reputation, according to a federally funded study.*

The *Jaws* theme was written intentionally and very effectively to create this intense sense of danger coming closer and closer.

The infamous music and fear of sharks have done little to scare away beach or movie goers. With total ticket sales exceeding \$1.5 billion, the movie is considered the “very first summer blockbuster” and continues to lure viewers.<sup>346</sup> The franchise has spawned three sequels and inspired other shark-related films and a fascination with the animals that continues to this day. “On the one hand, the movie did damage to sharks, because people saw them as monsters,” acknowledges

Robert Hueter of the Center for Shark Research at the Mote Marine Laboratory in Sarasota, Florida. “But for scientists, the whole *Jaws* thing started working in our favor, because of the overexaggerated public interest in these animals.”

Neither clips from the movie or its infamous theme song were actually used in the study. Instead, an excerpt from the *Ocean World* episode of the *Blue Planet Seas of Life* series featuring “schooling requiem (Family Carcharhinidae) and hammerhead (Family Sphyrnidae) sharks swimming innocuously” was shown in all treatments.<sup>347</sup> The scary background music, Track 8 (“Sharks”) of the *Blue Planet: Music from the BBC TV Series* soundtrack, “was assessed by an independent music expert” as having an “unsettling sound,” thus confirming the ominous nature of the music. The uplifting background music was an excerpt from Track 1 (“The Blue Planet”) of the same soundtrack and was evaluated by the same music expert who confirmed its uplifting nature.”<sup>348</sup>

The researchers concede the *Jaws* theme alone is not entirely to blame for taking a bite out of the reputation of sharks. “Sharks have been vilified in human culture for centuries, and negative attitudes toward sharks continue to pervade mass media, perpetuating stereotypes, often conveying inaccurate information.”<sup>349</sup>

“One way the public’s fear of sharks, which resonates deeply and viscerally, manifests itself is a pervasive overestimation of the likelihood of being ‘attacked,’” the study states.<sup>350</sup> There were a record 98 shark attacks worldwide in 2015, resulting in six deaths. The number of attacks could top 100 this year, according to the Florida Program for Shark Research.<sup>351</sup> While this number is relatively small, the researchers say the exaggerated fear of sharks “is validated and reinforced by sensationalistic news coverage of shark ‘attacks’ and by an emphasis on shark-on-human violence in shark documentaries.”<sup>352</sup>

“Most importantly, this study specifically highlights the need to raise the public’s awareness of the effect of background music in shark documentaries in the hope that it would decrease the extent by which they are affected by it,” the researchers write.<sup>353</sup>

Elizabeth Keenan, an assistant professor in the Marketing unit of Harvard Business School and a co-author of the study, cautions “any organization that intends to positively promote sharks or any other creature should carefully consider the soundtracks they choose.”<sup>354</sup>

While the researchers warn scary music in shark documentaries can negatively influence support for conservation efforts,<sup>355</sup> that music is part of the draw that continues to captivate the public in both *Jaws* and sharks in general. The film’s director, Steven Spielberg, acknowledges “the score was clearly responsible for half of the success of that movie.”<sup>356</sup> *National Geographic* reports “before *Jaws*, very little was known about the predators. After the film’s release, interest in sharks skyrocketed, resulting in increased funding for shark research.”<sup>357</sup> This, of course, includes some of the funding that made this study possible.

“I think a lot of people would suspect the music would have an effect,” confesses Keenan, “but we wanted to empirically capture its size.”<sup>358</sup>

With the theme music almost universally recognized, answering that question does not require much more than playing a few notes: Da nuh. Da nuh. DA NUH.  
DANADADANADANADANA!!!

# Government Public Relations And Advertising

**\$1.4 billion**

**Governmentwide**

**Nationwide**

A good product sells itself.

So what does it say when more than \$1.4 billion is spent every year promoting federal agencies and services but trust and confidence in the government have plummeted?

Federal contracts for advertising and public relations average nearly \$1 billion a year, according to a review by the Government Accountability Office (GAO).<sup>359</sup> Sixty percent of PR contracts are paid for by the Department of Defense (DOD).<sup>360</sup>

Another \$430 million a year is spent paying the salaries of approximately 4,900 federal public relations employees.<sup>361</sup> The median annual salary for government public relation staff is about \$90,000.<sup>362</sup> DOD also employs the largest number of public relations staff.<sup>363</sup> The Department of Veterans Affairs (VA) had the largest percentage increase in public relations employees over the past decade.<sup>364</sup> The number of VA PR staff grew more than nine percent from 144 employees in 2006 to 286 in 2014.<sup>365</sup>

The total cost of PR activities governmentwide is higher than the \$1.4 billion spent on contracts and employees, but is difficult to calculate. This is due, in part, to public relations activities not being delineated from other activities in contracts with broader purposes.<sup>366</sup> “Although advertising and public relations contracts data provide an indication of the magnitude of federal spending on public relations activities, they do not capture the full scope of these activities,” says GAO.<sup>367</sup>

GAO describes public relations as “an effort to develop and disseminate information to explain the activities of and the issues facing [an] organization,” which includes “issuing press releases and producing material for radio and television broadcasts.”<sup>368</sup> The White House Office of Management and Budget (OMB) says “public relations” includes “community relations and those activities dedicated to maintaining the image of the governmental unit or maintaining or promoting understanding and favorable relations with the community or public at large or any segment of the public.”<sup>369</sup>

Advertising consumes the largest amount of what is spent on public relations by federal agencies.<sup>370</sup>

Agency	Average Annual Cost
Department of Defense	\$626.2 million
Department of Health and Human Services	\$116.7 million
Department of Commerce	\$37.7 million
Department of Homeland Security	\$37.6 million
Department of Transportation	\$36.0 million
Department of Veterans Affairs	\$23.6 million
Department of Agriculture	\$8.8 million
Department of Justice	\$5.9 million
Department of State	\$5.8 million
Department of Labor	\$5.6 million

*The Department of Defense spends more on public relations and advertising than any other federal agency.*

Despite the high cost of these efforts, just 32 percent of Americans surveyed expressed “a favorable impression of the federal government,” according to a poll conducted by the Pew Research Center.<sup>371</sup> “Currently, just 19 percent say they can trust the government always or most of the time, among the lowest levels in the past half-century. Only 20 percent would describe government programs as being well-run,” according to the Pew findings.<sup>372</sup> The least popular agencies are the Department of Justice, the Department of Education, the IRS, and the VA, all of which were viewed unfavorably by a majority of those surveyed.<sup>373</sup>

The GAO report was requested by Senate Budget Committee Chairman Mike Enzi who says “with increasing pressures on limited federal resources, it is crucial to know how much is spent across the federal government on public relations activities.”<sup>374</sup>

Federal agencies could improve their public relations at no cost whatsoever by simply conducting themselves efficiently and effectively rather than misspending taxpayer dollars on questionable and unnecessary projects and activities that will inevitably end up in *Wastebook*.

## **Giant Glow-In-The-Dark Doobie**

**\$35,000**

**Colorado**

**National Highway Traffic Safety Administration**

Colorado rolled thousands of dollar bills into a giant, glow-in-the-dark doobie displayed in the Mile High City.

“At 28 feet tall, the installation is hard to miss,” the Colorado Department of Transportation (CDOT) boasted when the “Giant Marijuana Joint” was rolled out this summer in downtown Denver.<sup>375</sup> The three-dimensional installation on a billboard “even glows at night.”<sup>376</sup> LED lights embedded in the giant joint “shine throughout the evening hours.”<sup>377</sup>

The display was paid for with a National Highway Traffic Safety Administration grant.<sup>378</sup> The total price for the project is \$35,100, including \$16,600 to the advertising agency Amélie Company for the concept and design, \$6,000 for installation, and \$12,500 for the “media buy” to display it through September.<sup>379</sup>

The joint was “strategically placed on the side of the Courtyard Marriott,” CDOT points out.<sup>380</sup> “There are six marijuana dispensaries within a mile of the billboard, so it’s very likely



marijuana users will see it,” notes CDOT Communications Manager Sam Cole. “It’s also located downtown among scores of hotels where tourists may be staying.”

While the display may appear to be promoting marijuana, the state says it is intended to educate motorists about the dangers of driving while high.<sup>381</sup> The doobie on the billboard is actually “a mangled car that resembles a marijuana joint” with the slogan

*The giant glow-in-the-dark joint in the Mile High City was paid for with federal highway safety funds.*

“Hits Lead to Hits, Don’t Drive High” printed below.<sup>382</sup>

Driving under the influence (DUI) of marijuana is definitely a problem in Colorado, where the drug was legalized in 2012. Marijuana significantly impairs judgment<sup>383</sup> and there has been a steady increase in the number of fatal wrecks involving drivers who are high in the state.<sup>384</sup> More than half of marijuana users admit driving high and nearly one out of every five DUIs in Colorado involves pot.<sup>385</sup>

The Colorado Department of Transportation faces another issue directly related to driving and marijuana use. CDOT “is looking for at least 100 new staffers for its snow plows” and the Regional Transportation District “needs virtually that same number.”<sup>386</sup> The requirement for applicants to pass a drug test has become a “huge new problem” due to “the number of people in Colorado who use marijuana.”<sup>387</sup>

Colorado could have paid for the giant glow-in-the-dark blunt with the money being collected from marijuana sales taxes and licensing fees, which reached a new high of \$135 million last year.<sup>388</sup> Instead, federal highway dollars are going up in smoke.

Weeding out waste, like this giant joint, would smoke out more money that could be spent filling pot holes.

## **Earthquake-Proof Gingerbread House**

**\$150,000**

**Oregon**

**Institute of Museum and Library Services**

Designed and tested to withstand the force of an earthquake, these houses aren't going to crumble like a cookie even though they are made out of gingerbread.

Participants in the "How Does the Cookie Crumble?" workshop built their own earthquake-proof gingerbread house that was tested on a "shake table to see if it could survive 'the Big One.'"<sup>389</sup>

It was one of several workshops featured as part "Gingerbread Adventures," which took "a sweet and smart look at the science behind" gingerbread houses.<sup>390</sup>

The program was put on by the Oregon Museum of Science and Industry (OMSI) supported by the federal Institute of Museum and Library Services (IMLS)<sup>391</sup> from a \$150,000 grant.<sup>392</sup>

"Gingerbread Adventures" ran from November 19, 2016 thru January 2, 2017.<sup>393</sup> The exhibit highlighted "the innovation, engineering, and food science aspects of assembling elaborate gingerbread sculptures."<sup>394</sup>

"We have long considered a holiday-themed program for OMSI and this was the perfect fit, marrying food science with a beloved holiday tradition," says Andrea Edgecombe, OMSI director of events.<sup>395</sup>

Do-it-yourself gingerbread building workshops and cookie lab experiments were among the featured activities.<sup>396</sup>



*Gingerbread houses designed to withstand an earthquake were put to the test on a "shake table" as part of the "How Does the Cookie Crumble?" workshop supported by the federal government.*

The “Cookie Lab” unveiled “the similarities between a recipe and the scientific method” with attendees baking their own cookies.<sup>397</sup>

Those attending the “Mission: Infrostable Gingerbread Workshop” made Martian-themed gingerbread houses to take home.<sup>398</sup>

Guests at “Bite Sized Science,” a “maker-themed monthly event,” created a common food item, including non-alcoholic ginger beer.<sup>399</sup>

Other activities included “Paper Gingerbread Man Creation, a “Spaghetti Tower” demonstration, and a “People’s Choice Award” chosen by visitors to the museum for the best gingerbread creation.<sup>400</sup>

Despite the support from the IMLS, tickets were required to be purchased to attend the events. The “How Does the Cookie Crumble?” workshop cost \$25 per house<sup>401</sup> while tickets to the “Cookie Lab” sold for \$10 each.<sup>402</sup> General admission to the museum was not included in the ticket prices.

No matter how sturdy or tasty these gingerbread houses turned out, this kind of spending doesn’t stand up to the scrutiny of taxpayers.



Attendees of the “Mission: Infrostable Gingerbread Workshop” made their own Martian gingerbread houses.<sup>403</sup>

## **Dirtbag Beach**

**\$8.4 million**

**New York**

**Army Corps of Engineers**

Is an unwanted government project the end of the world for the beach in Montauk, New York, the self-described “end of the world?”

The once pristine beach, known for its natural landscape and lack of development in the tiny hamlet at the tip of Long Island is now being derided as “dirtbag beach.”<sup>404</sup>

The U.S. Corps of Engineers plowed away the beach’s natural dunes and constructed a wall made up of 14,000 1.7-ton geotextile bags holding orange non-beach sand topped with three feet of sand.<sup>405</sup> The sandbag wall stretches along more than a half-mile of shoreline and is surrounded with fencing.<sup>406</sup> The beach is now only accessible via four narrow, elevated walkways.<sup>407</sup>

The Downtown Montauk Emergency Stabilization Project was sold as a short-term fix to protect coastal properties from erosion.<sup>408</sup> The slope rises 15 feet above sea level at the water’s edge and was “designed to prevent a storm surge into the business district and damage to the shorefront buildings, primarily motels.”<sup>409</sup> The unsightly barrier, however, has residents and visitors “wondering if the town has destroyed the shore in order to save it.”<sup>410</sup> The bags were exposed just six months after the project was completed when the sand covering them was washed away by a storm.<sup>411</sup>



*Surfers and residents unsuccessfully tried to stop the Army Corps of Engineers from destroying Montauk beach.*

Waves of protestors assembled on the beach and in the water to halt the project. Some residents were even arrested for standing in the path of bulldozers. A lawsuit was also filed but was unsuccessful.<sup>412</sup> In the end, the objections of the residents were swept away by the tide of government

as the natural dunes were plowed away and replaced by the barrier of sandbags.

“The most common objection,” according to the *New York Times*, is that the dune “robbed the downtown of half its public beach.”<sup>413</sup>

“My first thought was: ‘Wow. This can’t be it,’” says Kevin Gurl, who has vacationed on Long Island for two decades. “It was disgusting. Half the beach was gone, and there’s this pipe spewing who knows what.”<sup>414</sup>



*Bulldozers plowing away the natural dunes of Montauk beach.*<sup>415</sup>

Surfers were among the most vocal opponents. The Surfrider Foundation laments the “50-foot-wide sandbag seawall on our public beach” is “essentially destroying that public resource.”<sup>416</sup>

Some experts even question if the artificial dune might do more harm than good. Dr. Rob Young, a coastal geologist, believes “the project design is flawed.” He notes “the geotextile wall will be exposed well before the projected lifespan is reached. The project will likely result in significant degradation of the public beach, while providing little protection for property.”<sup>417</sup>

While the Army Corps has been preparing a long-term proposal for the shoreline for a half-century, town officials claim the work done this year provides “a needed, though not optimal, temporary fix.”<sup>418</sup>

“The Army Corps came in, the funds were available, and this is what they proposed,” explains Larry Cantwell, the supervisor for the Town of East Hampton, which includes Montauk.<sup>419</sup>

But Joseph Vietri, chief of planning and policy for the North Atlantic Division of the Corps, says “we were asked to do this work. We don’t just go places and do things.”<sup>420</sup>

“There weren’t a lot of other alternatives,” insists Cantwell.<sup>421</sup>

Because the geotextile bags cannot be walked on, stairs constructed over the dune must now be taken to reach the beach.<sup>422</sup> Steps lead up to a platform and then another set leads down to the beach. These steps create an obstacle for many beachgoers.

“We wanted no walkways at all, and we certainly didn’t want the walkways they designed,” Cantwell explains, but the New York State Department of Environmental Conservation and “the Corps insisted that they be there.”<sup>423</sup>

“You used to be able to carry your beach gear or your kayaks right onto the beach,” says Judith Tanur, who retired here with her husband in 1998. “Now it’s hard for a lot of us older folks even just to get to the beach.”<sup>424</sup>

“You can’t get two people abreast on those stairs,” Diane Hausman, the chairwoman of the Montauk Citizens Advisory Committee and an owner of a hotel near the beach.

She says the steps pose a challenge to parents carrying young children, the handicapped, and other beachgoers with gear.<sup>425</sup> “There’s going to be people who can’t get to the beach.”<sup>426</sup>

Hausman’s hotel guests are not impressed with the unsightly dune either. She says nearly all of them ask her ““what the hell is that over there?””<sup>427</sup> Others tell her the impediment deterred some with limited mobility from coming to Montauk this summer.<sup>428</sup> “Now we’re cutting into my business,” Hausman says.<sup>429</sup>

Once over the mound, yet another surprise awaits beachgoers. The white color of the natural Montauk beach has been marred, at least temporarily, with an orange-colored “sandy dirt” that the contractors brought from an inland quarry to extend their working space.<sup>430</sup> “Under an agreement with the town, Montauk’s white beach sand was stockpiled to use for sandbag cover, to preserve the natural look of the beach. The spread, by the contractors, of

the orangey quarried sand across the rest of the beach was not anticipated, or, apparently, discussed.”<sup>431</sup>

The barrier has already had some problems.

Amidst heavy rain and high tide in April, water backed up and ponded behind the sandbag wall which prevented it from dissipating naturally.<sup>432</sup>

Then this fall, the dirt bags were exposed when the sand covering them was washed away by ocean waves caused by Tropical Storm Hermine.<sup>433</sup> Some of the bags were damaged and much of the beach in front of the wall was washed away.<sup>434</sup> The Army Corps feels that the dirt bag wall “did do what it was supposed to do,” said a spokeswoman. The Corps, therefore, “is not planning to remove the sandbags, as had been expected.”<sup>435</sup> The dirt bags will instead “become ‘a backstop’ to the restored beach, and provide ‘a higher level of risk reduction in the area,’” said Steve Couch of the Army Corps.<sup>436</sup>



*The dirt bags buried on Montauk beach were exposed just six months after the project was completed when the sand covering them was washed away by a storm.*

“One little modest storm blew out 300 feet of sand, exposed the sandbags beneath and cut into and destroyed some of these bags. It’s a grand mess,” writes Dan Rattiner, a renowned local journalist who initially supported the project calling it “a gift for Montauk.”<sup>437</sup> He now concedes “the naysayers were right. The Town Board for accepting this was wrong. I was wrong. The Army Corps does not know what it is doing.”<sup>438</sup>

“Storm surges and roaring tides are a fact of life here,” notes the *New York Times*.<sup>439</sup> “Many residents have been clamoring for storm defenses for years, yet just as many believe such efforts to try to outsmart the sea are a waste of both fiscal and natural resources.”<sup>440</sup>

## Getting Lit At The Liquor Store

\$50,000

Florida, Colorado, and Oklahoma

U.S. Department of Agriculture

Liquor stores are getting lit, literally, with the assistance of the U.S. Department of Agriculture (USDA).

A Florida liquor store with a late-night drive-thru is reaping a \$5,000 USDA Rural Energy for America Program (REAP) grant to help reduce the costs of keeping the lights on.<sup>441</sup>

Newberry Liquor boasts that with its “convenient” drive thru, “late night beer/liquor runs” are “made easy!”<sup>442</sup> The drive-thru is open until 9:30 p.m. on most weekdays and 10 p.m. on Friday and Saturday.<sup>443</sup>

Staying open late requires lighting and the USDA grant is intended to “make energy efficiency improvements” to the store’s lighting system.<sup>444</sup>

In addition to liquor, wine, and beer, Newberry Liquor also serves cigarettes and tobacco products.<sup>445</sup>



USDA also provided REAP grants to three other liquor stores:

- The Wild West Wine and Spirits, which boasts “the best selection of domestic, craft and imported beer in” the town of Del Norte, Colorado,<sup>446</sup> is making “improvements to its lighting system” with a \$12,576 REAP grant.<sup>447</sup> The store also received a \$2,231 loan from the Small Business Administration in 2011.<sup>448</sup>
- Citrus Liquors in Florida received a \$20,000 grant to “purchase and install a solar renewable energy system.”<sup>449</sup>
- Nancy’s Liquor in Antlers, Oklahoma was paid \$11,000 by the USDA “to make energy efficiency improvements to the lighting system.”<sup>450</sup>

Taxpayers should not have to subsidize the lighting or electricity costs of liquor stores or other businesses. It’s time to turn the lights off on this program.



*“Late night beer/liquor runs made easy!” promises Newberry Liquor store, which boasts a drive-thru window with lighting financed by the USDA.*

## **NASA Gets Religion About Extraterrestrials**

**\$1.1 million**

**NASA**

**New Jersey**

“How might the world’s religions respond to the discovery of life on other planets?”<sup>451</sup>

NASA is enlisting theologians to answer that question to prepare for if and when human contact is made with extraterrestrials.

The NASA Astrobiology Program awarded more than \$1.1 million to the Center of Theological Inquiry (CTI) to examine “the societal implications of the search for life in the universe.”<sup>452</sup> Astrobiology is the study of the origin and evolution of life in the universe that seeks to find evidence of life beyond Earth<sup>453</sup>

Located in Princeton, New Jersey, CTI is “an ecumenical institute for interdisciplinary research in the field of religion” seeking to “cultivate a theological renaissance through dialogue.”<sup>454</sup> CTI’s director William Storrar says “while our work is rooted in the interdisciplinary contribution of Christian theology to questions of global concern, CTI welcomes outstanding scholars in all branches of inquiry in the humanities and sciences, and any field of study in religion, including Judaism, Islam, Hinduism, and Buddhism. Scholars from across all these academic disciplines are integral to our educational mission.”<sup>455</sup> He notes, however, “we are not an issues-based think tank.”<sup>456</sup>

The background provided for the contract explains “although astrobiology is a new field, little known to the general public, the information it provides is destined to play a large part in politics, economic life, and the human self-understanding provided by theology, philosophy, and the arts. This proposal provides a program to explore the societal implications of astrobiology, with particular reference to religious traditions and faith communities.”<sup>457</sup>

“The focus on astrobiology came about when Storrar and NASA’s senior scientist for astrobiology Mary A. Voytek served together on an advisory committee at the Library of Congress.”<sup>458</sup>

“The second time we met, we turned to each other with the same thought in mind: that CTI would be a great place for a discussion that brought the multiple perspectives of the humanities to bear on the questions asked by astrobiologists,” recalls Voytek.<sup>459</sup> “The collaboration with CTI just fell into place and I am thrilled.”<sup>460</sup>



*NASA is spending more than \$1 million to explore how the world's religions might respond to the discovery of extraterrestrial life.*

“The aim of this inquiry is to foster theology’s dialogue with astrobiology on its societal implications, enriched by the contribution of scholars in the humanities and social sciences,” explains Storrar.<sup>461</sup> “We are grateful to the NASA Astrobiology Program for making this pioneering conversation possible.”<sup>462</sup>

“The project is intended to refresh and expand scholarly and public dialogue on this subject, which is of growing interest due to the discovery of thousands of extrasolar planets and the ongoing search for potentially habitable environments in our solar system and beyond,” according to CTI.<sup>463</sup> “With this \$1.108 million grant, CTI will oversee a resident team of visiting scholars in theology, the humanities, and social sciences that will conduct an interdisciplinary inquiry on the societal implications of astrobiology, the study of the origins, evolution, distribution, and future of life in the universe.”<sup>464</sup>

“It works like this: about a dozen scholars come to live in Princeton each year, a mix of eminent and up-and-coming. In addition to their own research, they collectively tackle a topic of the year.”<sup>465</sup> For 2016 and 2017, that topic “will be astrobiology and the implications of actually finding some sort of life somewhere out there in the vastness of space.”<sup>466</sup> Those selected to participate receive “up to \$70,000” and are “provided with offices, subsidized housing, and library access.”<sup>467</sup> In addition to funding from NASA, the program is being supported by the John Templeton Foundation.<sup>468</sup>

“We gather the best scholars from any discipline and any part of the world to think together on a common big question of our time,” explains Storrar.<sup>469</sup> “And we do that not through big conferences and large research projects, but by small-scale conversations around our table; salon-style rather than lecture-hall style.”<sup>470</sup>

“This isn’t about a search for little green men but about the origins of life within the context of new discoveries and the search for the conditions for life elsewhere,” Storrar says. “This will be a pioneering conversation, a deeply philosophical, ethical and legal debate in which assumptions are bound to be challenged.”<sup>471</sup>

During the opening symposium, “much of the discussion centered on the question, ‘What is life?’ It turns out that life is notoriously difficult to define,” notes a summary of the

meeting posted by CTI.<sup>472</sup> “If we define life so broadly that it includes all matter, the question of whether life exists elsewhere becomes easy to answer but uninteresting. If we define life only in terms of life on Earth we might be able to come up with clear criteria, but we wouldn’t know whether or not they apply elsewhere in the universe. It is very difficult to get outside of the anthropocentric bubble that we are in. Astrobiologists seek to think beyond that bubble as much as possible, and the current inquiry at CTI is beginning to explore how this new perspective can reshape how we think about life here on Earth.”<sup>473</sup>

The other questions the program seeks to answer include:

- To what extent do our moral relations depend on the biology we share with other persons and other life?
- If there are many different forms of life, known and unknown to us, what does it mean to be “alive”?
- How would art and literature depict life as we know it against this background of other possibilities?<sup>474</sup>

To justify spending more than \$1 million on the project, NASA explains “astrobiology is expected to play a large part in future politics, economic life, and the human self-understanding provided by various disciplines including, but not limited to: theology, philosophy, and the arts.”<sup>475</sup>

Storror says CTI is, in effect, bringing “interpreters of life into dialogue with scientists of life.”<sup>476</sup> “Astrobiology is attempting to understand the origins of life; we use the word ‘genesis’ quite a lot, and some people might see this as challenging the Bible,” Voytek says.<sup>477</sup>

NASA is not the only federal agency hosting discussions on the implications for religion if life is discovered on other planets. The Defense Advanced Research Projects Agency spent nearly \$100,000 for a strategy planning workshop including a session entitled “Did Jesus die for Klingons too?” in 2011.<sup>478</sup> The Klingons are a fictional alien species who were villains and then later allies of humanity in the Star Trek series. The session explored the theological conflict to Christianity if intelligent life was found elsewhere in the universe and how it could be resolved.<sup>479</sup>

## **Barbie Girl In A Barbie World**

**\$300,000**

**Tennessee**

**National Eye Institute and National Science Foundation**

Our nation's most prestigious science agencies are literally playing with dolls, to study what is obvious to children who haven't even graduated from preschool yet—whether boys or girls spend more time playing with Barbie dolls.

“The researchers’ intuition was that men may have played more with Transformers than [sic] Barbies when they were younger, and vice versa for women” and those experiences would provide gender advantages recognizing those toys as adults.<sup>480</sup>

These assumptions were confirmed by a survey of nearly 300 men and women, who were asked about their experiences with Barbies and Transformers and quizzed on the how well they recognized the faces of the toys.<sup>481</sup>

The project conducted at Vanderbilt University was funded from grants provided by NIH's National Eye Institute and the National Science Foundation totaling more than \$300,000.<sup>482</sup> All of the participants “were compensated with course credit or a small payment.”<sup>483</sup>



*Women spent more time playing with Barbies as young girls while men were more likely to have played with Transformers toys as boys, according to a new study supported by NIH and NSF.*

Women are also better at picking out the real Barbie in a line-up of dolls than men, but men have the advantage identifying Transformers.<sup>484</sup>



*Study participants had to select the face of Barbie from a line-up.*

“There is a popular misconception that all Barbie dolls have the same face,” notes Vanderbilt University. Isabel Gauthier, one of the researchers, points out “different models have distinctly different faces” and that “they appear to be modeled on different women.”<sup>485</sup>

“Barbie dolls and ‘Barbie-friend’ dolls have been released with several different face sculpts since 1959” and “a large number of Transformer toys have been released since 1984,” the researchers note.<sup>486</sup>

The study subjects were given images of faces and objects to study. In addition to the toys, faces of real men and women and pictures of cars were included.<sup>487</sup>

They were then presented with a series of six line-ups and asked to pick out the familiar face or car.<sup>488</sup> Each line-up included three images, “one from the initial set and two that they hadn’t seen before.”<sup>489</sup>

The women were much better at identifying the correct Barbies while the men were more likely to recognize the Transformers. Men also fared better identifying cars.<sup>490</sup> Coincidentally, many Transformers—which are robots in disguise—take the shape of cars and other automobiles.

While previous studies suggested women may have a “gender advantage in face recognition,” this study found there was “no significant gender difference in performance with human faces.”<sup>491</sup>

The researchers conclude “the male advantage we observed for recognizing Transformer faces provides evidence against a general female advantage for any type of faces, for instance one that could reflect an innate, female-specific bias for learning or remembering faces.”<sup>492</sup>

“Clearly, the faces you experience as a child leave a trace in your adult memory,” says Gauthier. “It is unlikely that this effect is limited to these particular toys.”<sup>493</sup>

“Gauthier’s other research has shown that just a few hours of experience with a new type of face, such as a new alien race from a Star Trek episode, can change how the brain processes these faces. The new research suggests that the experience is long lasting.”<sup>494</sup>

No matter how long you look at it, everyone can recognize this project as waste.



*The many faces of Barbie.*

## What's Upstream

\$570,000

Washington state

Environmental Protection Agency

The waste the U.S. Environmental Protection Agency (EPA) is trying to clean up in Washington state is its own.

This mess isn't a hazardous waste site, but rather a lobbying campaign that may have broken state and federal laws by pressuring state legislators to impose new regulations on agriculture.

"What's Upstream" was paid for with a portion of a \$12 million EPA grant to the Northwest Indian Fisheries Commission funneled to the Swinomish Indian Tribe to develop and carry out the campaign.<sup>495</sup>

The effort, which disparaged farmers as "polluters of our waterways," included a website and advertisements on billboards, buses, and the radio.<sup>496</sup>

"Unregulated agriculture is putting our waterways at risk," stated one ad next to a photo of a group of cows standing in a stream.<sup>497</sup> The picture was not even "a real example of a dairy in Washington violating state law," but rather "a stock photo from the Internet,"<sup>498</sup> originally labeled "Amish Country cows in stream."<sup>499</sup>



*Stock photos of cows, farmers, dirty water, and dead fish on The What's Upstream website are used to insinuate agriculture is unregulated and farmers are polluting waterways.*

Likewise, the <http://whatsupstream.com/> website “features a photograph — not taken in Washington — of cattle standing in a river and salmon that apparently had died after spawning, a natural occurrence. The insinuation was that farming in Washington state is not adequately regulated.”<sup>500 501</sup>

Swinomish tribal Chairman Brian Cladoosby concedes the campaign may have bent the truth by claiming agriculture is unregulated. “It’s possibly not 100 percent true, not 100 percent lie,” he said.<sup>502</sup>

The EPA “has stopped taking questions about What’s Upstream, including an important one: How much has the agency spent?”<sup>503</sup>

Even though the EPA, the fisheries commission, and the Swinomish tribe have all refused to answer “requests for a full accounting,” it is estimated the campaign cost about \$570,000.<sup>504</sup>

“The EPA initially defended the campaign as ‘public education’ on Puget Sound fish recovery, but on April 5, the agency reversed course and blamed the fisheries commission and the Swinomish tribe for misusing EPA money on the campaign.”<sup>505</sup>

EPA Administrator Gina McCarthy has attempted to disassociate the agency with the campaign, saying it was paid for as part of a subcontract.<sup>506</sup> The agency’s Northwest Administrator Dennis McLerran added EPA cannot control the “work product” of grant recipients.<sup>507</sup>

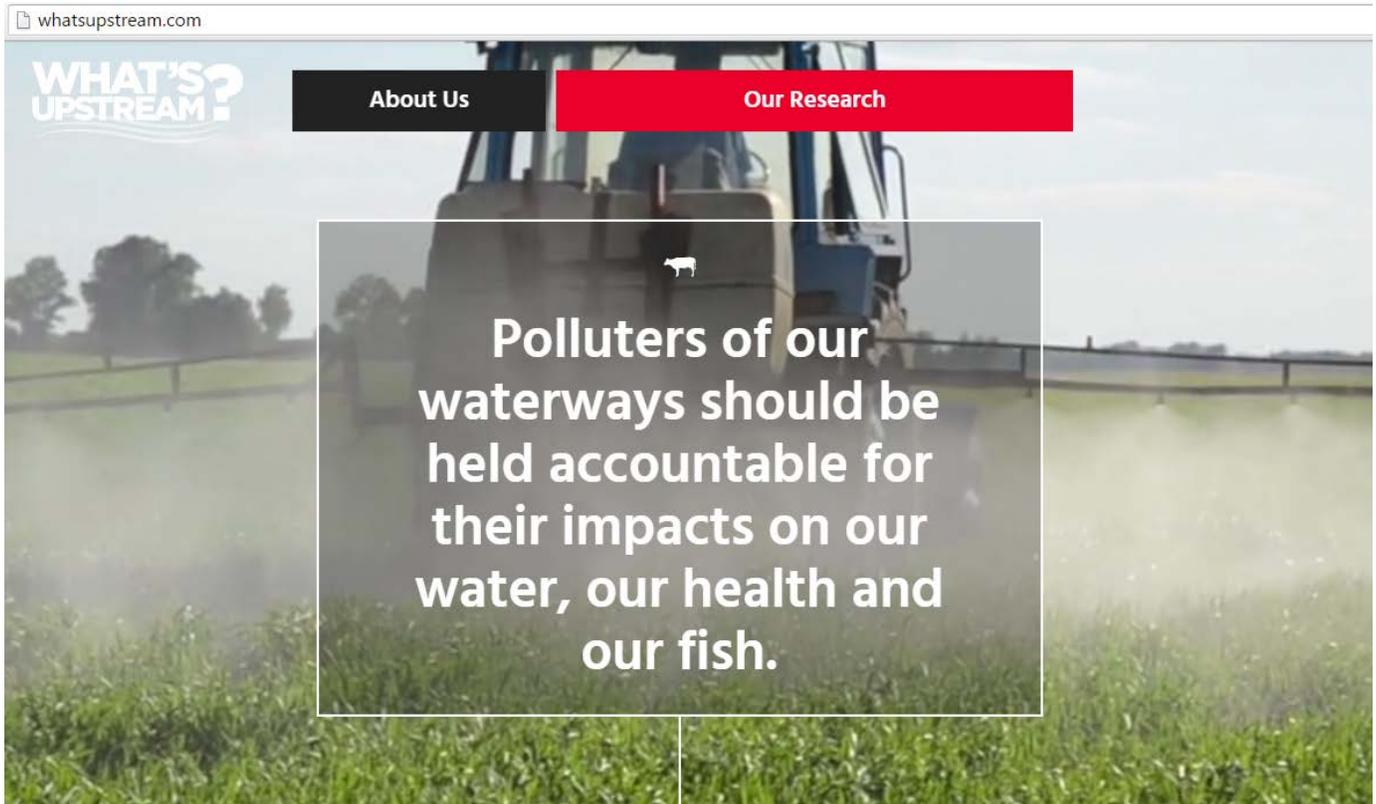
“However, EPA records show the agency’s involvement was hands-on. EPA spent more than four years and more than a half-million dollars directing the campaign to lobby Washington state legislators to impose on agriculture rules tougher than allowed under the federal Clean Water Act, according to EPA records.”<sup>508</sup> The agency also “issued specific directions, including demands for advertisements and the placement of news stories, which in turn did not disclose EPA’s involvement.”<sup>509</sup>

The tribe’s chairman, Brian Cladoosby, says, “staff from the EPA were intimately involved in helping us develop the content of public materials to ensure that they were both compliant with federal grant requirements and rooted in sound science.”<sup>510</sup>

The “What’s Upstream” website, also reviewed by the EPA,<sup>511</sup> urged citizens to “take action” and provided a “form letter to state legislators asking for mandatory 100-foot buffers between farm fields and waterways. The link has been removed from the website. Before then, the EPA said the link did not violate prohibitions on using federal funds to lobby because the letter did not take a position on specific pending legislation. The Swinomish tribe, however, had been involved in a proposal presented during the 2016 session to require buffers on some

farmland.”<sup>512</sup> The tribe “set a goal of changing state water-pollution control laws by this year, according to EPA records.”<sup>513</sup>

The campaign, ironically, went largely unnoticed by the state officials it was intended to influence during the legislature’s 2016 session and backfired once it did get noticed, sparking bipartisan outrage.<sup>514</sup>



*The “What’s Upstream” campaign misused federal funds and stock images to portray Washington farmers as polluters to pressure state officials to enact tougher regulations on agriculture.*

“It was a total waste of time and money if they were trying to get my attention,” said Republican state senator Judy Warnick, the chairwoman of the Senate Agriculture Committee. “The only attention they got from me was a negative impression. I was angry about how it was paid for, how it came about and even more angry about where the actual picture of cows came from.”<sup>515</sup>

“I don’t remember seeing anything,” echoed state Senator Dean Takko, the top-ranking Democrat on the Senate Agriculture Committee. “It looks like someone went out of their way to make farmers look like bad guys,” he added.<sup>516</sup>

“If they truly did agree to this lobbying, someone with the EPA needs to be held accountable, not just a slap on the wrist, but held accountable for violating the law,” declared Democrat state representative Brian Blake, the chairman of the House Agriculture Committee.<sup>517</sup>

Despite being “launched by 2013, according to EPA records,” the organizers of “What’s Upstream” did not register with the Washington Public Disclosure Commission as required by state law.<sup>518</sup>

The bus ads were removed after being deemed “too political” by the local transportation authority. The radio ads have been canceled and the billboards have been taken down.<sup>519</sup> While the tribe paid for the billboards, EPA money paid for “the services of the Seattle lobbying firm, Strategies 360, which developed the billboard’s content.”<sup>520</sup>

The EPA Office of Inspector General “has promised to investigate whether” the campaign improperly spent public money.<sup>521</sup>

Larry Wasserman, the environmental-policy director for the Swinomish, admits some of the ads did not include the required funding disclaimer and that he did not know where the stock photos used on the “What’s Upstream” ads and website were actually taken.<sup>522 523</sup>

Regardless, he vows “we will continue the campaign, in one way or another.”<sup>524</sup>

## **Whiskey Rebellion And Tea Party Served With A Twist**

**\$825,000**

**Georgia, Hawaii, Kansas, Michigan, Minnesota, New Hampshire, New Jersey, and Pennsylvania**

**U.S. Department of Agriculture and Department of Housing and Urban Development**

Taxes on tea and whiskey brewed up two of the most famous rebellions in American history: The Boston Tea Party against the British tea tax levied on American colonists and the Whiskey Rebellion against the excise tax on distilled spirits imposed by the new U.S. federal government.

In an ironic twist, two hundred years later the federal government is now serving up subsidies for tea and whiskey makers.

The U.S. Department of Agriculture (USDA) Value-Added Producer Grants program awarded \$390,000 to tea makers and \$145,000 to whiskey producers this year.<sup>525</sup>

These include:

- \$195,400 to Yaupon Tea Company in Georgia to expand the market for tea sales;<sup>526</sup>
- \$193,335 to help Mauna Kea Tea in Hawaii to “develop new green tea products and improve marketing”;<sup>527</sup>
- \$49,750 to Driftless Spirits in Minnesota “to market and brand organic, kosher grain to glass whiskey”;<sup>528</sup>
- \$58,056 to Canterbury Spirits in New Hampshire “to produce and market farmstead distilled spirits (including brandy, gin and whiskey) made from farm grown apples and rye”;<sup>529</sup> and
- \$38,000 to Marr Grange in New Jersey to “study the feasibility of establishing an on-farm distillery to process specialty grains, including rye, to create distilled craft whiskey.”<sup>530</sup>

In addition, an ongoing study examining “flavor development in distilled spirits” at Michigan State University is being funded by the USDA National Institute of Food and Agriculture.<sup>531</sup> The project summary points out the “economic potential for artisan distilling is

quite high,” specifically noting the product provides “substantial public source of funds through both State and Federal excise taxes and mark-ups.”<sup>532</sup> A study published as a result of this USDA-funded research examines how “to reduce the operating and investment costs of the production of high proof spirits.”<sup>533</sup> One certain way is to stop charging these projects to the tab of taxpayers.

USDA is not the only federal agency in the whiskey business.

A \$100,000 “job creation” Community Development Block Grant (CDBG) from the Department of Housing and Urban Development (HUD) is “financing” the distilling equipment for a new distillery in Norristown, Pennsylvania.<sup>534</sup> Five Saints Distilling and International Spirits LLC, a “grain to glass” distillery in which all of the distilling process is performed on site, opened this summer.<sup>535</sup> Five Saints serves white whiskey, savory gin, vodka, and a blood orange liqueur with plans to add rum, rye whiskey and bourbon to the menu.<sup>536</sup>

A \$190,650 HUD grant “awarded under the commercial rehabilitation category of CDBG funding” helped transform the former city hall of Dodge City, Kansas, into a distillery.<sup>537</sup> Boot Hill Distillery, opened the summer of 2016, produces white whiskey as well as vodka and gin with plans to eventually sell bourbon.<sup>538</sup>

This reverse tea party/whiskey rebellion is unnecessary since there is growing consumer demand for both beverages. Sales of American whiskeys is “booming in the U.S. and abroad,” according to the Distilled Spirits Council, which marked “the sixth straight year of increasing market share” in 2015.<sup>539</sup> Tea is the most popular beverage in the world after water. The wholesale value of tea sold in the U.S. exceeds \$10 billion a year, according to the Tea Association of the USA,<sup>540</sup> with the Beverage Marketing Corporation projecting continued market growth for tea over the next five years.<sup>541</sup>



Just as Americans protested taxes on tea and whiskey more than 200 years ago, subsidizing the beverages today is still not the taxpayers’ cup of tea.

*Opposition to the British tea tax incited rebellion in America in 1773. In an odd twist, the federal government is now subsidizing tea with taxpayer dollars.*

## Flobots, Robot Flowers

\$1.3 million

Arizona

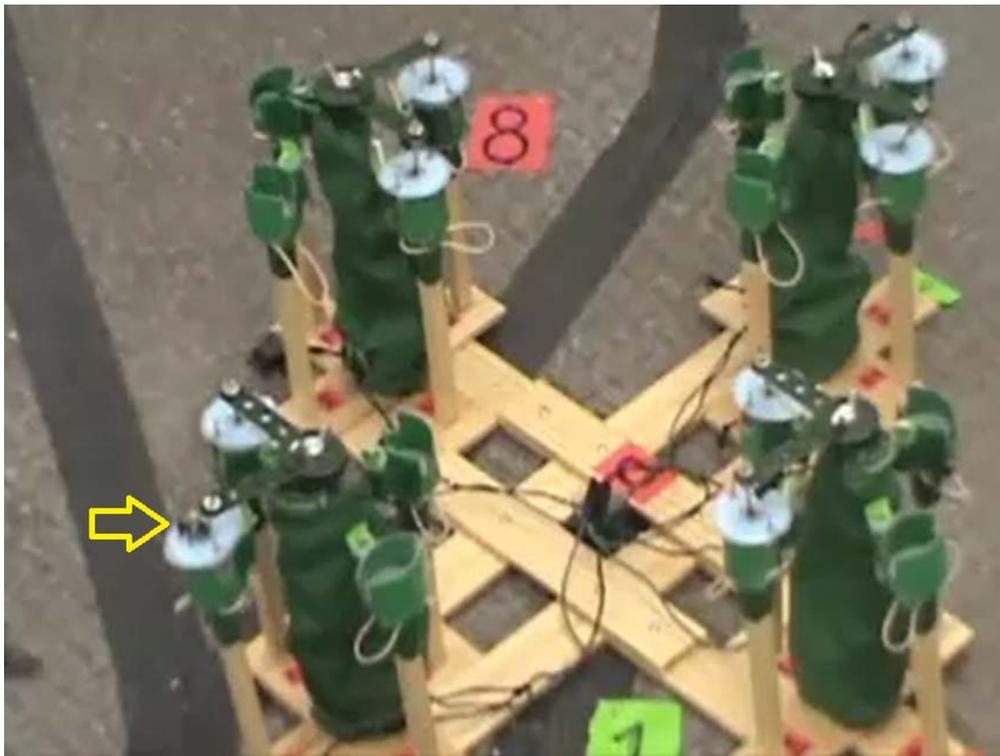
National Institutes of Health

Flobots aren't your garden variety flowers. In fact, they aren't flowers at all but rather robots in disguise.

The flobots were created with funding from a \$1.3 million grant from the National Institutes of Health to the University of Arizona.<sup>542</sup>

Each of the robotic flowers is made up of a brass rod dipped into a reservoir containing a liquid sugar solution.<sup>543</sup> They are designed to refill themselves with nectar sugar.<sup>544</sup>

The flobots were developed for use in studies into the foraging behaviors of bees and other pollinators when it may be "impractical" to use real flowers.<sup>545</sup> Bees can reach the flobot's sugar solution through a hole in the brass rod "using relatively natural behavior, similar



to probing the area around the base of a flower's style."<sup>546</sup>

While robotic flowers may sound like a futuristic idea, the concept is not new. "A variety of self-refilling artificial flowers" have been utilized and studied by researchers for more than four decades.<sup>547</sup>

*A bee foraging on flobots.*<sup>548</sup>

When compared to ten "artificial flower designs developed by other researchers," the flobots were found to have "two important disadvantages over most" of the others. "Namely the lack of control over nectar volume and the possibility that refilling flowers will startle

nearby bees,” according to the study “Flobots: Robotic Flowers For Bee Behavior Experiments.”<sup>549</sup>



*A flobot compared to a real flower.*

Despite these downsides, the creator of the flobots claims the robotic flowers “have a number of compensating advantages. The flowers can be set up, disassembled, and cleaned quickly enough to make the use of a large array feasible, and the components are inexpensive enough to allow construction of such an array on a small budget.”<sup>550</sup>

She also claims that by “using flobots, researchers can provide bees with a large number of flowers, allowing more natural foraging behavior.”<sup>551</sup> The appearance and make-up of the flobots, however, is far from natural, so she recommends painting the flobots “to give them a more natural appearance.”<sup>552</sup>

When the researched “trained bees” to visit the robotic flowers, most of the “bees readily learned to forage from the flobots,” but some still avoided the fake flowers.<sup>553</sup>

Taxpayers aren’t fooled either and want unnecessary projects like this nipped it in the bud.

## Could Dinosaurs Sing?

\$450,000

Texas

National Science Foundation

Regardless of the impression made on those who grew up singing along with the purple and green *Tyrannosaurus rex* Barney, dinosaurs did not actually sing.

Unlike birds, their closest living relatives, dinosaurs do not appear to have had the vocal structures necessary to produce singing sounds, according to a new study partially funded from three grants from the National Science Foundation (NSF) totaling \$450,000.<sup>554</sup>

Birds sing and make sounds with “a unique vocal organ called the syrinx,” the authors of the study explain.<sup>555</sup> The syrinx is made of cartilage rings that vibrate to produce songs and calls.<sup>556</sup>

The oldest preserved syrinx identified was contained in a fossil of a bird species, referred to as *Vegavis iaai*, that lived 66 million years ago.<sup>557</sup> The structure of this syrinx indicates early birds produced “duck-like or goose-like honks and other simple calls.”<sup>558</sup>

Over the past two years, the team of researchers “searched the dinosaur fossil record for other examples of a syrinx. Thus far, they have found none.”<sup>559</sup>



*New government-funded research debunks the myth that dinosaurs could sing.*



*No bones about it, dinosaurs could not sing. Scientists speculate the prehistoric beasts may have cooed or mumbled instead.*

This indicates dinosaurs “may not have been able to make noises similar to the bird calls we hear today”<sup>560</sup> and that the ability to sing may have developed after the ancestors of birds “split from true dinosaurs.”<sup>561</sup>

Because soft tissue does not fossilize as well as bone, the syrinx is not always preserved.<sup>562</sup> All of the other fossilized syrinxes that have been found, however, are in birds that lived “long after non-avian dinosaurs went extinct.”<sup>563</sup> Other modern day relatives of the dinosaurs, like crocodiles, also lack a syrinx.<sup>564</sup>

“This is another important step to figuring out what dinosaurs sounded like,” says Julia Clarke, the lead author of the study who discovered the oldest known fossil syrinx.<sup>565</sup> “To speculate wildly, we might have closed-mouth booms more similar to crocodilians in large-bodied dinosaurs like *T. rex*,” Clarke says.<sup>566</sup>

“Dinosaurs are often depicted in movies as roaring ferociously, but it is likely that some dinosaurs mumbled or cooed with closed mouths,” speculates another study<sup>567</sup> funded in part by NSF<sup>568</sup> and conducted by some of the same researchers.<sup>569</sup>

“No direct fossil evidence exists to reveal what dinosaurs sounded like.”<sup>570</sup> Therefore, “future research by this collaboration will integrate information from fossils, experimental physiology, gene expression and sound modeling to understand the sounds that extinct early avian species, and perhaps their dinosaur ancestors, produced.”<sup>571</sup>

So while this study may dispel the myth of singing dinosaurs, it might help guide researchers closer to creating a kind of dinosaur karaoke.

## **Streetcar Named Undesirable**

**\$65.5 million**

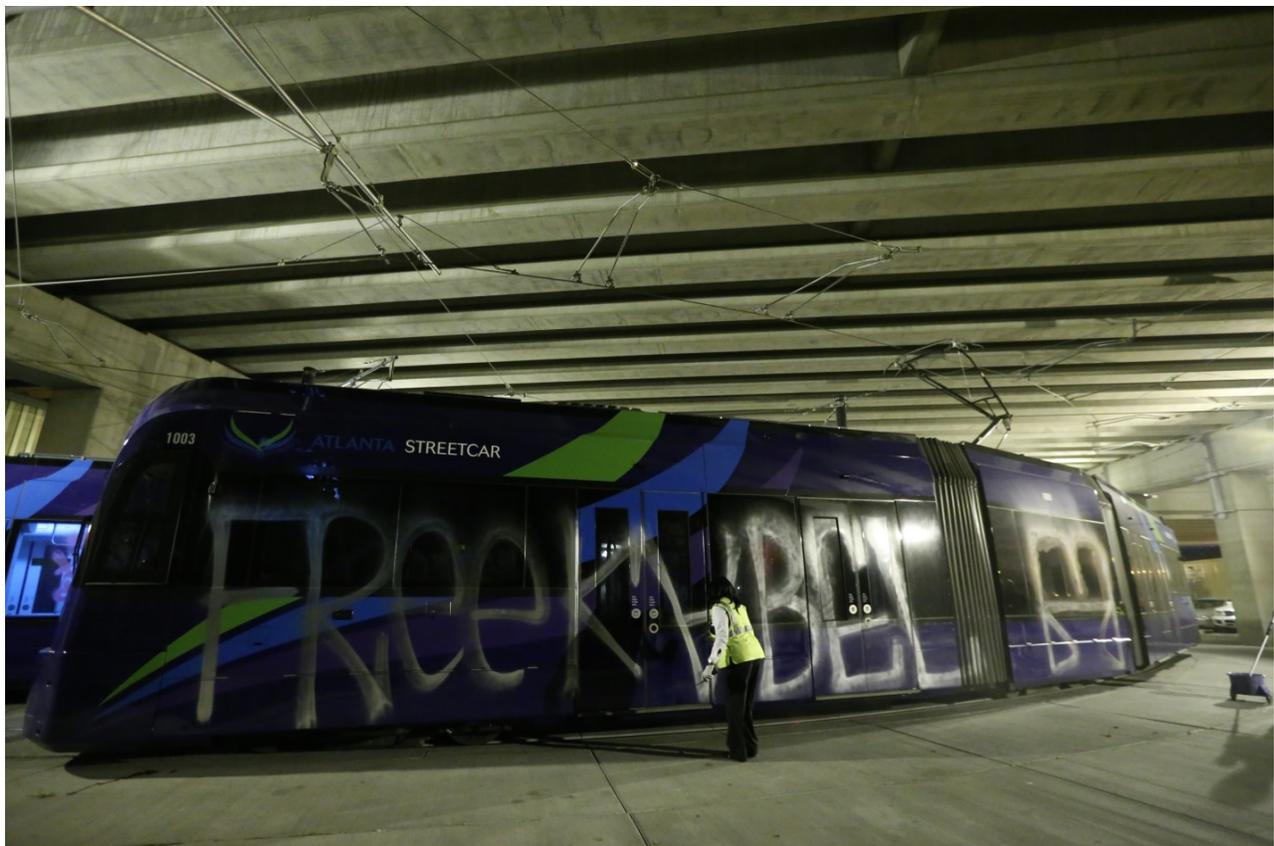
**Georgia**

**Department of Transportation**

Atlanta commuters don't want a free ride from the federal government or the city's new streetcar.

Even before it left the station, the streetcar was plagued with problems, including repeated delays and cost overruns.<sup>572</sup> The price tag for the initial 2.7 mile loop from Martin Luther King Center to Centennial Park was about \$70 million, but ballooned to nearly \$100 million.<sup>573</sup> The four streetcars finally began running in December 2014, nearly a year late, and the ride continues to be bumpy.<sup>574</sup>

The system has almost been derailed by safety concerns, poor management, high staff turnover, equipment failures, and even confusion over who is in charge.<sup>575</sup> Three of the trains were vandalized with graffiti despite being inside a locked and gated facility that was supposed to be patrolled by security guards because one didn't show up, while the other was sitting outside the gate because he forgot his badge.<sup>576</sup> And by taking away a lane from roadways, the



*Exposing lax security, the new Atlanta streetcars were vandalized with graffiti while in a locked and gated facility that was supposed to be patrolled by security guards.*

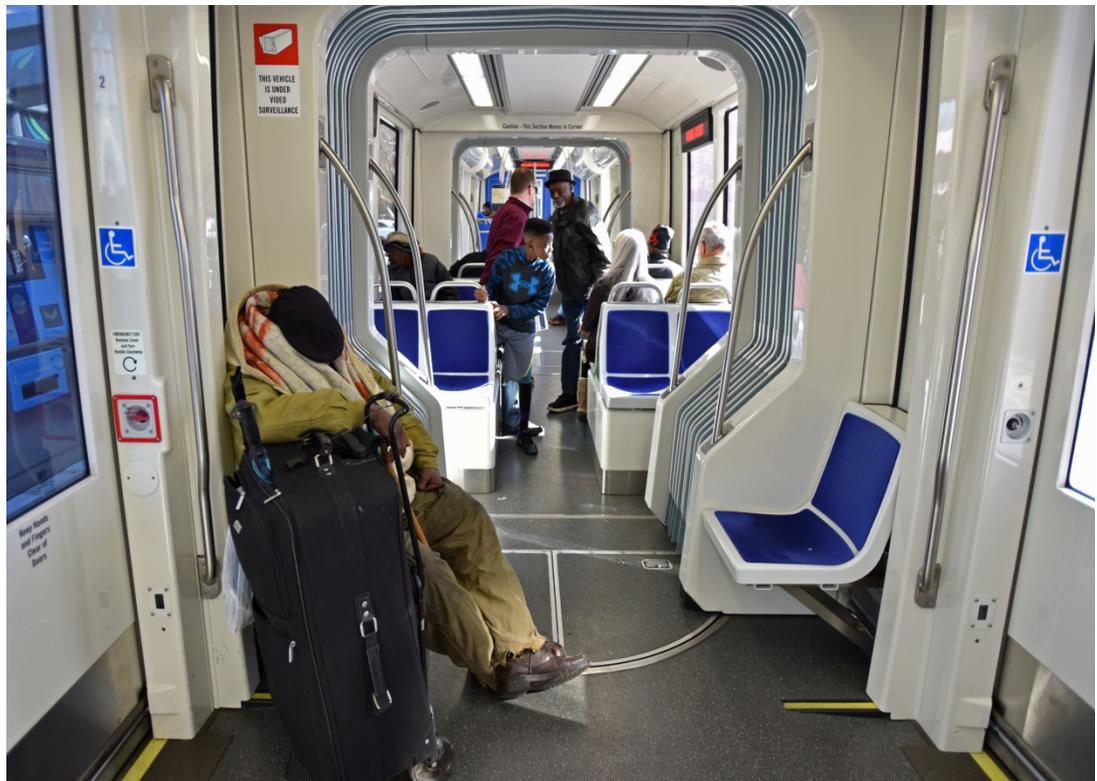
streetcar may be contributing to, rather than alleviating, traffic problems for most commuters through the area.<sup>577</sup>

Two federal Transportation Investment Generating Economic Recovery (TIGER) grants totaling more than \$65 million have supported the project. This includes a \$47.6 million TIGER grant awarded in 2010 and an additional \$18 million provided in 2013.<sup>578 579</sup> Another \$500,000 grant from the Federal Transit Administration (FTA) is being spent for land use planning along a proposed extension of the streetcar system.<sup>580</sup>

The city hopes to add more than 50 miles of tracks, which could cost \$5 billion.<sup>581</sup> These ambitious goals are dependent upon more federal funds.<sup>582</sup> The city has announced plans to “seek future federal funding for the streetcar project,” and Mayor Kasim Reed has boasted “there have been five rounds of TIGER and we’ve won two. And in the two rounds that we won, we got the largest grants.”<sup>583</sup>

What the city cannot brag about is the number of riders on the streetcar.

In 2013, a Metropolitan Atlanta Rapid Transit Authority (MARTA) consultant said more than 1.1 million trips would be taken on the streetcar in the first year if no fare was charged.<sup>584</sup> But even with the free rides, only 900,000 trips were taken in 2015.<sup>585</sup>



*Riders on MARTA streetcar.*

Ridership plummeted in January when the city began charging \$1 per ride<sup>586</sup> or \$3 for an all-day pass.<sup>587</sup> About 74,000 people rode the streetcar each month last year.<sup>588</sup> That number dropped to 32,000 a month in the first quarter of 2016 when the fares were added.<sup>589</sup>

Some of these numbers are estimates made up by the city due to the malfunctioning of its passenger counting technology.<sup>590</sup> The city was seven months behind in providing numbers to the federal government, which was blamed on the departure of the employee in charge of reporting the data.<sup>591</sup> There is also a “discrepancy between fare box revenue and the number of rides.”<sup>592</sup>

An Atlanta journalist who took the streetcar to work for eight weeks wrote “I’ve never been on a car with more than 25 other people; it’s usually about a dozen—in a car that can seat 60 and carry up to 195.”<sup>593</sup>

“Until it connects to something or goes where people want to go, we’re going to have those ridership numbers,” predicts city council member Felicia Moore.<sup>594</sup>

The streetcar is popular with one segment of the population—the homeless. The two-car trains have been described as a “rolling homeless shelter.”<sup>595</sup> “The operators have complained about it being such a stench on the train that it has overwhelmed them to the point where one of the operators got sick because of the smell,” according to PACE Union local president Gina Pagnotta.<sup>596</sup> Because there have been incidents when homeless riders “got a little bit rough with the operators,” Pagnotta says streetcar operators worry for their own personal safety.<sup>597</sup> Pagnotta points out the drivers “have no clear view of what’s going on behind them while they’re in the cab up front and no clear understanding of who’ll come if they feel threatened.”<sup>598</sup>

Those responsible for safety on the streetcar did not even know the emergency procedures if an emergency were to occur. Both the Manager and Director of Streetcar Services admitted they had not read the safety and security plans for the system.<sup>599</sup> The director “denied any active management responsibilities for the system, even though the auditors cited the passages describing the tasks and responsibilities directly from the relevant documentation.”<sup>600</sup>

The confusion is a result of MARTA, which operates the area’s bus and rail services, being forced to be part of the streetcar management by the federal government because the city lacked experience running a transit system. A senior advisor to the mayor, Melissa Mullinax, admits “it wasn’t clear early on who was in charge.”<sup>601</sup> Adding to the turmoil, nearly all of the system’s managers have quit.<sup>602</sup>

The city finally sought outside expertise in June after the state Department of Transportation threatened to shut down the system if 60 specific problems were not promptly fixed.<sup>603</sup>

Mayor Reed tried to cover the tracks by claiming the safety concerns were being driven by a reviewer's personal interests. "In my opinion the consultant for the Atlanta Streetcar, who is not a state employee – she's a private sector consultant – is using this opportunity for her personal gain," the mayor insisted.<sup>604</sup> "I actually think it's in her interest to continue to find things that are wrong."<sup>605</sup>

The list of problems identified from the state, however, followed a previous review by the FTA that found defects with the overhead electrical system, a lack of technical experience, and failures to report accidents.<sup>606</sup>

Streetcar supporters have also exaggerated its impact on economic development. The city claims the system has attracted more than 100 projects along the route, bringing as much as \$2.5 billion in investments to the area. An analysis by the *Atlanta Journal-Constitution*, however, "revealed that some of the major projects touted as being drawn downtown by the streetcar were conceived of before the route was identified in 2008."<sup>607</sup>

Mayor Reed says "this is a project that I believe will be a model for other cities across the United States of America."<sup>608</sup>

The system costs nearly \$5 million a year to run,<sup>609</sup> but is unlikely to bring in even \$1 million from fares. The city says the streetcar's "operating budget will be provided by fare box revenue, advertising, federal grant funds, ADID [Atlanta Downtown Improvement District] contributions, and proceeds from the City of Atlanta's car rental and hotel/motel tax."<sup>610</sup>

Despite the problems, FTA awarded another \$500,000 grant to plan land-use along a proposed 16-mile extension of the streetcar system.<sup>611</sup> "Atlanta Beltline Inc. and the city Office of Planning 'seek to develop a strategic outline of short- and long-term transit supportive land use, housing, and economic development activities along these transit corridors' to better their chances of qualifying for future federal transit funds, according to a request for proposals issued by the Beltline for consultants to work on the plan."<sup>612</sup>

Taxpayers should no longer be taken for a ride to keep Atlanta's streetcar from going off the rails.

## How To Be More Popular Online

**\$2.4 million**

**Georgia**

**Department of Defense**

Want to get more “likes” on your social media posts, add more followers on Twitter, improve online reviews of your restaurant, or successfully raise money on the internet for a crowdfunding project?

The Department of Defense (DOD) is backing research to determine how to be more popular online.

The work is being supported by a \$2.4 million grant from the Defense Advanced Research Projects Agency (DARPA) to the Georgia Tech Research Corporation, which is the contracting entity for the Georgia Institute of Technology.<sup>613</sup> The initiative is part of DARPA’s Social Media in Strategic Communication (SMISC) program which seeks “to counter misinformation or deception campaigns with truthful information.”<sup>614</sup>

The research found a simple formula to increase the popularity of pics on Instagram: Include faces, do not overdo it with the number of posts, and have lots of followers.<sup>615</sup>

The study examined 1.1 million randomly selected photos posted on Instagram.<sup>616</sup> Photos containing faces are 38 percent more likely to receive “likes” and 32 percent more likely to attract comments.<sup>617</sup> The number of faces did not make a difference, nor did the age or gender of the faces.<sup>618</sup>

While the researchers did not determine why users respond to posts with faces, Saeideh Bakhshi, who led the study, speculates it is because “people love to look at faces.” She notes “faces are powerful channels of non-verbal communication. We constantly monitor them for a variety of contexts, including attractiveness, emotions and identity.”<sup>619</sup>

Another factor that increases the number of likes is having a lot of followers. “The higher the number of followers, the more likely it is for the photo to receive likes and comments,” the researchers found.<sup>620</sup>

Posting too many pictures, however, reduces reactions.<sup>621</sup> “The more photos a user posts, the less likely it is that her photos receive likes and comments,” the analysis found.<sup>622</sup>

There are more than 150 million active Instagram users who collectively generate 1.2 billion likes per day.<sup>623</sup> “Since engagement is vital to photo sharing communities, it is critical to understand what form of content drives engagement,” the researchers explain.<sup>624</sup>

“Future work can look at emotional expressions of faces and explore the effects on user behavior. For example, are we more likely to comment on wry smiles or broad grins?,” the researchers suggest.<sup>625</sup> They would also like to determine “if pictures of friends are more or less popular than family group photos, or if selfies attract more attention than group shots.”<sup>626</sup>

Color also has an impact on the popularity of images online, according to another study by the Georgia Tech Research Institute that was supported by the DARPA grant.<sup>627</sup>



“Red, Purple and pink seem to promote diffusion, while Green, Blue, Black and Yellow suppress it,” according to the review of one million images pinned on Pinterest.<sup>628</sup> Black-and-white images are not shared as much as those with color.<sup>629</sup>

The researchers speculate “that Pinterest users are more interested in sharing exciting (Red-colored images) and elegant (Purple colored images) images than cool, cheerful and relaxing ones (Blue, Green, Yellow).”<sup>630</sup>

*To get noticed online and generate more “likes” and comments, post pictures with faces and use a filter to add warm colors.*

“One of the popular ways of editing photos is to apply filters to them, the researchers note, suggesting their findings “can be used to design new filters for images. Filters that increase saturation or enhance the warmth of the image will likely increase engagement with the photo. In other words, a filter that saturates the image and adds Red tint will probably be better than a bluish one, in terms of virality.”<sup>631</sup>

Other findings DARPA lists as generated by the Georgia Tech Research Institute include:

- Customers are more likely to leave bad restaurant reviews when it is raining, snowing or extremely hot and better reviews when it is pleasant and warm outside, according to an analysis of 1.1 million reviews of 840,000 restaurants located across

- the country that were posted online.<sup>632</sup> The researchers found “the weather outside can be just as significant a factor for reviews as what happens inside a restaurant.”<sup>633</sup> Saeideh Bakhshi, who also led this study, says “people love to describe themselves as foodies. But in the end, it looks like we’re all weather people, whether we realize it or not.”<sup>634</sup>
- Twitter’s users can attract more followers by being happy and informative rather than negative and self-centered. These conclusions were based upon a study of the follower counts of 507 Twitter accounts over a 15 month period.<sup>635</sup> Twitter users whose tweets contain informational content, referred to as “informers,” attract followers at a rate 30 times higher than those who tweet about themselves, branded “meformers.”<sup>636</sup> Those who overuse hashtags are less likely to attract new followers. Spelling and grammar are also important for adding followers.<sup>637</sup> “Twitter users apparently seek out well-written content over poorly written content when deciding whether to follow another user,” the researchers found.<sup>638</sup> The researchers acknowledge “other variables” such as “a person’s real-world celebrity status,” may contribute to the growth of Twitter followers.<sup>639</sup>
  - Filtered photos get noticed more. A review of over 7.6 million randomly selected images uploaded to Flickr found filtered photos are 21 percent more likely to be viewed and 45 percent more likely to generate comments.<sup>640</sup> Increasing the warmth with more intense reds and yellows and increasing exposure and contrast “boost engagement the most,” according to the researchers.<sup>641</sup> Pics filtered to add an aging effect with the appearance of dust and scratches “seem to increase views but decrease the number of comments.”<sup>642</sup>
  - It pays to use certain words and phrases to successfully crowdfund projects online, while others terms predict failure.<sup>643</sup> “The driving factors in crowdfunding ranged from social participation to encouragement to gifts,” according to an analysis of 20,000 phrases included in 45,000 crowdfunding projects on Kickstarter.<sup>644</sup> “While offering donors a gift may improve a campaign’s success, the study found the language project creators used to express the reward made the difference,” according to the study supported by DARPA.<sup>645</sup> Projects that successfully reach funding goals include the phrases “also receive two,” “mention your,” “given the chance,” “your continued,” and “we can afford.”<sup>646</sup> Other successful terms include “good karma and” as well as “project will be.”<sup>647</sup> Phrases attached to unsuccessful projects include “not been able,” “even a dollar,” “later I,” “a blank,” and “hope to get.”<sup>648</sup> Interestingly, the Pentagon did not seem to follow its own findings on successful word choice when requesting funding for Fiscal Year 2017. The phrase “not been able,” which has been demonstrated to predict unsuccessful requests for funds, is used and none of the five successful phrases identified are employed.<sup>649</sup>

## **Fannie Mae's Fancy Make-Over**

**\$56 million**

**Washington, DC**

**Federal Housing Finance Agency/ Federal National Mortgage Association**

The Federal National Mortgage Association, or Fannie Mae, which was bailed out and taken over by the federal government amidst the 2008 financial crisis, is relocating to a fancy new headquarters with bridges made of glass and rooftop decks overlooking downtown Washington.

A government watchdog is warning the escalating costs of the lavish building, which have increased by more than 50 percent, pose “significant financial and reputational risks” to the already troubled government-sponsored enterprise. The director of Fannie Mae’s conservator, the Federal Housing Finance Agency (FHFA), is not concerned, however, and says the price could get even more expensive.<sup>650</sup>

With the lease on its largest property expiring in 2018, Fannie Mae decided to relocate and consolidate its thousands of employees who have been spread among numerous locations throughout the Washington, DC area into a new headquarters.<sup>651</sup>

Presented with three options, Fannie Mae chose to lease space in the Midtown Center, a new building now under construction in downtown DC that is owned by Carr Properties.<sup>652</sup> The building will include two wings separated by a large, open and landscaped courtyard.<sup>653</sup> The architectural features will include three enclosed glass bridges connecting different parts of the buildings, “town centers” at the end of each bridge, spiral staircases, and rooftop viewing decks.<sup>654</sup>



*Despite, or perhaps because, it was bailed out and taken over by the federal government, Fannie Mae has little incentive to control the costs of its extravagant new headquarters.*

The selection of the Midtown Center “was based primarily” on its lower price compared to the competing relocation proposals.<sup>655</sup>

The cost of the project, however, has “escalated,” according to a review by the FHFA Office of Inspector General (OIG).<sup>656</sup> “Over a 14-month period from January 29, 2015, when FHFA approved Fannie Mae’s proposal to relocate to 700,000 square feet in a new building,” the OIG calculated “the projected build-out costs escalated from \$164.32/square foot to \$252.81/square foot, an increase of \$88/square foot—or 53.85 percent.”<sup>657</sup> At the same time, “the estimated square footage for the leased space had declined from 700,000 square feet to 679,000 square feet. With the reduced square footage, the increased cost for the build-out exceeded \$56 million (from \$115 million to \$171 million),” according to the OIG.<sup>658</sup>

“It does not appear to us that anyone in” FHFA’s Division of Conservatorship (DOC) “was aware of the projected 53 percent increase in estimated build-out costs for Fannie Mae’s new office space,” the OIG notes.<sup>659</sup>

Even though it is not owned by the federal government, the building’s plush features are coming at a big price to taxpayers. “Fannie Mae has agreed to pay 70 percent of the costs to construct the glass bridges; the cost to Fannie Mae for these bridges, if they are built, will be about \$15 million,” the OIG reports, noting “we were not able to determine from Fannie Mae’s budget documents whether Fannie Mae has agreed to pay all or part of the costs for any of the other proposed features.”<sup>660</sup>

The OIG questions whether paying for such fancy features “in a building that is not owned by Fannie Mae or the U.S. government are appropriate for an entity in conservatorship.”<sup>661</sup>

Since it is surviving on government subsidies, Fannie Mae does not seem concerned with the costs of the project, according to the OIG.<sup>662</sup> With its “continued operations were made possible by the \$116.1 billion investment by U.S. taxpayers,” Fannie Mae “arguably has little incentive to cabin its costs for the buildout of its new headquarters because any positive net worth it does not spend on itself will be swept into the Treasury as a dividend. Excessive or unnecessary spending by Fannie Mae may be seen as monies that ought to have been swept to the U.S. Treasury as a dividend for the \$116.1 billion investment by U.S. taxpayers. For these reasons, we believe there are significant financial and reputational risks from the projected costs associated with Fannie Mae’s relocation of its headquarters that warrant immediate, sustained comprehensive oversight from FHFA, the conservator of Fannie Mae,” the OIG warns.<sup>663</sup>

While the FHFA was made the conservator of Fannie Mae to protect taxpayers from further financial liability, the agency’s director, Melvin Watt, “strongly” disagrees with the OIG’s



*Fannie Mae is spending an extra \$15 million to construct three enclosed glass bridges in the mortgage lender's new headquarters.*

alert.<sup>664</sup> Watt dismisses the claim that Fannie Mae is not concerned about expenses is “based on a faulty assumption.”<sup>665</sup> He says “the cost of any construction project is inherently dynamic.”<sup>666</sup> Watts says “while spiral staircases may sound extravagant, they take up significantly less space than regular staircases and taking the stairs generally leads to better employee fitness and efficiency than taking elevators. Additionally, bridges that connect tenant spaces in different office towers facilitate employee collaboration by allowing employees to move efficiently throughout the space, and ‘Town Centers’ are an essential part of the new ‘open-office’ design concept that has proven to both save space and encourage employee collaboration and efficiency.”<sup>667</sup> He indicates other upgrades may be added that could further increase costs. “There are numerous other options under consideration that will require difficult decisions that balance their upfront costs against their longer-term benefits.”<sup>668</sup>

On its website, Fannie Mae boasts that it provides “stability and affordability” to homebuyers “in a disciplined fashion while maintaining our credit standards and minimizing losses.” The agency should provide the same assurances regarding its own dwelling to taxpayers who will be paying the rent.

## The Big House

\$326,000

Virginia

Federal Emergency Management Agency

The federal government is spending \$326,000 for improvements to a private home valued at \$331,000 that is repeatedly damaged by flooding and owned by a former Olympic gold medalist and repeat convict.<sup>669</sup>

The house, located on Harbor Drive in Hampton, Virginia, belongs to Steven E. Riddick, and floods frequently.<sup>670</sup> Riddick, who also has a residence in Maryland, does not even live in the house full time.<sup>671</sup>

The money provided by the Federal Emergency Management Agency (FEMA) flood mitigation program is being spent to raise the house to reduce the risk of damage from flooding.<sup>672</sup> It is located less than 100 feet from a tributary to the nearby James River.<sup>673</sup>

Riddick won a gold medal in the 4x100-meter relay at the 1976 Olympic Games.<sup>674</sup>

In 2000, Riddick pleaded guilty to a forgery charge related to “travel expense irregularities” while he was a coach at Norfolk State University.<sup>675</sup> In a separate incident, he was convicted again in 2007 for counterfeit check cashing.<sup>676</sup>

Riddick was already applying for federal mitigation grant money well before he was released from prison in 2012 and finally took home the gold for his home in 2016.<sup>677</sup>



*The federal government is spending \$326,000 for improvements to this home valued at \$331,000 owned by a former Olympic gold medalist and repeat convict.<sup>1</sup>*

Very few homeowners in Virginia receive the flood mitigation assistance. “Localities forwarded only six of these grant applications to the Virginia Department of Emergency Management last year, according to Robbie Coates, a grants manager for the department.”<sup>678</sup> Statewide, 322 properties were classified as “severe repetitive loss,” with 53 of them—including Riddick’s home—located in Hampton.<sup>679</sup>

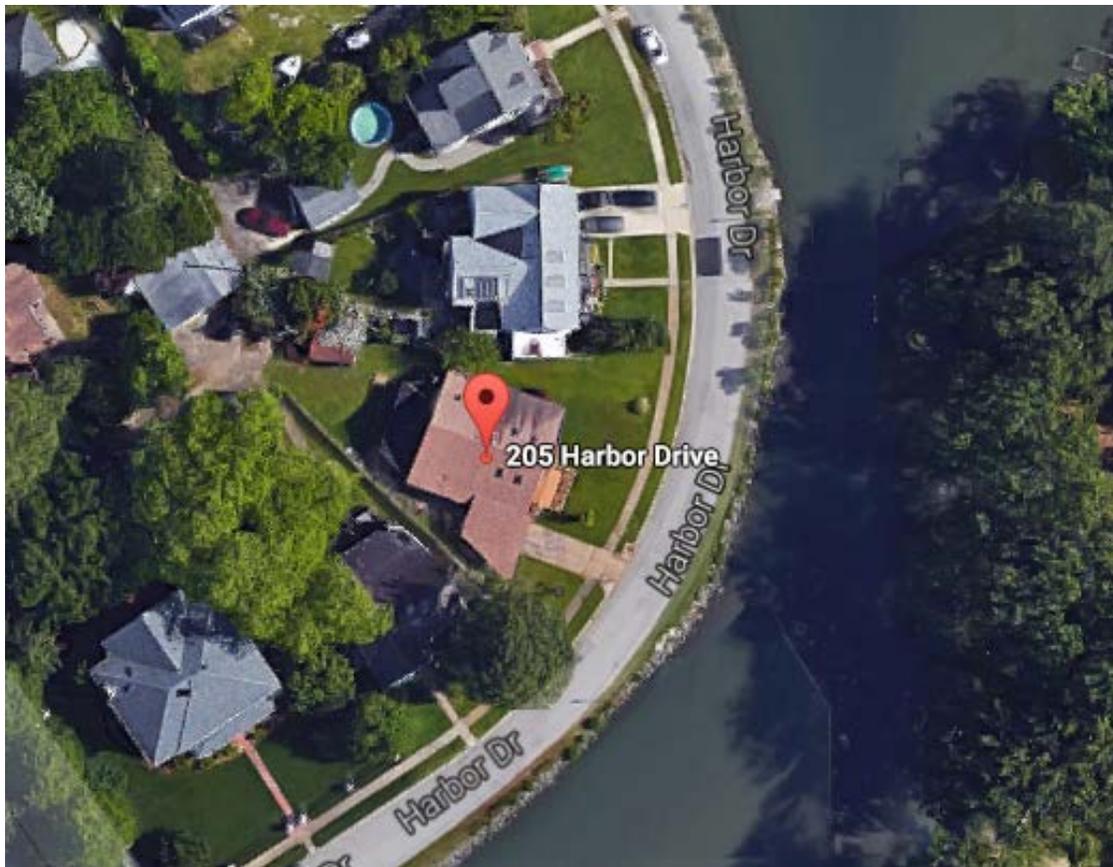
To qualify for “Severe Repetitive Loss,” more than \$20,000 of flood damage claim payments have been made by the federal flood insurance program or the cumulative payments made must exceed the market value of the building.<sup>680</sup>

“Riddick’s grant application lists 10 flooding events from 2003 to 2012, costing more than \$343,000 in insurance claims.”<sup>681</sup>

The National Flood Insurance Program (NFIP) is underwater itself, being more than \$20 billion in debt.<sup>682</sup> Despite this rising tide of red ink, the program was recently revised to provide owners 100 percent reimbursement for the price of elevating their homes. This “has been controversial because many homes along the coast are owned by the wealthy and the flood-insurance and elevation grant programs do not look at income as a basis for reimbursement.”<sup>683</sup>

“Riddick’s home is valued at about \$331,200, and U.S. taxpayers will spend nearly \$326,000 to raise it,” according to the *Newport News Daily Press*.<sup>684</sup>

“Is that a problem?” Riddick asked when questioned about the taxpayer money he obtained to pay for renovations to his flood prone home.<sup>685</sup> It may be a problem for taxpayers, but this scheme is perfectly legal.



The house, which is less than 100 feet from a tributary to the nearby James River, is prone to flooding.<sup>686</sup>

## **The Flying Monkey**

**\$206,000**

**Connecticut**

**NASA**

The flying monkey has been unleashed.

Not to catch Dorothy and her little dog Toto, but as part of a NASA-funded project “to create a prototype of a high altitude robotic monkey puppet, which can operate in near space conditions.”<sup>687</sup>

This High Altitude Monkey, or HAM, is “made out of soft wood with servos attached” to control its motions.<sup>688</sup> HAM is named after the first chimpanzee to travel into space in 1961.<sup>689</sup>

The robot monkey will fly on a high-altitude balloon (HAB) designed to look like a 1960s Project Mercury space capsule.<sup>690</sup> HAM will ride in the payload of the helium balloon 100,000 feet above the Earth before returning by splashing down into the Atlantic Ocean.<sup>691 692</sup> The flight will only last a few hours.<sup>693</sup>

The robotic puppet monkey was created at the University of Bridgeport with the support of a \$6,000 NASA Connecticut Space Grant Consortium (CSGC) Faculty Seed Money Grant.<sup>694 695</sup> NASA is spending another \$200,000 to fly the monkey on missions over the next two years.<sup>696</sup> The HAM HAB flights will be “conducted several times per year.”<sup>697</sup>

“The robotic puppet looks like an upper body of a chimpanzee and has a head and arms that move.”<sup>698</sup> The robot’s motions include wave, clap, thumb up, thumb down, press a button, and touch heart.<sup>699</sup> The monkey’s motions “are definitely not continuous. Several combinations of gestures will be programmed and will be pre-timed to be repeated throughout the flight.”<sup>700</sup>

The first launch of the flying monkey project was planned for December 2015 but was postponed “due to unfavourable weather conditions.”<sup>701</sup> The flight is now planned for this fall.<sup>702</sup>

The robot monkey will be monitored by three cameras during its flight with the video feed transmitted to ground control.<sup>703 704</sup>

The flying monkey team has indicated they may “apply for additional funding from the Department of Education which has supported projects where ‘puppets’ are used to teach STEM subjects.”<sup>705</sup> The grant application concedes “from working with children we know the

view from a high altitude balloon may not (unfortunately) enthrall a younger student [grades Pre-K – 6] for very long. And the thought was (as unusual as it may sound), ‘What if the children had a little friend onboard the HAB that they could interact with?’ The ‘friend’ has become a robotic monkey.”<sup>706</sup>

If NASA hopes to relaunch a manned space program anytime soon, the agency needs to stop wasting money on this type of monkey business.



*NASA’s robotic High Altitude Monkey was named HAM, after the first chimpanzee to be launched into space.*

## **Unused E-Mail Archiving Service**

**\$12 million**

**Washington, DC**

**Internal Revenue Service**

The IRS spent \$12 million on an e-mail archiving system that it could not and did not use.

While the IRS has been paying subscription and renewal fees over the past two-years beginning in June 2014 for the service, the software to activate the program was never even deployed, according to a review by the Treasury Inspector General for Tax Administration (TIGTA).<sup>707</sup>

TIGTA says the purchase of the unused system “was made without first determining project infrastructure needs, integration requirements, business requirements, security and portal bandwidth, and whether the subscriptions were technologically feasible on the IRS enterprise.”<sup>708</sup>

The IRS’s current e-mail system lacks archive capability. It is also approaching the end-of-support by the manufacturer and “is experiencing numerous failures resulting in a significantly increased workload” for support staff.<sup>709</sup>

“If the IRS does not efficiently upgrade its e-mail environment, it could adversely affect the IRS’s ability to effectively perform tax administration,” warns TIGTA.<sup>710</sup>

The Office of Management and Budget (OMB) directed all federal agencies to have a system to archive e-mails by December 2016.”<sup>711</sup>

In addition to wasting taxpayer money, the IRS violated a number of federal procurement rules with the purchase of the e-mail archiving system.

“By not using full and open competition to purchase these subscriptions,” the IRS violated Federal Acquisition Regulation requirements.<sup>712</sup>

IRS may have also “violated the bona fide needs rule when it purchased the subscriptions in Fiscal Years 2014 and 2015 by using Fiscal Years 2014 and 2015 appropriations and not deploying the software subscriptions in those years,” says TIGTA.<sup>713</sup> The bona fide needs rule states “an appropriation should not be used for the purchase of an article not necessary for the use of a fiscal year in which ordered merely in order to use up such an appropriation.”<sup>714</sup>



*The IRS spent \$12 million on an e-mail archiving system that it could not and did not use.*

By justifying the enterprise e-mail project “an upgrade to existing software and not a new development project or program,” the IRS Information Technology organization “did not follow the Internal Revenue Manual Enterprise Life Cycle guidance.”<sup>715</sup>

While the agency’s Chief Information Officer stated “we strongly disagree that the IRS wasted taxpayer dollars,” the IRS “allowed the contracts for these subscriptions to expire on June 19, 2016.”<sup>716</sup>

## Hamster Cage Match

**\$3.4 million**

**Massachusetts**

**National Institutes of Health**

The contenders are divided into weight classes then pitted against each other in timed bouts. The challenger who scores the most points by making contact with his opponent is declared the winner and advances to the next contest.

Unlike professional sports, this competition allows steroid use, there are no penalties, biting is permitted, and the contenders are not even human.

It's all part of the taxpayer-funded hamster cage match.

Over the past 20 years, juvenile male hamsters have been pitted against one another by researchers at the Northeastern University in Boston to study aggression and anxiety in the rodents. The contests are being sponsored by the National Institute on Drug Abuse (NIDA), which has provided more than \$3.4 million for the research to date.<sup>717</sup> Syrian hamsters are good “guinea pigs” for these experiments because they are by nature both solitary and territorial and will fight if they come into contact with one another. So far, more than 1,000 hamsters have taken part in the experiments.<sup>718</sup>



*Over the past 20 years, juvenile male hamsters have been pitted against one another by researchers at the Northeastern University in Boston to study aggression and anxiety in the rodents.*

One of the studies tested—and validated—the “winner effect,” a phenomenon that occurs when an animal with a history of winning fights is favored to succeed in future encounters.<sup>719</sup> This was done by training a group of young male hamsters to fight and then entering them into a tournament where the winning hamster advanced to fight another opponent.<sup>720</sup>

As part of the training, an “intruder” was put into the cage of a “resident” hamster each day over a two week period.<sup>721</sup> “To increase the probability that residents would experience winning during the training phase, encounters were biased” by matching them against physically inferior intruders who were smaller in size.<sup>722</sup>

“Each training session lasted for 20 minutes and was qualitatively assessed.”<sup>723</sup> A scorekeeper “recorded the frequency of attacks, bites, and retreats made by each hamster. An attack was scored each time the animal physically assaulted its partner. The winner/loser status was established when at least three attacks occurred during the trial, consistently initiated by the same individual and eliciting avoidance or freezing behavior from the opponent.”<sup>724</sup>

A group of prize-winning trained hamsters who had never lost a fight then went on to a tournament. But instead of taking one another on, they were matched against untrained hamsters.

The new set of intruder animals was of equal size and weight to the trained hamsters. Again, the matches were scored for “specific and targeted aggressive responses including upright offensive postures, lateral attacks, flank bites, and rump bites.”<sup>725</sup> The researchers explain “an attack was scored each time the resident animal would pursue and then either lunge toward and/or confine the intruder by upright or sideways threat each generally followed by a direct attempt to bite the intruder’s dorsal rump and/or flank area(s). A composite aggression score, used as a general measure of aggression, was defined as the total number of attacks (i.e., upright offensives and lateral attacks) and bites (i.e., flank or rump bites).”<sup>726</sup>

Two scorekeepers tallied the points during the matches, which lasted for ten minutes and were videotaped, and a winner and loser declared.<sup>727</sup>

Repeated daily fighting significantly increased the probability of winning. “By day 5 of training, half of the resident animals began to acquire a consistent winning status in all or most” of the future contests.<sup>728</sup> The “trained fighter” hamsters also “displayed elevated fighting behaviors characterized by more intense and severe displays of aggression along with increased displays of dominant postures compared to naïve residents with no prior social experience.”<sup>729</sup>

“Our overall findings suggest the presence of the winner effect in hamsters, though further investigation is necessary,” the researchers report.<sup>730</sup> “These increases in aggression

observed after repeated winning may reflect a learned behavior resulting from increases in neurotransmitter activity which serve to reinforce the behavior.”<sup>731</sup>

To turn it up a notch, some hamsters were pumped up with steroids in another series of cage matches funded by the same grant.<sup>732</sup>

A group of juvenile male hamsters was injected with a shot of anabolic/androgenic steroids (AAS) for 30 consecutive days.<sup>733</sup>

“The results are chilling. Within ten minutes, the steroid-injected hamsters become violent, vicious. They are not cute and cuddly anymore. They attack one another.”<sup>734</sup>

The hamsters with roid rage were then pitted one-on-one against hamsters of similar size and weight that were not given steroids but had demonstrated aggressive behaviors.<sup>735</sup>

Each face-off was timed for 10 minutes and videotaped. Two scorekeepers observed the matches and awarded the hamsters points for biting, pursuing, and lunging at the other animal.<sup>736</sup>

Training Day

Animal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	Win	Win	Loss/neutral	Loss/neutral	Loss/neutral	Loss/neutral	Loss/neutral	Loss/neutral	Win	Loss/neutral	Loss/neutral	Loss/neutral	Loss/neutral	Loss/neutral
B	Loss/neutral													
C	Loss/neutral	Loss/neutral	Loss/neutral	Win	Loss/neutral									
D	Loss/neutral													
E	Loss/neutral	Win	Loss/neutral											
F	Loss/neutral													
G	Win	Loss/neutral												
H	Win													
J	Loss/neutral													
K	Loss/neutral													
L	Loss/neutral													
M	Loss/neutral	Win	Loss/neutral											
N	Loss/neutral													
O	Loss/neutral													

= Win     
  = Loss/neutral

The cage match scoreboard reveals that the more hamsters trained to fight, the more they won.<sup>737</sup>

The researchers explain, “an attack was scored each time the resident animal would pursue and then either [1] lunge toward and/or [2] confine the intruder by upright and sideways threat; each generally followed by a direct attempt to bite the intruder’s dorsal rump and/or flank target area(s).”<sup>738</sup>

The hamsters on steroids acted significantly more aggressive. “In fact, AAS animals exhibited a greater than tenfold increase in number of rump/belly attacks and were four times faster to attack intruders compared to” the hamsters who were not given steroids.”<sup>739</sup>

“In summary, these studies provide data that indicate that moderate dose AAS exposure during adolescence and adulthood differentially modulates aggression and anxiety in hamsters. Specifically, these data show that moderate dose adolescent AAS exposure significantly increases aggressive responding during the adolescent AAS exposure period but not during AAS withdrawal while increasing anxiety-like responding during AAS withdrawal but not during the adolescent AAS exposure period,” according to the researchers.<sup>740</sup>

These findings do echo much of what has been known about the behavioral issues caused by abusing steroids. Some experts, however, caution against drawing conclusions about the long-term impact on humans based upon studies of hamsters over a very short period. Professor Jonathan Seckl of the University of Edinburgh, for example, noted that hamster research “showed effects for a few days, and you can’t say that will translate into years for humans.”<sup>741</sup>

Unlike humans, hamsters also have a natural tendency to fight.<sup>742</sup> That is, after all, precisely why they are being used in these experiments.

Richard Melloni, one of the researchers conducting these experiments, admits “Hamsters like to fight.”<sup>743</sup> But he claims “our hamsters live charmed lives. They have food and water, they’re warm, they have no predators. [The only catch is that], every once in a while, we ask them to do what they’d do anyway – defend their territory. The worst they receive is a shot.”<sup>744</sup>

After twenty years of cage matches, it is time to get taxpayers off this hamster wheel.

## **Sick Art**

**\$1.2 million**

**Florida**

**FBI**

Nearly \$1.2 million was spent to purchase, install, and then remove a giant wooden sculpture from the FBI's Miami field office which caused severe allergic reactions that hospitalized at least a dozen staffers, including the facility's nurse.<sup>745</sup>



The General Services Administration (GSA) paid artist Ursula von Rydingsvard \$750,000 to design the piece specifically for the site.<sup>746</sup> Made of 30 pieces of Western Red Cedar imported from Vancouver, the sculpture stands 17 feet tall in the lobby of the building and weighs more than 15,000 pounds.<sup>747</sup> Titled "Cedrus," the statue is meant to resemble a tornado.<sup>748</sup>

Not long after being installed in 2015, cedar dust from the sculpture began making some staff members sick. None of those who became ill were able to return to the office and one employee being hospitalized for 11 days.<sup>749</sup>

*Nearly \$1.2 million was spent to purchase, install and then remove this giant wooden sculpture from the FBI's Miami field office that caused severe allergic reactions that hospitalized at least a dozen staffers, including the facility's nurse.*

The facility's only nurse was among those most severely affected and had to be relocated to an off-site location.<sup>750</sup> "Upon the installation of the art sculpture, the nurse developed rhinitis, difficulty swallowing, sinus pressure, sneezing, has difficulty breathing and began to itch all over," the FBI explained in a letter to officials at GSA.<sup>751</sup> "We have only one nurse at this time who is responsible for approximately 1,000 employees," the letter stated, noting "she is not able to perform her job duties being at an off-site when her health unit is in the federal building."<sup>752</sup>

Despite being alerted to the health problems being caused by the sculpture, Michael Goodwin, the GSA's southeast regional commissioner, rebuffed requests to remove the sculpture.<sup>753</sup>

"Mr. Goodwin resisted the FBI's request to remove the artwork, inexplicably ignoring that 17 Miami field office employees became ill following its instillation," says Richard Haley, the FBI's assistant director of finance overseeing department property.<sup>754</sup> "Mr Goodwin appeared to be concerned only for the artwork."<sup>755</sup> Goodwin suggested the FBI's effort to protect workers by wrapping Cedrus in tarp had "endangered" the artwork.<sup>756</sup>

The sculpture was finally removed in October 2015 and sent into storage, which cost an estimated \$412,000.<sup>757</sup> "Because the FBI does not own the building and did not commission the artwork, it wanted GSA to pay to have it removed, according to POLITICO.<sup>758</sup> "Neither agency would confirm the exact price" or who paid the cost, but "emails indicated the FBI was on the hook."<sup>759</sup>

The sculpture was shipped to GSA's fine arts facility in Alexandria, Virginia and then put into a storage facility in Maryland.<sup>760</sup> A GSA spokeswoman says "Cedrus is now temporarily stored in Maryland until a permanent home has been identified."<sup>761</sup>

## **Golf Tournaments And Dragon Boat Races**

**\$892,000**

**Florida**

**Department of Transportation**

Golf tournaments, a music and wine festival, holiday wine glasses, and a private boat cruise were among the questionable expenses made by the Lake-Sumter Metropolitan Planning Organization (MPO),<sup>762</sup> a regional transportation planning agency in Florida which “receives more than \$100 million in federal and state transportation funding each year.”<sup>763</sup>

The MPO continually overspends its budget while handing out money to organizations unrelated to the agency’s mission, according to the findings of an audit by the Lake County Florida Clerk of the Circuit and County Courts Division of Inspector General.<sup>764</sup> The audit found more than \$892,000 of questionable charges to grants over a four year period.<sup>765</sup>

Furthermore, the agency’s employees routinely do not show up for work, cook the books to hide how public funds are being spent, file fake spending reports late, and solicit contractors to pay for staff dinner parties.<sup>766</sup>

Headquartered in Leesburg, Florida, the MPO is “the lead agency for regional transportation planning” for Lake and Sumter counties in Florida and prioritizes “the allocation of millions of dollars in federal transportation funding annually.”<sup>767</sup>

The MPO claims it “helps citizens speak with one voice to their state and federal legislators on transportation-related issues,” noting “effective public involvement ensures scarce tax dollars are used in accordance with the greatest needs and desires of the community.”<sup>768</sup> In practice, however, the MPO has been serving the needs and desires of its staff, particularly the MPO director.

For years, the director has spent MPO funds “for questionable purposes,” ranging from a holiday cruise for MPO staff to paying for sponsorships of more than 30 events that do “not serve a legitimate business purpose for the MPO.”<sup>769</sup> These include the entry fee for the YMCA in a Dragon Boat event “at a time when the MPO Director was on the Board of the YMCA.”<sup>770</sup> The MPO “routinely” pays for the director’s lunch at special events, and in numerous instances “has been paying extra to allow the MPO Director to speak at the luncheon or breakfast event.”<sup>771</sup>

Financial irregularities are pervasive, from routinely overspending the office budget to widespread grant mismanagement.<sup>772</sup> The audit concluded “that a significant portion of the MPO’s receipts and disbursements are inappropriate and are not accounted for properly” and “that a significant portion of MPO activities are not approved, appropriate or in compliance with grant documents, contracts, and other agreements.”<sup>773</sup>

While the MPO was misspending funds, it was also running a deficit, staying afloat only with financial bailouts from the county.<sup>774</sup>

“The MPO is not self-supporting and is using the County’s bank account to fund operations,” according to the Inspector General.<sup>775</sup> “This situation is occurring off-the-books on a day-to-day basis because the MPO’s cash is commingled in the same bank account as County funds. If only the MPO’s funds were in the bank account, the MPO would consistently be operating in a deficit situation, and its operations, as currently structured, could not continue.”<sup>776</sup>

From July 1, 2014 through June 30, 2015, the balance was never positive. The deficit was never less than \$131,424. On September 12, 2014, the balance due to Lake County rose to nearly \$480,000.<sup>777</sup>

“The fact that a balance has been due to Lake County for several years shows that the MPO is not able to sustain its operations consistently and cannot pay its obligations when they come due. Also, the need for the MPO to use the County’s consolidated cash account to this extent demonstrates that the MPO is not independent of the County. There is no agreement between the MPO and the County that obligates the County to fund MPO operations,” according to the Inspector General.<sup>778</sup>

“Mismanagement of grants has occurred consistently,” according to the Inspector General.<sup>779</sup> “There is a lack of accountability over expenditures of grant funds, including reporting false expenditures to the Florida Department of Transportation, the agency providing grants to the MPO. These reports, which identified only an apportionment of the budget rather than the required actual expenditures, were signed by the MPO Director. Further, the Director’s emphasis seemed more on charging expenditures to grants where funds were available, rather than making sure expenditures charged to the grant were actually expended on activities related to the grant.”<sup>780</sup>

The Inspector General audit found “the MPO Director has not exercised adequate administrative control over MPO staff, MPO activities, and MPO funds. As a result, there is little assurance that some staff have routinely worked their required hours, and the establishment of a team environment with staff has been hindered. The Director has adopted a practice, without formal MPO Board approval, of largely working from home. He has allowed some of the staff members to also work from home a significant part of the week. He has not established adequate performance measures to ensure the staff members are actually working,

nor has he sought MPO Board approval for a work from home policy. As a result of this situation, we cannot provide reasonable assurance that the Director and staff, who work largely from home, are working their required number of hours.”<sup>781</sup>

MPO staff have created a “perception of public corruption” by soliciting contributions from contractors for agency’s annual dinner party.<sup>782</sup> The Inspector General found “each year the MPO sends out letters to various firms that it has consulted or worked with announcing the annual awards dinner” as well as the “benefits that will be given if the firm sponsors’ the event with a monetary contribution.”<sup>783</sup> The OIG “surveyed a list of the firms that were sent a letter for the January 2015 dinner and two of them acknowledged that MPO staff has called them directly asking for a contribution. One of the consultants was a contractor for the MPO for several years and expressed that he has stopped doing business with the MPO because he believes that the organization has a different philosophy of doing business than he does, and different from that of the County, as well. He further stated that it is his opinion, and generally known by other firms, that the distribution of work on task orders is tied to contributions.”<sup>784</sup>

The audit was initiated as a result of a whistleblower, who is now threatening a lawsuit because she claims the MPO director is retaliating against her.<sup>785</sup>

The MPO’s executive committee, which is made up of elected officials from Lake and Sumter counties, has shown little outrage about the mismanagement of the agency or its misuse of public funds.<sup>786</sup>

During a special meeting in April to discuss the audit, the chair of the MPO board, Lake County Commissioner Leslie Campione, defended the expenditures for sponsoring events like the dragon boat event, wine festival, and golf tournament. “I personally think that this is an important part of getting the public’s participation and figuring out which projects get priority and how we do them in a way that has the most positive impact and least negative impact,” she said at the meeting.<sup>787</sup>



Despite the audit's findings that current MPO employees do not even show up to work, Campione suggested the financial irregularities could be solved by hiring a new staff member specifically to handle the agency's finances.<sup>788</sup>

The Florida Department of Transportation "is currently reviewing invoices paid to the MPO under state and federal grants to determine any ineligible expenses," says the department's spokeswoman Jessica Ottaviano.<sup>789</sup> She notes "the grant agreement allows FDOT to perform several actions, which include withholding future reimbursements, demanding repayment of ineligible costs and terminating or temporary suspending the project."<sup>790</sup> FDOT, however, is focused on just \$17,000 of the spending questioned by the audit.<sup>791</sup>

The MPO has been called a "rogue agency" by the *Orlando Sentinel* and the newspaper has called for the firing of its director.<sup>792</sup>

But the members of the MPO executive board have stood by the director, T.J. Fish. Clermont City Council member Ray Goodgame, one of seven members of the executive board says, "I don't know of anyone who would do a better job."<sup>793</sup>

Fish himself insists "I'm good at my job and I'll continue to do my job well."<sup>794</sup> Noting he has been the director of the MPO for 11 years,<sup>795</sup> Fish says "I guess I need to be humbled occasionally."<sup>796</sup> Regardless, he declares "I'm unapologetic."<sup>797</sup> Fish points out that the MPO is "legally an independent agency" and vows "we're going to further assert our independence from Lake County."<sup>798</sup>

Despite years of spending grant money on items not related to transportation, Fish admits "at the local level our road infrastructure is deteriorating at a rate we are not keeping up with."<sup>799</sup>



*The chair of a Florida transportation planning board defended spending thousands of dollars of grant funds to pay for sponsorships of Dragon Boat Festivals and other unrelated events as "an important part of getting the public's participation and figuring out which projects get priority."<sup>800</sup>*

## **Minecraft: The Berkshires Edition**

**\$36,700**

**Massachusetts**

**Environmental Protection Agency**

While many communities across the country were confronting the possibility that old pipes could be contributing to dangerous levels of lead in drinking water, the Environmental Protection Agency (EPA) was literally playing games with taxpayer money.

The group Greenagers, based in Great Barrington, Massachusetts, went gaming for federal funds to develop a Minecraft video game customized specifically for the Berkshires and scored \$36,700 from the EPA. The Environmental Education grant is supporting “Crafting the Landscape,” a program that uses the popular video game Minecraft to “to engage kids in an environmental conversation.”<sup>801 802</sup>

“Experience with or willingness to learn MineCraft” was one of the few required skills listed on the job announcement for a position with the “Crafting the Landscape” program posted by Greenagers.<sup>803</sup> Players of Minecraft build their own virtual worlds with three dimensional blocks, like a computerized version of Legos.<sup>804</sup>

About 100 students “will work with their forests, watersheds, and local agriculture by creating virtual communities and environmental goals in the video game, Minecraft, and translating these goals into service projects in the community,” according to the EPA.<sup>805</sup>

This initiative is blending “virtual insights” from playing the classroom version of the video game, MindcraftEdu, with “hands-on projects” around the Berkshires “to help shift students’ realities.”<sup>806</sup>

Life in the Berkshires has long been a shift in reality to many. The region stretching through the mountains of western Massachusetts became a “favorite summer retreat and playground for the aristocracy in the Gilded Age, when the barons of business erected” large mansions referred to by the locals as “cottages.”<sup>807</sup> Andrew Carnegie, Harley Proctor of Proctor and Gamble Co., George Westinghouse, the Vanderbilt’s and “many others who formed the American Aristocracy” all owned estates in the Berkshires.<sup>808</sup> Pulitzer Prize-winning American novelist Edith Wharton wrote that the area has “its own tonic effect on me,” while novelist Henry James, expounded “I am very happy here, surrounded by every loveliness of nature and every luxury of art, and treated with a benevolence that brings tears to my eyes.”<sup>809</sup>

The \$36,700 spent on this grant may seem relatively small, especially by Berkshire standards. That amount, however, could have gone a long way in less affluent areas. Service

lines containing lead, which cost an average of \$5,000 each to replace, could have been upgraded in Flint, Michigan, for example.<sup>810</sup>

Instead of pouring money down the drain in virtual worlds, EPA should target resources to fixing real problems in the real world.



*The EPA paid to have a version of the popular video game Minecraft customized specifically for the Berkshires.*

## **Government Cheese**

**\$21.8 million**

**Nationwide**

**U.S. Department of Agriculture**

There is more surplus cheese stored in refrigerated warehouses in the U.S. than at any time since the records were first taken 100 years ago, according to the U.S. Department of Agriculture (USDA).<sup>811</sup> Cheese sales in some parts of the country are “lagging behind production rates, causing stocks to accumulate,” the USDA notes.<sup>812</sup> As a result, some cheese makers are even “cutting back” on manufacturing to “manage large inventories.”<sup>813</sup>

Despite this growing mountain of cheese, the federal government is subsidizing more companies to get into cheese making and buying the leftover cheese.

At one point, the surplus of cheese and other dairy products held by the government had a market value of \$3 billion and was so large it took 500 warehouses and five giant storage caves carved out of limestone to store it all.<sup>814</sup>

This year, approximately 11 million pounds of the surplus cheese valued at \$20 million was acquired.<sup>815</sup> USDA says the move is in response to “requests from Congress” and advocacy groups for the industry.<sup>816</sup> The Department says the purchase is “assisting the stalled marketplace for dairy producers whose revenues have dropped 35 percent over the past two years.”<sup>817</sup>

Despite these unfavorable conditions, USDA spent \$1.8 billion to subsidize 16 new cheese making ventures this year through the Value Added Producer Grant program.



*USDA is subsidizing the expansion of cheese production while the amount of surplus cheese has reached the highest level in decades.*

Burnett Dairy Cooperative of Grantsburg, Wisconsin, received the largest slice.<sup>818</sup> The co-op is spending the \$250,000 grant “to help expand the sales of meat infused string cheese.”<sup>819</sup> Zesty Teriyaki, Hot Pepper Beef and Pepperoni Pizza are among the mozzarella string cheese snacks blended with meats currently offered by Burnett Dairy. The new product, which is string cheese with a beef stick in the center, is being developed with meat snack maker

Jack Link’s.<sup>820</sup> “They came together and decided this was something there was a market for,” says Jeff Hudson, the Business Programs Director for the USDA Rural Development Agency in Stevens Point.<sup>821</sup> Hudson cautions “the purpose of the grant is not to give out ‘free money.’”<sup>822</sup> That statement has more holes in it than a slice of Swiss cheese.

**3 new flavors** **STRING CHEESE**

Add excitement to your string cheese set by offering natural meat blended in with our award-winning string cheese. Perfect for on-the-go snacking, these varieties are a great source of protein for cheese lovers of all ages.

**10 oz. resealable bag** Packed 12 per case  
12 individually wrapped pieces

ZESTY TERIYAKI 50588      PEPPERONI PIZZA 50589      HOT PEPPER BEEF 50590

**12 oz. resealable bag** Packed 12 per case  
12 individually wrapped pieces

CREAMY ORIGINAL 50096      HOMESTYLE RANCH 50574      SMOKED 50356

USDA also paid out more than \$11 million in financial assistance to dairy producers enrolled in the Margin Protection Program (MPP) for Dairy.<sup>823</sup> This was the largest pay out since the program established in 2014 to provides financial assistance “when the margin – the difference between the price of milk and feed costs falls below the coverage level” for dairy producers.<sup>824</sup>

Even some dairy farmers are criticizing the federal government’s cheesy policies. “Farmers are not encouraged to produce less and they feel the only way they can help make ends meet and get all of their bills taken care of at the end of the month is to produce more milk, which in turn ends up hurting them in the end,” laments Darin Von Ruden, a dairy farmer and president of the Wisconsin Farmers Union.<sup>825</sup>

Government cheese really grates on taxpayers.

## **Caviar And Truffles**

**\$86,000**

**Delaware and Wisconsin**

**U.S. Department of Agriculture**

Truffles and caviar—two of the most expensive delicacies in the world—are probably not on the grocery list of most Americans, but they will be on their tax bill this year.

The U.S. Department of Agriculture (USDA) is spending \$86,000 on the luxury foods.



*USDA is subsidizing efforts to grow truffles in Delaware.*

Blue Skies Farm in Delaware was awarded a \$34,210 Specialty Crop Block Grant to conduct “field research on cultivating edible truffle mushrooms” in Delaware.<sup>826</sup>

“The most expensive food in the world,” European white truffles have retailed for as much as \$3,600 a pound.<sup>827</sup> Black truffles can sell for \$1,000 a pound.<sup>828</sup>

Truffles spores grow underground and may take as long as six to ten years for spores to produce a truffle.<sup>829</sup> While found around the world, efforts to cultivate truffles in the U.S., however, have had “only limited success.”<sup>830</sup>

While USDA is planting taxpayer money in Delaware hoping to eventually dig up truffles, it is also fishing for caviar in Wisconsin.

A USDA Value Added Producer Grant totaling nearly \$52,000 is paying to develop “a feasibility study of value-added fish products,” including herring caviar.<sup>831</sup> The money was awarded to the Red Cliff Band of Lake Superior Chippewa Indians.<sup>832</sup>

While the cuisine is typically produced from other fish, there is a growing appetite for caviar from herring, also called cisco. This has made the eggs more valuable than the fish itself.

“We get really good money for our roe,” says a Wisconsin fisherman who notes herring, by contrast, is “a real cheap product.”<sup>833</sup>

The tiny pinkish orange eggs, referred to as “Lake Superior Gold,” sell for \$8 a pound.<sup>834</sup> The fish itself goes for about 50 cents a pound or \$4 for fillets.<sup>835</sup> About 160,000 pounds of the herring caviar from Lake Superior cisco is exported annually.<sup>836</sup>



*Something smells fishy about the federal government subsidizing caviar, called “Lake Superior Gold” by local fisherman because it sells for \$8 a pound.*

USDA’s caviar dreams are not shared by everyone. While the federal government is subsidizing studies to expand production of herring caviar, the Great Lakes Fishery Commission is urging “the state of Wisconsin, and some Indian tribes there, to reduce” their catch to protect the population from overfishing.<sup>837</sup> Terry Margenau of the Wisconsin Department of Natural Resources, agrees that there is a problem, warning “what’s going on right now we don’t think could go on for long without seeing some impacts.”<sup>838</sup>

Something smells fishy about taxpayers subsidizing the production of delicacies like caviar and truffles at a time when many Americans are struggling just to put the basics on the family dinner table.

## **Fearbola**

**\$41,000**

**Ohio**

**National Science Foundation**

Even the best antivirus software cannot protect against an infectious disease government researchers say can be spread via Twitter.

Dubbed “Fearbola,” the syndrome can cause hysteria over the fear of contracting the Ebola virus. It is spread largely through social media and sensational news accounts.

In the immediate aftermath of the first diagnosed cases of Ebola in the U.S. in 2014, some Americans exhibited symptoms of Fearbola which caught the attention of the National Science Foundation (NSF). Among the first studies funded as part of NSF’s “rapid response” to Ebola was a Kent State University project to assess how Fearbola spreads and its impact on human behavior.<sup>839 840</sup>

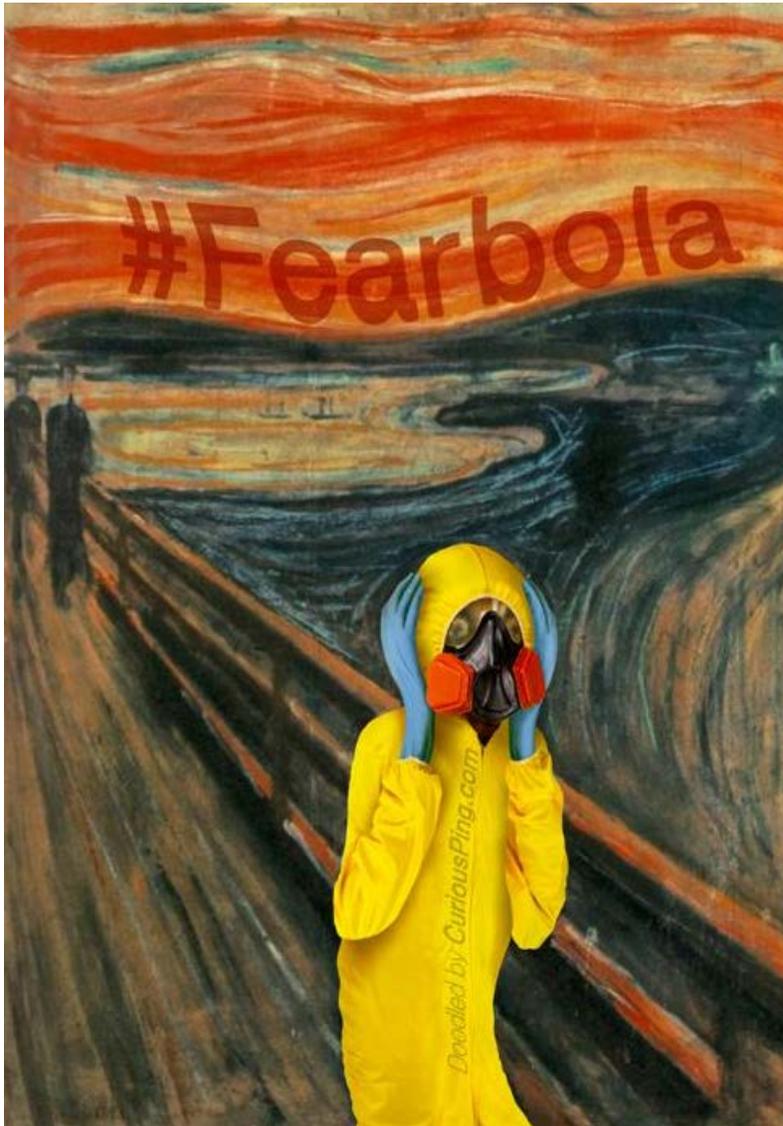
The \$41,200 NSF grant “was awarded just two months after the research was proposed,” Kent State boasts.<sup>841</sup> The Fearbola study is supported with NSF Rapid Response Research grants, which NSF states “fund research with an urgent need, to advance fundamental Ebola research”<sup>842</sup> and “support researchers seeking to answer important questions.”<sup>843</sup>

Rather than being spent in a lab, a quarter of the money was paid to Twitter. And instead of looking at specimens under a microscope, the researchers examined hashtags in tweets.

The researchers spent more than \$10,000 to purchase 40 million “tweets from Twitter that share hashtags with terms such as ‘Ebola,’ ‘fear’ and ‘Fearbola’” posted by those living in the Kent State area of Ohio.<sup>844</sup>

The Fearbola outbreak occurred in the U.S. in the fall of 2014. West Africa was then in the midst of the largest outbreak of Ebola in history.<sup>845</sup> In September, the Centers for Disease Control and Prevention (CDC) revealed that a Liberian man had been diagnosed with Ebola in Dallas, Texas.<sup>846</sup> He died from the disease shortly after the announcement and two of the nurses who treated him became infected. While in the disease’s incubation period, one of those nurses traveled to Ohio.<sup>847</sup>

Nearly two-thirds of Americans surveyed at that time expressed concern about the possibility of a widespread Ebola outbreak despite the repeated assurances from public health officials.<sup>848</sup> More than 40 percent admitted to being “very” or “somewhat worried” they or family members might become infected with Ebola.<sup>849</sup>



*Twitter was paid more than \$10,000 for tweets that included the hashtags #Ebola, #fear and #Fearbola.*

While just four Americans would eventually be confirmed as having Ebola,<sup>850</sup> more than 28,000 others—mostly in Africa—were infected. The deaths of 11,325 people were attributed to the virus.<sup>851</sup>

Despite lacking a vaccine or proven cure for Ebola, funding for the Fearbola project was quickly approved and announced in December 2014.<sup>852</sup>

The study is investigating “what social media activity on Twitter reveals about perceptions of” the 2014 “Ebola scare” and how those perceptions influenced people’s behaviors.<sup>853</sup>

Using “high-performance computers to sift through 40 million tweets, the researchers are examining “what was re-tweeted, how often users returned to the subject, and what sources of

information, whether valid or inaccurate, they consulted and passed along to others.”<sup>854</sup> The researchers are looking for “behavior-comment associations” in the tweets.<sup>855</sup>

“Twitter usage spiked wildly in the Kent State area on October 15, 2014,” notes principal investigator Eric Shook, “as news spread about the nurse and Ebola. In Northeast Ohio, tweets about the nurse, who later recovered, far outnumbered those about Thomas Eric Duncan, the Ebola patient in Dallas, who later died.”<sup>856</sup>

The tweets were then compared to the responses of online survey taken by 4,300 Kent State faculty, students and staff in October 2014.<sup>857</sup> Additionally, 750 people in the surrounding region were quizzed as part of a telephone survey about Ebola. The participants

were asked what risks they perceived and how they changed their behavior in response to the visit to the area by the nurse who was later found to be infected.<sup>858</sup>

Those surveyed reacted to the perceived threat of Ebola by sanitizing and washing their hands more often, avoiding crowds, and using public transportation less often.<sup>859</sup>

Shook says the study “was really spurred by the response we were seeing on campus and kind of the nervousness of students, staff and faculty and those surrounding campus and their response to the potential risk of Ebola.”<sup>860</sup>

Chris Woolverton, another researcher involved with the study says “the team plans to apply for a larger grant to expand their research and study more of America through the surveys and tweets.” He concedes the sample size that just focuses on the Kent State area in the current project “is somewhat low” and a better picture of the spread and impact of Fearbola across the country could be tracked by purchasing and studying more tweets.<sup>861</sup>

“By examining the linkages between the flow of information and the change in behavior in response to a major risk event, this project addresses an unresolved fundamental question: are data from the social media platform Twitter representative of on-the-ground perceived risk and behavioral response?”<sup>862</sup>

Confronted with real diseases like Zika and Ebola, NSF should not be squandering funding researching fictional contagions. This project is just another example of an all-too-real epidemic of wasteful spending in Washington.

## **Quack Doctors**

**\$3 million**

**Centers for Medicare & Medicaid Services**

**Nationwide**

Hundreds of quack doctors that are barred from public health care programs for committing fraud and other unscrupulous behaviors are still being paid millions of dollars by the federal government.

If kicked out of Medicare or Medicaid for cause, such as fraud, quality or conviction, health care providers are prohibited under federal law from participating in the programs in other states.<sup>863</sup>

Yet, barred providers are continuing to collect \$3 million every year by Medicaid and the Children's Health Insurance Program (CHIP), according to the Congressional Budget Office (CBO).<sup>864</sup>

Medicaid and CHIP are both joint federal-state health insurance programs. Medicaid serves lower-income and disabled patients while CHIP provides coverage for uninsured children. Medicare is a federal health program for patients 65 and older.

"Preventing ineligible providers from entering the Medicare and Medicaid programs not only reduces improper payments, but also prevents patient harm," points out Ann Maxwell, an Assistant Inspector General at the Department of Health and Human Services Office of Inspector General (OIG).<sup>865</sup> "Unfortunately, there are numerous examples of Medicare and Medicaid providers causing significant harm to patients," she says.<sup>866</sup>

For instance, an oncologist "administered aggressive cancer treatments and other therapies to patients who did not need them to increase the provider's billings to Medicare."<sup>867</sup> Maxwell says as a result "the unnecessary therapy and excessive medications led to significant health problems for a number of patients."<sup>868</sup>

In another case, a pediatric dentistry company "performed medically unnecessary dental services, including baby root canals, on young children covered by Medicaid. These dental facilities did not let parents accompany their children, placed children in unreasonable confinement, and caused significant physical pain to this vulnerable population of children."<sup>869</sup>

An OIG review found 295 providers, or 12 percent of those terminated for cause, were still participating in Medicaid in other states years after being barred.<sup>870</sup> The programs "paid \$7.4 million to 94 providers for services performed after each provider's termination for cause by the initial State."<sup>871</sup>

A single provider was paid more than \$1 million by Medicaid for services billed after being terminated for cause.<sup>872</sup> Fifteen others each received payments totaling \$100,000 or more.<sup>873</sup>

At least 100 of these barred providers were kicked out due to criminal charges, indictment, or conviction, while 58 were barred for reasons related to “fraud, quality, or integrity.”<sup>874</sup> Others were terminated for policy violations or improper billing.<sup>875</sup>

Hundreds of Medicaid providers in just four states “were potentially receiving improper Medicaid payments,” according to a review conducted by the Government Accountability Office (GAO) released this year.<sup>876</sup> “The providers had suspended or revoked medical licenses, had invalid addresses, were identified as deceased in federal death files, or had been excluded from federal health care programs, including Medicaid,” according to GAO.<sup>877</sup>



*Hundreds of quack doctors that are barred from public health care programs for committing fraud and other unscrupulous behaviors are still being paid millions of dollars by the federal government.*

“At least \$79 million” was paid by Medicaid to 269 providers who are barred from the program, according to a review conducted by the news service Reuters.<sup>878</sup> The analysis estimates “Medicaid payments to banned providers could easily reach into the hundreds of millions of dollars,” but notes the data to make such a calculation is incomplete.<sup>879</sup> Among the findings found by Reuters:

- Pennsylvania paid \$17,000 to a Philadelphia doctor *after* he was convicted for taking \$263,000 worth of *other* illegal payments;<sup>880</sup>
- An optometrist who pleaded guilty to Medicare fraud for billing 177 eye exams in a single day in Georgia was still on South Carolina’s Medicaid provider list nearly a year later;<sup>881</sup> and
- An Ohio psychiatrist barred by CMS in 2011 continued to collect payments totalling more than \$500,000 from the Illinois Medicaid program.<sup>882</sup> He billed for providing therapy to more than 100 patients in Illinois on the same day he was being sentenced for workers’ compensation fraud in Ohio.<sup>883</sup>

The problem persists because the federal Centers for Medicare & Medicaid Services (CMS) is failing to coordinate adequate data-sharing necessary to “help states catch unscrupulous providers.”<sup>884</sup> State officials and Medicaid managed care plan representatives say “accessing and using fragmented information from multiple and disparate federal databases challenged their screening efforts” and CMS “has not coordinated with other agencies to address these challenges.”<sup>885</sup> States and health insurance plans must instead rely on information “fragmented across 22 databases managed by 15 different federal agencies to screen providers,” according to a performance audit conducted by GAO.<sup>886</sup> States are also failing to properly register why a provider has been barred. The most common reason listed by states for barring provider participation is simply “termination.”<sup>887</sup>

As a result, the OIG says Medicaid remains “vulnerable to providers who may be ineligible or who may defraud the program and harm patients in the process.”<sup>888</sup>

## **Casino Workers Dealt Losing Hand**

**\$29.4 million**

**New Jersey**

**Department of Labor**

Despite a jackpot of nearly \$30 million, laid-off casino workers in Atlantic City, New Jersey were dealt a losing hand by a government job-retraining program that went bust.<sup>889</sup>

The effort was financed by a \$29.4 million grant from the U.S. Department of Labor (DOL).<sup>890</sup> The state's congressional delegation lobbied to secure funding from the National Emergency Grants program, which is part of the Secretary's discretionary fund.<sup>891</sup> DOL opened the pot in January 2015.<sup>892</sup>

Few of the nearly 7,000 displaced workers participated in the program or landed a job as a result.<sup>893</sup> Of the 6,835 laid-off workers notified by the state of the availability of the job training and placement services, just 1,231 participated.<sup>894</sup> Of those, only 29 percent found jobs with assistance from the program.<sup>895</sup>

"In the end, the demand for our services was not as great as what we asked the federal government for," says Aaron Fichtner, the deputy commissioner of the state Department of Labor and Workforce Development. "We believe that many people got jobs in other industries on their own or through assistance of other government programs," he speculates.<sup>896</sup> "We're confident that the people that needed services, that wanted services from us—that those services were made available to them," says Fichtner.<sup>897</sup>

To the contrary, not everyone who wanted or needed services found the program to be very helpful. Kristi Hance, who was a poker dealer at the now-closed Showboat casino-hotel and attended one of the sessions, was told she would have to attend "20-hour-a-week, month-long adult basic-education classes" before she could even begin job training.<sup>898</sup> "I don't have time for that," says Hance. "I have to put food on the table, for crying out loud."<sup>899</sup> She adds, "there's thousands of us, there's not thousands of jobs here in the city."<sup>900</sup>

"Like any government money, it probably could have been spent more efficiently," concedes Bob McDevitt, president of the union representing Atlantic City's casino workers.<sup>901</sup>

The spending of the money shows the state doesn't seem to know when to hold 'em, know when to fold 'em, or when to walk away. Less than 10 percent of the grant was used as of May.<sup>902</sup> The state "plans to spend more" of the money before it expires in December, "but doesn't yet know how or how much."<sup>903</sup>



*Despite a jackpot of nearly \$30 million, laid-off casino workers in Atlantic City were dealt a bad hand by a federal job-retraining program that went bust.*

The city hit a losing streak in 2014 and has been playing its cards poorly ever since. Four of its 12 casinos—accounting for 70 percent of the city’s tax revenues—closed.<sup>904</sup> Three others have filed for bankruptcy protection.<sup>905</sup> Atlantic City itself “teeters on the edge of bankruptcy.”<sup>906</sup> With the city facing a \$33.5 million budget deficit and a gloomy economic outlook,<sup>907</sup> the credit rating agency Moody’s downgraded the city’s rating in April.<sup>908</sup> Lacking the money to pay public employees, the state sued to make sure teachers were paid before other

city workers.<sup>909</sup> The state did loan Atlantic City \$75 million, but is threatening to take over the jurisdiction if the city doesn’t put together a plan to get its finances in order soon.<sup>910</sup>

In a twist, nearly 1,000 employees of the Trump Taj Mahal who were spared the lay-offs suffered by workers at other casinos went on strike this summer.<sup>911</sup> As a result, the casino closed in October, leaving 3,000 employees out of work and becoming the fifth Atlantic City casino to go out of business since 2014.<sup>912</sup> While the casino bore his name, president-elect Donald Trump no longer owned it at the time of the strike or shutdown.<sup>913</sup>

And the delay of the re-opening of another Atlantic City casino was being blamed on government red-tape. The megaresort Revel, which includes a casino, was ready to be opened in June, but was still waiting for “a liquor license from state gaming regulators, a temporary certificate of occupancy from the city and a permit from the Casino Reinvestment Development Authority.”<sup>914</sup> New Jersey’s bureaucracy was blamed for the delays by the owner, Glenn Straub. “This is exactly what New Jersey is known for,” Straub says.<sup>915</sup>

While New Jersey may have raked in tens of millions of dollars from the high rollers in Washington, the odds are against this program paying off for displaced workers—making it another bad bet placed by politicians gambling with taxpayers’ money.

## **The Singing: The Shining Takes The Stage As An Opera**

**\$70,000**

**Minnesota**

**National Endowment for the Arts**

The Shining has become The Singing.

The shrieks and screams caused by Stephen King's novel about a haunted hotel that became a horror-movie classic starring Jack Nicholson have been transformed into songs for an opera. The Minnesota Opera brought the spine-tingling tale to the stage of the Ordway Center for the Performing Arts this year with the support of a \$70,000 grant from the National Endowment for the Arts (NEA).<sup>916</sup>

"The macabre tale portrays Jack Torrance who has arrived at the Overlook Hotel having taken a new job in the hopes of a fresh start for himself, his wife Wendy, and son Danny. Relaxation turns to terror as the idyllic location grows remote and sinister and the only one to notice the strange and terrible forces at the Overlook is the uniquely gifted five-year-old son."<sup>917</sup> That gift, of course, is a sixth-sense he calls "the shining."

The spirits singing on stage were mixed with spirits served from behind the bar. A cocktail named Redrum was served to patrons at the premier, a nod to the backwards spelling of "murder" famously chanted and written on a door by Danny.<sup>918</sup>

The lavishness of the production did not go unnoticed. "Minnesota spent some real money on the production," observed a review by *The Wall Street Journal*, noting "the elaborate getups" and the "grandeur" of the set.<sup>919</sup>

The performances received mostly favorable reviews, but one reviewer said "for all of the powerful performances and effective atmosphere, the production never quite gels as a compelling story."<sup>920</sup>

Another wrote that while the opera adaptation "sounds like a lot of fun," he suspects "many people are going to leave the Ordway feeling vaguely unhappy, if only because this operatic version of *The Shining* isn't as spooky or terrifying or musically awesome—indeed, nearly as much *fun*—as they had hoped."<sup>921</sup> He elaborates, predicting the audience will find "the lack of identifiable 'songs'" disappointing as well as "the curiously dissonant and underwhelming presence of the hotel's chorus of ghosts. Roughly ninety-percent of the entire show is talk-singing. Much of this sprechgesang is technically virtuosic in a way that only a true opera fan can appreciate, but coupled with so much insipid dialogue, it looks and sounds a bit ridiculous. No one is going to go home and listen to Paul Moravec's score, either, because

there is precious little in the way of soaring arias and other operatic thrills, save for the occasional howl of anguish from Jack and/or Wendy. The score is mostly mood music that bubbles and froths and swirls around the dialogue. There's plenty of demonic tension, and the party scenes have a jazzy, cabaret vibe, but it's as if the music is trying too hard at times to overcome the opera's other structural deficiencies, and too little at times when it's needed most."<sup>922</sup>

Perhaps most disappointing to fans of the movie, there is no musical rendition of Nicholas's famous line "Heere's Johnny" in the opera since that scene does not actually appear in the book.<sup>923</sup>

Singing the Shining did not scare away audiences. "All 7,056 seats across The Shining's four performances are sold out," the Minnesota Opera announced weeks before the first show.<sup>924</sup> Scalpers made a "killing on eBay and Craigslist," according to a local media report.<sup>925</sup>

Despite the show's financial success, taxpayers were still haunted with the production's costs. The redrum is now red ink.



*Redrum was served at the opera premier of "The Shining."*





## Boondoggle Boulevard

\$76 million

New Jersey

Federal Highway Administration and Department of Housing and Urban Development

More than \$341 million was spent reconstructing just 12 ½ miles of a New Jersey road on which fewer than 7,000 people live.<sup>939</sup> The price tag comes to about \$27.3 million per mile.<sup>940</sup>

The stretch of Route 35 running between Seaside Heights and Bay Head was severely damaged by Superstorm Sandy in October 2012.<sup>941</sup>

Even though the project was fast-tracked by state officials, it was finished a year behind schedule and \$76 million over budget.<sup>942</sup>

More than \$20 million of this excess was spent to pay contractors for not working.<sup>943</sup> All work was stopped during the summer of 2014, but the contractors continued to be paid.<sup>944</sup> Construction was shut down for Memorial Day weekend and then halted altogether from June 13 to September.<sup>945</sup> Contractors were paid again for being idle when construction was stopped while pipes were being installed under the road.<sup>946</sup> “Those numbers are mind-boggling,” says Barry LePatner, a construction contract attorney. He points out “a suspension of work shouldn’t add up to (\$25 million) in labor costs.”<sup>947</sup>



*The reconstruction of New Jersey Route 35 cost more than \$27 million per mile.*

Government officials cannot explain how another \$23 million was even spent.<sup>948</sup>

State officials justify the exorbitant costs by claiming “this is not just a resurfacing job.”<sup>949</sup> Instead, Route 35 was “redesigned as a state-of-the-art roadway.”<sup>950</sup> This included reconstructing the roadway, landscaping to enhance medians,<sup>951</sup> replacing miles of gas, sewer and water lines under the road and

adding bicycle lanes on the northbound side of the road.<sup>952</sup>

Anthony Attanasio, who was an assistant commissioner of the state DOT until April 2014, says the setbacks were caused, in part, because the plans for the area were inaccurate. The planners “were essentially blind to what utilities were beneath the road.”<sup>953</sup> As a result, “this created a stop-and-start pattern— contractors would dig down and find an unmarked gas pipe, then they would have to call the gas company and wait for it to inspect or replace the pipe.”<sup>954</sup>

Democrat state Senator Raymond Lesniak calls the project “a boondoggle” and is urging the U.S. Department of Transportation and Congress to investigate.<sup>955</sup> “The Route 35 reconstruction project is the poster child for what’s wrong with the state and federal government’s Sandy relief effort,” says Lesniak.<sup>956</sup>

The high price of the project was only a bump in the road for the state, however, because most of the costs were billed to the federal government.

“Very little of the cost for the Route 35 reconstruction project will be paid by New Jersey taxpayers,” according to Steven Schapiro, a spokesman for the New Jersey Department of Transportation.<sup>957</sup>

“Of the \$341 million project costs, \$336.3 million are expenses eligible for federal reimbursement and fall under the 80 percent (the Federal Highway Administration) will pay for, totaling \$269.04 million. The State share of eligible costs, which is 20 percent, would be \$67.26 million. When the \$4.7 million that FHWA determined was not eligible for federal reimbursement is added in, the State share totals \$71.96 million. Of that amount, NJ has been reimbursed \$50.1 million by a federal Housing and Urban Development (HUD) Community Development Block Grant (CDBG) for Superstorm Sandy recovery efforts. That leaves \$21.86 million for which the State is responsible. However, NJDOT expects additional reimbursement from the CDBG grant but we don’t have a figure at this time,” explains Schapiro.<sup>958</sup>

And while the reconstruction is finally finished, this isn’t the end of the road for the costs associated with this project. Residents say the construction damaged their homes, including cracks in walls and ceilings.<sup>959</sup> At least 36 property owners contacted the New Jersey Department of Transportation with claims related to work on Route 35. The state, however, is referring the residents to the contractor but the contractor’s insurance company has been denying liability.<sup>960</sup>

For taxpayers, the reconstruction of Route 35 has been a rocky road with the cost amounting to highway robbery.

## Robot Auction

\$311,000

Wisconsin

Department of Veterans Affairs

Two robots purchased by the Department of Veterans Affairs (VA) for \$313,000 that went unused for two years were sold back to the manufacturer this year for less than \$2,000.<sup>961</sup>

The Madison VA Medical Center (VAMC) in Wisconsin “acquired the robots in September 2012 to assist with the distribution of supplies throughout the facility” to “give employees who normally distributed supplies the ability to focus on other priorities.”<sup>962</sup>

The robots, called TUG 2.5, are made by Aethon.<sup>963</sup> The TUG is an autonomous mobile robot that navigates with a built in map and on-board sensors used to deliver medications, laboratory specimens or other materials.<sup>964</sup> Each robot consists of two parts, the tug and a

cart, which combined are about 2 feet wide and 4 feet tall.<sup>965</sup>

“The robots are programmed to avoid obstacles by adjusting their route when they detect an object up to 18 inches away. If the robots are unable to adjust their route, they will stop until the object is cleared.”<sup>966</sup>

The robots, however, had problems navigating around staff and patient traffic in the hallways of the facility. The robots “would get stuck next to each other in the hallways and, in doing so, would block staff and patients from passing by,” says the center’s chief of



*These are not the droids you are looking for: The VA spent more than \$310,000 to purchase a pair of robots that went unused for two years before being sold back to the manufacturer for less than \$2,000 in May.*

logistics.<sup>967</sup> Even attempts to use the robots “at times when hallway traffic was minimal” failed.<sup>968</sup>

The chief of logistics “determined their use was not effective and took them out of service in July 2014.”<sup>969</sup> The robots were transferred to the VA medical center in Milwaukee before being passed along to another VAMC in Chicago last year.<sup>970</sup>

The robots went unused for two years and then put up for auction. The manufacturer of the robots was the winning bidder, paying just \$1,937 to retake possession of the robots in May 2016.<sup>971</sup> As a result, the VA lost \$311,000.

An investigation by the VA Office of Inspector General (OIG) concluded “because of inadequate planning,” the VA wasted more than \$310,000 on the two robots “that could not operate effectively within the facility.”<sup>972</sup>

The director of the Madison VA John Rohrer “doesn’t think the robots were a waste of money because the hospital tried them out for 15 months before deciding the service didn’t work.”<sup>973</sup> He notes, however, “I understand how that looks.”<sup>974</sup>

# Fish Tales

\$32,000

Massachusetts

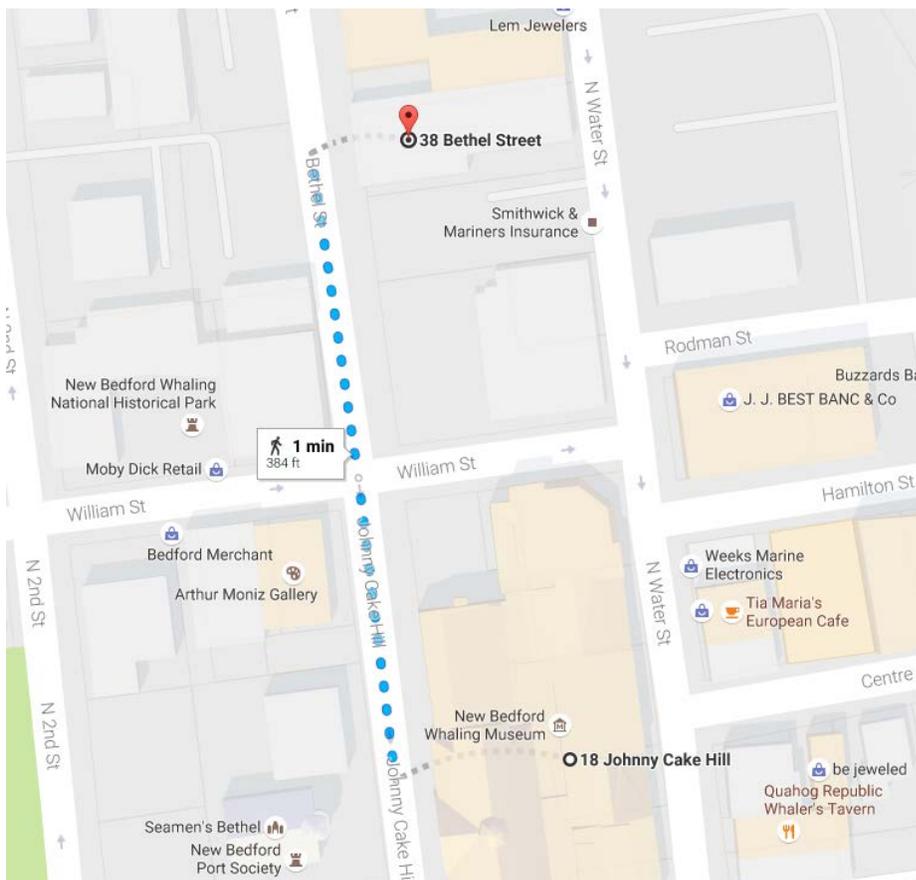
National Park Service and National Endowment for the Humanities

Something smells fishy in New Bedford, Massachusetts.

“America’s #1 fishing port”<sup>975</sup> was once “the wealthiest city per capita” in the country,<sup>976</sup> but today “suffers from a long list of woes— high crime, persistent unemployment and poor public schools.”<sup>977</sup>

What New Bedford does not suffer from is a lack of museums commemorating its glory days and maritime history.

The city is home to “the world’s largest whaling museum,” the New Bedford Whaling Museum, which serves as “a forum for whale and now fishing” issues.<sup>978 979</sup> The museum is part of the New Bedford Whaling National Historic Park, a component of the National Park



Service (NPS), which also includes the Corson Maritime Learning Center.<sup>980 981</sup> Just one block down the road, the New Bedford Fishing Heritage Center opened its doors in June 2016<sup>982</sup> to “educate the public about the history and culture of New Bedford’s commercial fishing industry.”<sup>983</sup>

It smells fishy that the federal government was handing out tens of thousands of dollars to this new private museum before it even opened its doors, rather than directing

*It takes just a minute to walk to the New Bedford Fishing Heritage Center, located at 38 Bethel Street, from the New Bedford Whaling Museum, located at 18 Johnny Cake Hill.*

the money towards addressing the National Historic Park’s \$661,435 deferred maintenance backlog.<sup>984</sup> Deferred maintenance means the conditions are deficient and require work to meet accepted codes, laws, and standards.<sup>985</sup>

By reeling in \$32,000 from two different agencies, the fledgling Fishing Heritage Center proves that catching government grants is like shooting fish in a barrel. Both grants are supporting efforts to bait tourists to the area by telling fish tales.

A \$20,000 Maritime Heritage Program grant from the NPS is paying to produce a “film about fishing” that will last a mere 15 minutes.<sup>986</sup> Tentatively titled “Resilience: The Story of New Bedford’s Fishing Industry,” it “will present an overview of the history and development of New Bedford’s commercial fishing industry from 1900 to the present, exploring life at sea, life on shore, and sustaining the resource.”<sup>987</sup> The film is expected to premier in June 2017.<sup>988</sup> It will be shown at “multiple outlets throughout the city,” including the Waterfront Visitor Center and the State Pier ferry terminal, and to passengers on ferries and cruise ships.<sup>989</sup>

Even the executive director of the New Bedford Fishing Heritage Center, Laura Orleans, was surprised to catch so much free money from the NPS’s Maritime Heritage Program.<sup>990</sup> “We got the full amount,” exclaims Orleans, saying, “I was flabbergasted.”<sup>991</sup>



*By reeling in grants from two different agencies before it even opened its doors, the New Bedford Fishing Heritage Center proves that catching government money is like shooting fish in a barrel.*

Despite the big haul, “there will be unknown costs and complexities around the broadcast rights to much of the material,” Orleans said.<sup>992</sup> Additionally, “showing the film on the Internet is already proving problematic.”<sup>993</sup>

The film should not be confused with “Whaling City,” an award-winning, independently-funded film shot in New Bedford that tells the story of a third-generation fisherman and the region’s struggling fishing industry.<sup>994</sup> While the new government-sponsored film celebrates the fishing heritage of the New Bedford community, the independent film ironically has been described as exposing “an uncaring federal system that is turning good people to desperation” with “oppressive regulations.”<sup>995</sup>

The New Bedford Fishing Heritage Center also received a \$12,000 Cultural Heritage Grant from the National Endowment for the Humanities (NEH) which is being spent making “house calls” and hosting events to digitize photo albums and other artifacts of fishing families in the community.<sup>996</sup> A USB drive containing the scanned images is being given to all those who provide photographs and other materials.<sup>997</sup> The year-long project called “Salted, Pickled, or Smoked: Preserving and Presenting the Cultural Heritage of New Bedford’s Fishing Community” will also include “a variety of public programs which will serve to inspire community participation, evoke memories, and provide an interpretive framework for materials that are brought forward.”<sup>998 999</sup>

Taxpayers should not be on the hook for these parochial projects when the maintenance backlog for our country’s most treasured national sites has reached \$12 billion and continues to grow.<sup>1000</sup> Clearly, the federal government has bigger fish to fry.

## SBA World Tour

**\$18.9 million**

**Nationwide**

**Small Business Administration**

Health insurance costs, government regulations, federal taxes, economic uncertainty, and tax complexity are the “most severe problems” small business owners say they face.<sup>1001</sup>

Exporting repeatedly makes the bottom of the list, with just three percent of small business owners calling it a severe problem in the most recent survey.<sup>1002</sup> Yet, the U.S. Small Business Administration (SBA) State Trade and Export Promotion (STEP) program is spending nearly \$18.9 million this year on international junkets and other promotional activities “to assist small businesses with export development.”<sup>1003 1004</sup>

STEP is “a Federal-state partnership initiative” that pays for international trips, design of international marketing products and campaigns, and export trade show exhibits for small businesses.<sup>1005</sup> These include excursions to international fashion shows, air shows, and wine fairs.

STEP is funding junkets to the Paris Air Show next Spring for grantees from Virginia<sup>1006</sup> and Maryland.<sup>1007</sup> This particular event has been a popular destination for STEP grantees.<sup>1008</sup>



*The California STEP program took part in CENTRESTAGE, a four-day fashion show in Hong Kong in September.*

The California STEP program took part in CENTRESTAGE, a four-day fashion show in Hong Kong in September.<sup>1009</sup> The theme of the event was “Shooting Stars.” Four “thematic zones” showcased fashion from around the world: GLAM, ALLURE, METRO, and FORWARD.<sup>1010</sup> The California STEP also participated in the International Wine and Spirits Fair in Hong Kong in November.<sup>1011</sup>

The Oregon winery, Adelsheim Vineyard, “used STEP funds to attend the Prowein International Trade Fair in Dusseldorf, Germany.”<sup>1012</sup>

While these trips may introduce some business owners to foreign customers, that is not always the case. For example, Idaho’s Koenig Distillery and Winery already had “established”

contacts in Taiwan and mainland China prior to receiving funds from the program to support a trip to the region.<sup>1013</sup>

Some grantees haven't even been able to spend all of the free money provided by the program. This has not stopped the SBA from handing out more cash. Despite ending last year with "leftover funding," Delaware's STEP program "scored" a record-setting \$282,636 grant from the SBA this year.<sup>1014</sup> The state's export advisor, Beth Pomper, says efforts will be made to "prevent a repeat of last year's surplus."<sup>1015</sup> She notes "while the difference didn't hurt us with this year's award, the SBA may not allocate as much for Delaware in the future if we are consistently unable to use it all."<sup>1016</sup>

A review by SBA's own Office of Inspector General (OIG) concluded STEP is mismanaged and lacks metrics to measure performance.<sup>1017</sup> SBA's Office of International Trade (OIT) "personnel did not hold STEP grant recipients accountable for meeting reporting requirements," the OIG found.<sup>1018</sup> "Recipients of STEP grants did not implement adequate metrics by which to measure program performance" and, as a result, "performance measurements did not demonstrate whether grant recipients achieved milestones and remained on track to meet proposed goals."<sup>1019</sup> The OIG points out "without this information, grant recipients and OIT personnel could not ensure that the STEP program would have the effect that Congress intended."<sup>1020</sup> The audit also found that "due to SBA's mismanagement, more than \$1 million in funding was misspent" by the program.<sup>1021</sup>

The nonpartisan Government Accountability Office (GAO) found STEP to be providing services duplicating numerous other federal and state programs but failing to coordinate with those efforts. In addition to the SBA STEP program, a number of other federal agencies "directly assist small businesses to export overseas," including the Export-Import Bank, the Departments of Agriculture, Commerce and State, and the U.S. Trade Development Agency, according to the GAO.<sup>1022</sup> This duplication has caused fragmentation and inefficiency. GAO notes that Commerce officials say states do not always share their plans regarding trade promotion events in other nations, "particularly since the states started obtaining additional funds through the STEP program."<sup>1023</sup> For example, the governors of Kentucky and Wyoming held a trade show for their mining equipment companies geared toward sales to China at the same time as Commerce's similar efforts."<sup>1024</sup>

President Obama's 2016 budget proposal recommended zeroing out funding for the STEP program.<sup>1025</sup> "U.S. small businesses have access to counseling and training on exporting topics through SBA programs which assist small businesses who seek to execute a new-to-export strategy or expand into additional export markets; therefore, the SBA does not request funding for the STEP cooperative agreements in FY 2016."<sup>1026</sup>

The STEP program is unnecessary, duplicative, mismanaged and failing to step up to address the most severe problems of small businesses.

## Lap Dogs

**\$1.3 million**

**Virginia**

**National Science Foundation**

The way cats and dogs drink is as different as, well, cats and dogs, according to research supported by the National Science Foundation (NSF). The project was partially funded out of three separate NSF grants that total more than \$1.3 million.<sup>1027</sup>

“Little is known about the actual physical mechanisms that dogs use to transport fluids when lapping,” according to researchers at the Virginia Tech College of Engineering.<sup>1028</sup>

“Before we did fundamental studies of how these animals drink fluids, our guess was dogs and cats drink about the same way,” says Sunghwan “Sunny” Jung, an associate professor of biomedical engineering and mechanics. “Instead we found out that dogs drink quite differently than cats.”<sup>1029</sup>

“Comparing lapping in dogs and cats reveals that, despite similar morphology, these carnivores lap in different physical regimes: an unsteady inertial regime for dogs and steady inertial regime for cats,” the researchers say.<sup>1030</sup> In other words, dogs are sloppy when they drink.

Nineteen dogs “of various sizes and breeds were observed drinking water “using photography and laboratory simulations.”<sup>1031</sup>

“The researchers measured tongue motion, recorded water volumes, and generally measured lapping in the dogs. They used the results to generate a physical model in the laboratory of the tongue’s interaction with the air-fluid interface, according to Jake Socha, an associate professor of biomedical engineering and mechanics at Virginia Tech.”<sup>1032</sup> Physical experiments were also conducted “to mimic the motion of a dog’s tongue as it exits the water.”<sup>1033</sup>

The difference between how dogs and cats drink was discovered.

“Dogs accelerate the tongue upward more quickly than do cats, and then time their bite to coincide with the pinch-off of the column. The everyday experience of dogs as messy drinkers results from the backward curl of the tongue, which increases the size of the water column and thus enables dogs to drink more per lap than with a straight tongue,” the researchers explain.<sup>1034</sup>



LAP DOG: A dog drinking water as part of the study.<sup>1035</sup>

“Dogs lap because they have incomplete cheeks and cannot suck. When lapping, a dog’s tongue pulls a liquid column from the bath,” the researchers observed.<sup>1036</sup> “We measured lapping in 19 dogs and used the results to generate a physical model of the tongue’s interaction with the air–fluid interface. These experiments help to explain how dogs exploit the fluid dynamics of the generated column. The results demonstrate that effects of acceleration govern lapping frequency, which suggests that dogs curl the tongue to create a larger liquid column.”<sup>1037</sup>

So what do these findings mean? “This was a basic science study to answer a question very little was known about — what are the fundamental mechanics of how dogs drink?” explains Sean Gart, the graduate student who filmed the dogs.<sup>1038</sup>

These types of projects are lapping up public resources that could be put to much better use.

## Sur-fing Cats And Rainbow Hugs

\$583,000

Massachusetts

Department of Commerce

Surfing cats and rainbow hugs are among the features of the video games developed by the Massachusetts Digital Games Institute (MassDiGI) at Becker College, which boasts being an Economic Development Administration (EDA) University Center.

The video game institute based in Worcester has been supported with nearly \$2.5 million from the EDA, a component of the U.S Department of Commerce, since being established just five years ago. In 2011, the center received a \$500,000 EDA grant.<sup>1039</sup> It was awarded another EDA grant for \$1.4 million in 2013 to help create the New Ventures Center (NVC) to support interactive media and game development.<sup>1040</sup> Currently, MassDiGI is receiving a \$583,000 grant from the EDA University Center program “to support its ongoing efforts to promote entrepreneurship, academic cooperation and economic development across the state’s video and digital games ecosystem.”<sup>1041</sup>

The MassDiGI Center’s goal is “to nurture and expand the digital games industry in Massachusetts through academic support, product development, technology



commercialization, and targeted activities that cultivate entrepreneurship.”<sup>1042</sup>

The activities of the MassDiGI University Center focus on “increasing the amount of video games published in the region and on training students in the state of the art skills required in this fast moving industry. One way the Center trains students is through a Game Jam where students come for 24-48 hours and work with a group of fellow students to

*In “Cat Tsunami,” players navigate a cat on a surfboard across waves of other cat to reach a Black Friday catnip sale. The game is among those created by the Massachusetts Digital Games Institute, which is an Economic Development Administration Universe.*

develop a game,” with the those judged to be the best “developed further during the summer internship program.”<sup>1043</sup>

Players of “Cat Tsunami,” one of the games created at MassDiGI, must navigate a cat on a surfboard across waves of other cats to reach a Black Friday catnip sale.<sup>1044</sup>

In another MassDiGI, Robot Orphan Workforce, robots are motivated with hug rainbows to assemble block-based buildings and monuments that are sold to alien overlords.<sup>1045</sup>

Players of Hibachi Hero try to become the ultimate hibachi chef by flinging a knife to cut steaks and slice peppers and other falling food.<sup>1046</sup>

Other MassDiGI-produced games coming soon include Comet Cats and Slime Break.<sup>1047</sup>

The U.S. video gaming industry generates more than \$15 billion in annual revenues and continues to grow.<sup>1048</sup> While coming up with new concepts may literally be all fun and games, doing so should not be paid for by gaming the taxpayers.

## **Drooling Monkeys And The Evolution Of Saliva**

**\$817,000**

**New York**

**National Institutes of Health**

Drool from monkeys, gorillas, orangutans, macaques, and humans was compared in an attempt to gain “insights into evolution of saliva.”<sup>1049 1050</sup>

The study was funded, in part, from two National Institutes of Health (NIH) grants totaling \$817,000 to the State University of New York at Buffalo (UB).<sup>1051</sup>

DNA samples of saliva from the primates were purchased and then analyzed using polymerase chain reaction (PCR).<sup>1052</sup> PCR is a technique that copies and amplifies small segments of DNA to conduct molecular and genetic analyses.<sup>1053</sup>



*The genetic make-up of monkey drool was studied and compared to that of other primates, including humans, to gain insights into the evolution of saliva.*

The research specifically focused on the salivary mucin-7 (MUC7) gene, that “tells the body how to create a salivary protein of the same name.”<sup>1054</sup> This protein, “which is long and thin, forms the backbone of a bottlebrush-shaped molecule that helps to give spit its slimy, sticky consistency.”<sup>1055</sup>

The analysis found the instructions within the MUC7 gene “for building important components of the bottlebrush were repeated multiple

times” in each of the five primate species studied.<sup>1056</sup> Gorillas had the fewest copies of this information (4-5), while African green monkeys had the most (11-12). Humans fell somewhere in between, with 5-6.”<sup>1057</sup>

The researchers then simulated evolutionary changes in the composition of the saliva gene over 11 million years from a common ancestor.<sup>1058</sup> They assumed “every 1 million year [sic], there is a random gain or loss of 0.5/1.0/1.5/2.0 copies for Orangutan and the common ancestor of Human, Chimpanzee and Gorilla separately. At 8 million years ago, the common ancestor of Human and Chimpanzee separated from Gorilla and they started the copy number gain and loss simulation separately. The same simulation continues to 5 million years ago that Human and Chimpanzee separated from each other, and start their copy number gain/loss process independently until present. We simulated this process 1,000 times for 4 different copy-number-change rates (0.5/1.0/1.5/2.0 copies per million year), and for each simulation, calculated the variation of final state of simulated copy numbers for Human, Chimpanzee, Gorilla and Orangutan. The observed copy number state in present is Human 5 or 6 copies, Chimpanzee 5 copies, Gorilla 4 or 5 copies, and Orangutan 6 or 7 copies.”<sup>1059</sup>

So what does that all mean?

“This diversity in humans and other primates is ‘fodder for rapid evolution,’” the scientists write in a study published in *Scientific Reports*.<sup>1060 1061</sup> It is “unusual for members of a single species to have varying numbers of tandem repeats,”<sup>1062</sup> which are “short strings of DNA found multiple times inside the gene.”<sup>1063</sup>

The researchers speculate that by “having numerous copies of the repeated instructions likely conferred an evolutionary advantage to primates— possibly by enhancing important traits of saliva such as its lubricity.”<sup>1064</sup>

The authors of the study do caution that “gene predictions, especially for genes that have repeat content as in MUC7, may be error prone.”<sup>1065</sup>

As sticky as the subject may be, saliva does serve important functions. Other studies— including some conducted at UB— have examined the importance of saliva for human health. While the findings of those efforts may lead to exciting scientific breakthroughs, this particular study is nothing to drool over.

## **Angry Birds**

**\$118,000**

**Ohio**

**U.S. Department of Agriculture**

Birds must escape oncoming trucks—real and virtual—as part of experiments conducted at the U.S. Department of Agriculture (USDA) Wildlife Services’ National Wildlife Research Center (NWRC) in Ohio. The studies are trying to determine the speed an automobile must be traveling to hit a bird before it can fly to safety. To date, nearly \$118,000 has been spent on the bird collision experiments.<sup>1066</sup>

Using what they describe as a “straightforward but unique” approach, researchers “drove a vehicle directly towards turkey vultures (*Cathartes aura*) baited to the middle of roads at typical vehicle speeds (30–90 kph) and measured their reactions” as part of one project.<sup>1067</sup>

To lure the unsuspecting birds into the experiment, raccoon carcasses were placed in the road and “tethered to a 4.5-kg flat metal weight to prevent them from being dragged from the road.”<sup>1068</sup> A 2003 Ford F250 pickup truck was then driven “directly toward vultures feeding on the raccoon carcasses.”<sup>1069</sup> The researchers repeated the attempted hit-and-run 72 times.<sup>1070</sup>

The birds’ escape responses to the speeding truck varied overall. “No turkey vultures were struck during this experiment, but there were several instances when vultures narrowly avoided our vehicle,” according to the researchers.<sup>1071</sup> Most of the near collisions occurred when the truck was moving at 90 kph, or about 56 miles per hour. “Had we approached vultures at vehicle speeds  $\geq 90$  kph, we suspect that collisions would have been even more likely,” say the researchers, who call for additional “research examining bird responses to even faster vehicles.”<sup>1072</sup>

In another experiment, captive brown-headed cowbirds were put into a “simulation chamber where the birds watched videos of vehicles approaching at various speeds.”<sup>1073</sup>

“No matter how fast the car approached, the birds always took off when it was roughly 90 feet away,” states Dr. Travis DeVault, a supervisory research biologist at NWRC’s Ohio Field Station.<sup>1074</sup> The “avoidance behaviours in cowbirds appeared to be based on distance rather than time available for escape.”<sup>1075</sup> The birds “could successfully avoid slower-moving vehicles, but vehicles at speeds over 75 mph overwhelmed the birds’ escape strategies.”<sup>1076</sup> The results from the virtual video chamber were similar to outdoor experiments involving “cowbirds in enclosures responding to a real vehicle approach.”<sup>1077</sup>

The researchers note previous studies “demonstrated that several species of birds escaped earlier from oncoming vehicles as the posted speed limit *increased* (emphasis added),

but the actual speed of vehicles had no effect on escape behaviours.” Regardless, they “suggest that lowering” some speed limits should be considered as well as “installing speed bumps or other physical barriers” to reduce bird-vehicle collisions.<sup>1078</sup>

“What we think is that their anti-predator behaviors in some cases may work well, but that doesn’t work really well with fast vehicles,” notes Bradley Blackwell, one of the scientists involved with the project.<sup>1079</sup> Could it be that the birds are just playing chicken with the scientists?

Blackwell says “there are a lot of really bad decisions animals make.”<sup>1080</sup> As these bird brain experiments demonstrate, there are a lot of really bad decisions that government makes about how to spend tax dollars as well.

While collisions with birds and other wildlife do pose safety and conservation issues, these taxpayer-funded experiments are for the birds.



*Birds in a simulation chamber watch a video of an approaching vehicle.*

## The Low Road

\$300,000

Missouri

Federal Emergency Management Agency and U.S. Department of Agriculture

When it rains, it pours on Keltner Road in Christian County, Missouri.

As much as half-a-million dollars from two federal agencies may be poured onto the desolate road serving less than ten people that frequently floods, even with the lightest amount of rain.<sup>1081</sup>

“It’s very rural and runs alongside Swan Creek. In a lot of places, the road is lower than the creek,” explains Christian County Highway Administrator Miranda Beadles. “When we have medium or heavy rains, the creek would run down the road.”<sup>1082</sup> Less than an inch of rainfall causes the creek to flow onto the road, says Beadles.<sup>1083</sup> At times, the creek passes right over the road.<sup>1084</sup>

“When the road is washed out, residents do have other options, but not convenient ones.”<sup>1085</sup>

“Downpours last year left it impassable” and “what looked like puddles, locals recalled, were actually 6-foot-deep craters.”<sup>1086</sup>



*As much as a half-a-million dollars is being spent to upgrade a Missouri road that frequently floods and serves fewer than ten property owners.*<sup>1087</sup>

“Between \$300,000 to nearly half a million dollars is expected to be spent” to fix the road, much of which is being paid for by the U.S. Department of Agriculture (USDA) and the Federal Emergency Management Agency (FEMA).<sup>1088</sup>

FEMA is paying most of the costs to repair damage to the road caused by a flood last summer and USDA is covering 75 percent of the costs to put a 12-foot barrier between the creek and the road.<sup>1089</sup>

The project caught the interest of the area’s state representative, Lynn Morris who inspected Keltner Road for several hours. He is “concerned that if it rains again like it did last year, all the work will be for naught.”<sup>1090</sup> Morris worries the road “will never be permanently fixed” and that there could be other roads with similar conditions. He says “the public needs to know how much we’re spending on each of these projects.”<sup>1091</sup>

Last year, the county commission levied a property tax on the eastern district to supplement its budget for road improvements.<sup>1092</sup> “Roughly a fifth of the Christian County Eastern Road District’s funds this year will be spent on Keltner Road.”<sup>1093</sup>

Property owners along the road blame the county for the road’s poor conditions. Rather than fixing the flooding issues, the county graded the road until it sat below the nearby creek, which worsened the problem.<sup>1094</sup>

Randy Ebrite, who owns property on Keltner Road but lives in Springfield, says he now wants to sell his land along the road.<sup>1095</sup>

A report issued last year, “Missouri Transportation by the Numbers: Meeting the State’s Need for Safe and Efficient Mobility,” found 22 percent of locally and state-maintained roads are in poor condition and 23 percent of Missouri’s bridges are structurally deficient or functionally obsolete.<sup>1096</sup>

Faced with these much more urgent transportation priorities, federal funding for Keltner Road should come to the end of the road.

## Methodology

For inclusion in Wastebook 2016, some or all of the money from a grant, loan, contract, tax break, or other federal expenditure was spent to support the activities described in the entry in calendar year 2016 or Fiscal Year 2016, which began October 1, 2015 and ended September 30, 2016. In the case of some research supported with federal funds, a study was considered eligible for inclusion if it was conducted with the support of federal assistance and was published or made available to the public in 2016.

The best effort was made to determine the precise cost of the activity, product or service profiled in an entry paid for with taxpayer funds. However, in some cases the exact amount spent was not tracked by the agency, could not be determined, or was spent over a number of years, including future years. Therefore, the amount provided may be the total amount budgeted for the program or grant profiled rather than for the specific purpose highlighted.

## Footnotes

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are made to 85% of historical base acres and thus decoupled from producer crop choices. Also, PLC and ARC payments are not available until nearly a full year after harvest—October 1 following the end of the marketing year when full information on farm prices is available. The 2014 farm bill also created "generic" base acres—former cotton base acres from the 2008 farm bill. Generic base is added to a producer's total base for potential payments, but only if a covered crop is planted on the generic base. In other words, PLC payments on generic base acres are coupled to actual plantings (although payments remain subject to the 85% factor applied to eligible acres). Under current peanut program provisions, peanuts have a separate program payment limit—a consequence of the quota buyout (P.L. 107-171; §1603). As a result of this feature, a farmer that grows multiple program crops including peanuts has in effect two different program payment limits: the first payment limit (of \$125,000) is for an aggregation of program payments made to all program crops other than peanuts; and the second (also of \$125,000) is for program payments made exclusively to peanuts. Thus, under an extreme scenario involving large payments for both peanuts and other program crops, this could potentially double a farmer's payment limits. Farm policy economists have noted that peanuts have a statutory reference price that is set disproportionately above historical market prices, particularly when compared to other major program crops. Some contend that this potential advantage favors peanut production on generic base acres. However, the extent to which this scenario might play out is unclear, and both agronomic and market circumstances suggest that it might be somewhat limited."

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5R01DA010547-16

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Project Number: 5R01DA010547-16 Contact PI / Project Leader: MELLONI, RICHARD H.  
 Title: ADOLESCENT ANABOLIC STEROIDS, VASOPRESSIN AND AGGRESSION Awardee Organization: NORTHEASTERN UNIVERSITY

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PubMed PubMed Central Google Scholar EXPORT

Title (Link to full-text in PubMed Central)	Journal (Link to PubMed abstract)	Authors	Similar Publications	Cited By
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## JOB ANNOUNCEMENT

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Greenagers is now hiring for a part-time (approx. 15hrs/wk beginning in late Feb.) teaching position for the after-school program, “Crafting the Landscape”. This program focuses on teaching environmental literacy and stewardship to middle school students through hands-on projects and excursions as well as with the video game MineCraft.edu

A four year degree in environmental or related studies and/or relevant field and teaching experience required. Experience with or willingness to learn MineCraft also required. Candidates must be able to work well in a team teaching environment with a broad range of academic and emotional abilities. The program runs Monday through Thursday afternoons from 3-5pm in Great Barrington and Sheffield during the school year. Summer programs run 4 days/wk, 6hrs/day for 5 weeks.

Applicant must have reliable transportation, clean driving record and submit to a CORI background test. This program is a collaboration between Greenagers and the Berkshire Coop Market. Cover letter and resume may be sent to Will Conklin: [director@greenagers.org](mailto:director@greenagers.org).

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Cost	Study #	Study Title	Publication
\$29,500	QA-1855	<a href="#">How does vehicle speed influence behavioral reactions to object approach by birds</a>	Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions," PLoS One, February 4, 2014; <a href="https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf">https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf</a>
\$30,500	QA-1961	How does vehicle speed influence bird reactions to oncoming vehicles	Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Speed kills: ineffective avian escape responses to oncoming vehicles," Proceedings of the Royal Society B, January 7, 2015; <a href="http://rspb.royalsocietypublishing.org/content/282/1801/20142188">http://rspb.royalsocietypublishing.org/content/282/1801/20142188</a>
\$27,500	QA-2228	Individual variation in flight initiation distances of birds in response to simulated vehicle approach	Publication pending
\$30,350	QA-2372	Does experience with vehicles influence the risk of bird-vehicle collisions?	Publication pending

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<sup>1068</sup> Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions," PLoS One, February 4, 2014; [https://www.aphis.usda.gov/wildlife\\_damage/nwrc/publications/14pubs/14-014%20devault.pdf](https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf)

<sup>1069</sup> Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions," PLoS One, February 4, 2014; [https://www.aphis.usda.gov/wildlife\\_damage/nwrc/publications/14pubs/14-014%20devault.pdf](https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf)

<sup>1070</sup> Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions," PLoS One, February 4, 2014; [https://www.aphis.usda.gov/wildlife\\_damage/nwrc/publications/14pubs/14-014%20devault.pdf](https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf)

<sup>1071</sup> Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions," PLoS One, February 4, 2014; [https://www.aphis.usda.gov/wildlife\\_damage/nwrc/publications/14pubs/14-014%20devault.pdf](https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf)

<sup>1072</sup> Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, "Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions," PLoS One,

February 4, 2014; [https://www.aphis.usda.gov/wildlife\\_damage/nwrc/publications/14pubs/14-014%20devault.pdf](https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf)

<sup>1073</sup> Larry Clark, NWRC Director, USDA APHIS Wildlife Services, “Speed Kills: Why Birds Collide with Vehicles,” The Wildlife Society, June 19, 2015; <http://wildlife.org/speed-kills-why-bird-collide-with-vehicles/#prettyPhoto> .

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<sup>1078</sup> Travis L. DeVault, Bradley F. Blackwell, Thomas W. Seamans, Steven L. Lima, and Esteban Fernández-Juricic, “Effects of Vehicle Speed on Flight Initiation by Turkey Vultures: Implications for Bird-Vehicle Collisions,” PLoS One, February 4, 2014; [https://www.aphis.usda.gov/wildlife\\_damage/nwrc/publications/14pubs/14-014%20devault.pdf](https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/14pubs/14-014%20devault.pdf)

<sup>1079</sup> David Patch, “Study: Birds bad at gauging speed of objects,” Toledo Blade, January 11, 2015; <http://www.toledoblade.com/local/2015/01/11/Study-Birds-bad-at-gauging-speed-of-objects.html> .

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<sup>1095</sup> Giacomo Bologna, “The expensive fix of one rural dirt road welcomed — and questioned,” Springfield News-Leader, April 24, 2016; <http://www.news-leader.com/story/news/local/christian-county/2016/04/24/expensive-fix-one-rural-dirt-road-welcomed-and-questioned/83002576/> .

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