



IDEAS

HEALTH CARE

POLICY OF THE YEAR NOMINEE

*Blocking D.C.'s
School-to-Prison
Pipeline Using Improved
Mental Health Resources*



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Who We Are

The Roosevelt Institute, working to redefine the rules that guide our social and economic realities, is home to the nation's largest network of emerging doers and thinkers committed to reimagining and re-writing the rules in their communities to create lasting change. Our members, organizing in 130 chapters in 40 states nationwide, partner with policy makers and communicators to provide them with clear, principled ideas and visionary, actionable plans. Our members are actively influencing policy on the local, state and national level – from introducing legislation on protections for LGBTQ youth to consulting with local governments on natural disaster flood prevention.

What You're Holding

Now in its eighth year, the *10 Ideas* series promotes the most promising student-generated ideas from across our network. This journal, which includes submissions from schools located from California to Georgia to New York, stands as a testament to the depth and breadth of our network of innovators.

Our *10 Ideas* memos are selected for publication because they are smart, rigorously researched, and, most importantly, feasible. We want to see these ideas become a reality.

How You Can Join

As you explore these ideas, we encourage you to take special note of the “Next Steps” sections. Here, our authors have outlined how their ideas can move from the pages of this journal to implementation. We invite you to join our authors in the process. Contact us on our website or by tweeting with us @VivaRoosevelt using the hashtag #RooImpact.

Thank you for reading and supporting student generated ideas.

Together we will design the future of our communities, from towns to countries and all that lies in-between.

Dear Readers,

Young people are incredibly important to the American political process. Millennials and Generation Z now make up the same portion of eligible voters as the Baby Boomer generation. This emerging generation is also the most diverse in our nation's history: Half of all eligible Latino voters in 2016 are between the ages of 18 and 35. We're told we can make the difference every election, and candidates and elected officials ask for our votes, time, and money—but they don't ask for our ideas.

Young Americans continue to transform our economy and culture. Now it's time for us to disrupt our political system.

The *10 Ideas* journals, one of our oldest and most competitive publications, elevate the top student-generated policy ideas from across the country. In this year's journals, you will find solutions to problems in places ranging from South Dakota to North Carolina to Oregon to New York. Whether seeking to make Pittsburgh an immigrant-friendly city or to reduce recidivism in the state of Massachusetts, the following proposals take a creative and locally focused approach to building opportunity for all.

Rooseveltians are also committed to turning their ideas into action. Whether that means meeting with decision-makers, writing opinion pieces in their local papers, or organizing actions in their communities, we intend to see the solutions we propose become reality.

Why? As the generation that will inherit the world shaped by today's decisions, we have the most to lose or gain. Involving the emerging generation in the policy process will lead to outcomes that benefit everyone. We believe it matters who rewrites the rules, and we have ideas for how to change them.

I hope you enjoy reading the proposals in this journal as much as we did.

Onward,

A handwritten signature in black ink, appearing to read 'Joelle', followed by a long, sweeping horizontal line that extends to the right.

Joelle Gamble

National Director, Network, Roosevelt Institute

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Blocking D.C.'s School-to-Prison Pipeline Using Improved Mental Health Resources

By Samantha Garzillo, American University

Thesis

D.C. Public Schools should replace their punitive responses to delinquency with referral to on-site mental health services, providing students the opportunity for behavioral and emotional development, with funding provided by the Substance Abuse and Mental Health Services Administration.

Background and Context

The School-to-Prison Pipeline, which disproportionately affects low-income urban minority youth, criminalizes students for small offenses and pushes them into the juvenile justice systems. Prioritizing punishment over constructive reform leads to increased incarceration rates, the acquisition of juvenile records, and removal from school.¹ Schools are taking less responsibility for the actions of students, and instead passing responsibility off to law enforcement. Policies such as zero-tolerance, the use of school resource officers (SROs), the implementation of metal detectors, and barriers on returning to school after entering the juvenile justice system dehumanize students, disrupt education, and increase dropout rates.² A lack of belief in the effectiveness of rehabilitation in the 1970s and the “hard on crime” mentality of the 1980s has extended the juvenile justice system to include more and more young people, but the penal system has not proven to be effective at deterring crime or benefitting students.³ New policies must work to move beyond punishment and towards reforming and helping students. Otherwise, the juvenile justice system will become increasingly overwhelmed, while the needs of students are ignored.

Policy Idea

The D.C. Public School system should refer delinquent students to on-site therapists, who can address issues concerning drug use, social and familial issues, abuse, and anger management through crisis intervention or long-term support. The referral system would exclude potentially lethal crimes, such as carrying a weapon. Therapists would then identify the causes of the student's behavior, working towards positive behavioral, emotional, and social reform. Sessions would be integrated into students' schedules to avoid competing with instructional time or be scheduled before or after school to accommodate for work and family obligations.

Talking Points

- Funneling students into the juvenile justice system prevents them from attending school, inhibiting their access to education

- ▶ Punitive punishments respond to behavioral issues, without resolving the underlying factor(s) driving the behavior
- ▶ Currently there are no rehabilitative measures directly work against the School-to-Prison pipeline in DC

Policy Analysis

In a study of Chicago Public Schools, mental health treatment reduced violent crime by 44 percent and non-violent crime by 36 percent.⁴ A reduction in juvenile crime makes schools and communities safer. Punitive policies increase dropout rates, restrain future income, increase recidivism, and use tax revenue, amounting to \$8 to \$21 billion a year.⁵ Comparatively, a school-based treatment program in New York City costs \$140,025 to \$156,106 annually.⁶ However, existing programs are limited. Only 43 percent provide substance abuse counseling; the proposed policy is more responsive to student needs.⁷ Teachers, untrained in addressing mental health and overwhelmed with high teacher-to-student ratios, would no longer be responsible for student reform.

KEY FACTS

- ▶ Fifty percent of chronic mental illnesses begin by age fourteen.¹²
- ▶ Those afflicted with mental illness often do not receive treatment until 8 to 10 years after symptoms first appear.¹³
- ▶ Seventy-five to 80 percent of children with a mental illness do not receive care;¹⁴ among children of color this number rises to 87 percent.¹⁵
- ▶ African-Americans are 7.3 times more likely to live in high-poverty neighborhoods with limited to no access to mental health services.¹⁶

NEXT STEPS

This policy should first be piloted in Luke C. Moore and Washington Metropolitan High Schools, given their high dropout rates, high percentage of minorities, high percentage of impoverished students, and use of SROs.^{8 9 10 11} D.C. Public Schools should work with the D.C. School Mental Health Program and the D.C. Department of Mental Health to provide these strategic mental health services, given their investment in the wellbeing of youth. The Department of Education's Office of Elementary and Secondary Education also has vested interest in the academic achievement of students, their ability to remain in school, and students' health; they should be a key ally in enacting this policy. A coalition of the D.C. public schools should be formed, with information regarding students in the program being transferred as the student rises through grade levels or changes schools. Over time, the policy can be expanded to include family and parental resources and program availability post-graduation to provide on-going treatment.

Optimizing Obstetric Hemorrhage Protocols: Reducing Maternal Mortality in the State of Georgia

By Esther Osinaiya, Annie Ho, and Hannah Lumapas,
University of Georgia

Thesis

Georgia has one of the highest rates of maternal mortality in the U.S., with most deaths occurring due to obstetric hemorrhage. Georgia maternal health care providers should be mandated by the Georgia Department of Public Health to optimize protocols for treating postpartum hemorrhage (PPH).

Background and Context

Despite spending \$60 billion on maternity care in 2012, maternal mortality remains a challenge in the U.S. Every year, an estimated 1,200 women in the U.S. experience fatal complications during pregnancy or childbirth.¹ Georgia has one of the highest maternal mortality rates in the country. In 2011, Georgia's maternal death estimate was 35 maternal deaths for every 100,000 births compared to the national average of 21 per 100,000 births.² PPH is traditionally diagnosed in many Georgia hospitals when estimated blood loss surpasses 500 ml after vaginal birth or 1,000 ml after cesarean birth, which is standard across most states.³ Obstetric hemorrhage during the postpartum period remains a major factor in pregnancy-related deaths in Georgia.⁴ Though many women in Georgia deliver in hospitals with knowledgeable and trained staff, underperforming hospitals lack standard and efficient protocols in managing obstetric hemorrhage emergencies. Existing protocols are not always designed and approved by all maternal health care providers in the hospital. Unfortunately, this has led to a lack of quality assurance and teamwork precision needed to treat hemorrhages.⁵

Talking Points

- The high rate of maternal mortality in Georgia indicates that existing protocols for maternal hemorrhage are ineffective.
- Optimizing protocols across the state of Georgia, similar to the way other states have optimized protocols can be effective in treating hemorrhages in a timely manner.⁶
- Affordable programs and seminars about treating PPH—provided by organizations such as the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN)—are available to a limited number of member hospitals and nurses.

Policy Idea

Public health officials should devise a uniform policy on the protocol for maternal hemorrhage and post-delivery check-up and care for the mother and child. The updated protocol should include rapid emergency blood transfusion and a call extra attention to maternal blood loss, during the pregnancy and the early postpartum period. These protocols should be state-mandated and taught statewide through a public health education program. Trained maternal health care workers who can accurately identify early stages of PPH in addition to updated protocols would allow for timely and appropriate treatment.⁷

Policy Analysis

To decrease the number of obstetric hemorrhage cases, the California Maternal Quality Care Collaborative (CMQCC) and the California Department of Public Health prepared a similar policy in 2009 to update protocol for hemorrhage treatment methods.⁸ The California Department of Public Health Program general funding for Maternal, Child and Adolescent Health State Operations was \$3,554,000 in 2009. Of all the live births in California, 2.4 percent were complicated by PPH, though some reviews have found this rate to be as high as 5 percent or more.⁹

CMQCC improved the quality of care within the accumulated surveys from California's maternity services. Many of the problems that CMQCC found in their obstetric branches reflect Georgia's current lack of protocol for massive transfusion and obstetric hemorrhage.¹⁰ CMQCC provided guidelines in the event of obstetric hemorrhage to identify at-risk patients and establish the stages of hemorrhage. Hospitals that execute periodic drills

KEY FACTS

- ▶ Postpartum hemorrhage affects 2 percent of all women who give birth. It is associated with nearly 25 percent of all maternal deaths and is the leading cause of maternal mortality in the world.¹³
- ▶ According to the World Health Organization, skilled care before, during, and after childbirth can save the lives of women and newborn babies.¹⁴
- ▶ Out of the 116 hospitals in Georgia, only 25 are part of the Association of Women's Health, Obstetric, and Neonatal Nurses' Postpartum Hemorrhage Project, a dues-free program created to help medical professionals detect and treat PPH.

and examinations for PPH cases show behavioral change among staff, which improves the quality of care for all mothers.¹¹

From 2006 to 2008, the rate of maternal deaths in California was 14 per 100,000. After the updated protocols were put in place, the rate of maternal deaths declined to 6.9 per 100,000 between 2011 and 2013.¹²

Through statewide training programs and an optimized protocol, health care workers will acquire the skills to care for mothers. Investing in statewide programs to train healthcare workers to efficiently recognize PPH would also save money by reducing medical malpractice lawsuits.

NEXT STEPS

The next step is a pilot program in several hospitals in the state of Georgia to evaluate and detect flaws in existing protocols for maternal hemorrhage. In the pilot program, the Georgia Department of Public Health should mandate that hospitals optimize their protocols by addressing the detected flaws and training healthcare providers in more efficient and productive ways of treating PPH.

Data from the pilot program will determine the most effective protocol. A uniform statewide initiative should be launched based on the most effective protocol. Possible supporters and key targets for the policy idea include the Georgia Department of Public Health, Georgia Department of Community Health, and AWHONN. The Georgia Department of Public Health is the leading agency that works to promote public health and well-being. The Georgia Department of Community Health is one of the top Georgia health agencies and responsible for a \$12 billion budget. AWHONN is a non-profit, application-based, membership-only organization that promotes women's health.

Starting a Dialogue: Encouraging Responsible Firearm Ownership at the University of Oregon

By Madeleine McNally, University of Oregon

Thesis

To encourage responsible firearm ownership on the University of Oregon campus, the University Police Department should send letters to incoming students outlining the legal responsibilities of firearm owners.

Background and Context

The U.S. is currently experiencing a firearm violence epidemic. In 2013, there were 21,175 suicides involving firearms.¹ In the same year, 11,208 homicides involved a firearm and 505 additional lives were lost due to “accidental discharge of firearms.”²³ In the state of Oregon alone, there were 497 deaths by firearms in 2014.⁴ Lane County, home to the University of Oregon, had 62 firearm-related deaths.⁵

Firearms account for an average of 30,000 deaths per year in the U.S.⁶ In 2010, the estimated societal cost of firearm violence was \$164.6 billion.⁷ Firearm violence has significant social costs, but continues to rise due to government inaction.

The Federal Bureau of Investigation (FBI) reported an upward trend in active shooter incidents between 2000 and 2013. An active shooter is a person engaged in killing or attempted killing in a confined or populated space.⁸ Between 2000 and 2005, the FBI reported an average 6.4 incidents annually; however, between 2006 and 2013 annual incidents increased to 16.4.⁹ The U.S. cannot afford a continued rise in firearm violence. Firearm legislation is uncoordinated across the U.S. because states maintain autonomy over firearm policy.

Oregon does not require gun owners to obtain licenses or register their guns, allow local governments to regulate firearms, impose waiting periods on gun acquisition, or require license for firearm dealers.¹⁰ However, the state does require background checks prior to the transfer of a firearm between unlicensed parties.¹¹ The state also allows universities to ban concealed carry at their own discretion, which the University of Oregon has chosen to do.¹²

Talking Points

- ▶ A dialogue about active shooter incidents and firearm legal obligation does not exist on the University of Oregon campus between students, faculty and staff.
- ▶ Students from out of state may not be aware of their legal responsibilities as firearm owners in Oregon. Firearm legislation varies drastically between states.
- ▶ The University of Oregon Police Department can leverage their authority to meaningfully engage and educate students.

The Policy Idea

To start a dialogue about safe, responsible firearm ownership on college campuses, the University of Oregon and its Campus Police Department should work in tandem to inform students of their responsibility as firearm owners.

Upon committing to the University of Oregon, the University of Oregon Police Department will send letters to every student reminding them of their school and state-level legal responsibilities and firearm storage safety tips.

The letter will provide students with a foundational understanding of existing firearm policy. To further educate students, the school can host an awareness day and share its existing firearm safety protocol in case of an active shooter scenario. The school will maintain an open-door policy around the topic of firearm safety on campus. Based on their newly curated knowledge of firearm policy, students will be encouraged to share their ideas about safety on campus.

Policy Analysis

Between 2005 and 2009, the California Department of Justice worked in conjunction with the Los Angeles Police Department to distribute letters to people in the Los Angeles region who applied to purchase a handgun.¹³ The letter was signed by the Attorney General, City Attorney and Chief of Police and reminded the handgun purchaser of their responsibility to run transactions through a licensed gun store if they chose to transfer gun ownership to someone else.¹⁴

The Los Angeles City Attorney's Office stated that the letters were effective at reminding individuals of their legal obligations and had an impact on gun

KEY FACTS

- ▶ About 100,000 Americans are victims of gun violence annually.
- ▶ Suicide attempts via drug overdose are fatal in less than 3 percent of cases. Whereas, 85 percent of suicide attempts involving firearms end in death.
- ▶ One in sixteen Oregon adults have a concealed-carry permit.

purchasing behavior.¹⁵ Moreover, individuals who received a letter were over twice as likely to report a stolen gun than those who had not received a letter.¹⁶

Both the objectives of the policy in L.A. and the demographic it targeted are quite different than the proposed policy. However, L.A. provides a provocative and innovative solution to a complicated issue. The goal of the proposed policy is to shift the narrative around gun safety.

Much of the current dialogue on college campuses exists around whether or not to ban concealed carry or ban police carry. The University of Oregon has a unique opportunity to be proactive and engage with students about firearm safety in a time when college campuses are looking for innovative solutions to reduce firearm violence. A letter allows the university to be transparent while providing knowledge to students and parents about legal expectations and responsibilities that may otherwise not be known. With this knowledge transfer, the university makes room for a deeper level of dialogue with diverse viewpoints. A well-crafted letter will increase accountability among students on the University of Oregon campus. Both firearm-owning and non-firearm-owning students will be empowered with knowledge to engage in conversation that will help develop additional, comprehensive firearm safety protocols.

NEXT STEPS

The University of Oregon is the institution in charge of facilitating and implementing change. Anne Mattson, nurse practitioner in the University of Oregon Health Center, is an ally because firearm violence is considered a public health problem in the medical sphere. Ginevra Ralph, University Board of Trustees, is a target because she is an active community member and has long worked with children and students in the community of Eugene. Ralph also has a large stake in the university and would provide good feedback about the policy proposal as a member of the Board of Trustees.

Associated Students of the University of Oregon (ASUO) holds a lot of clout with the school administration and have already raised concerns about firearm safety on campus. Carolyn McDermid, Chief of Police, is a potential ally because her department is a major stakeholder in this proposed policy. The police department has been holding talks about officer-carry on campus. These discussions would be a good place to introduce this policy idea.

Presumed Consent for Organ Donation: Combating the Increasing Organ Shortage in the U.S.

By Hayley Padden, *University of Michigan*

Thesis

To combat the increasing organ shortage, the U.S. should implement a presumed consent law, allowing organs to be considered for donation unless there is stated opposition, therefore increasing the number of organ transplants that could occur.

Background & Context

The number of people waiting for an organ is steadily rising in the U.S. In 1991, there were 23,198 people on the waiting list compared the 123,000 people in 2014.¹ However, while the list of people on the transplant list increased fivefold, the number of available donors has not even increased twofold.² Every day an average of 22 people die while waiting for a donation.³ Even with the implementation of many initiatives across the country to increase the number of available organ donors, it is simply not high enough to meet the increasing need.

Despite the fact that 90 percent of U.S. citizens support organ donation, only 42 percent are registered organ donors.⁴ One reason for this disparity is lack of trust of medical professionals. There is a myth that doctors are less likely to take all life-saving measures if a patient is an organ donor.⁵ This is not true, but public perception persists. Another contributing factor is death is a sensitive topic and many people feel uncomfortable making plans for after their deaths, therefore they fail to become organ donors.⁶

Currently, the U.S. has an opt-in method of consent where citizens have to actively sign up to become an organ donor or families have to consent to donation after death.⁷

Talking Points

- ▶ The need for organs for transplant far outstrips organ donation in the U.S.
- ▶ Currently, Americans must opt-in to become organ donors. A presumed consent law would increase organ donation. Under that law, only those opposed to donation would have to register their wishes.
- ▶ Organs would never be donated against the wishes of the individual or

their family.

The Policy Idea

The U.S. should adopt a presumed consent law where organs will be automatically considered for donation unless the individual has stated their refusal in an official form, or the immediate family objects to donation after the death of the potential donor.⁸ If neither of these applies, consent is implied and, if organs were suitable, organ donation would take place. In addition, all major hospitals should employ transplant coordinators who would have access to a national database of those who object to organ donation. These coordinators would be responsible for identifying potential donors and directing the entire donation process from the donor to the recipient.

Policy Analysis

Implementing a presumed consent law is the best way for all potential donors to be considered for organ donation unless the individual or the immediate family objects. An objection by the individual would be documented and, in the event of brain or circulatory death, a transplant coordinator would refer to a national database before making any decision regarding donation. If there is no document of objection on file, consent is implied.

If immediate family members were present at the time of death, the transplant coordinator would be required to inform them of the intended organ donation and they could disallow the donation. The ability of family to deny donation is another step to ensure that only people who do not oppose donation will have their organs donated.

Belgium uses a presumed consent system, which has resulted in organ donation more than doubling.⁹ Public support is extremely high in Belgium. In 1996, 10 years after presumed consent was implemented, fewer than 2 percent of the population had submitted an objection to organ donation.⁴ Spain's system, another successful presumed consent system, relies heavily

KEY FACTS

- ▶ An average of 22 people die a day in the U.S. waiting for an organ donation.¹¹
- ▶ Ninety percent of Americans support organ donation yet only 42 percent are registered organ donors.¹²
- ▶ Ten years after Belgium implemented presumed consent their organ transplants more than doubled.

on transplant coordinators, funded by the government, to talk to families and make sure that they support the donation before it takes place, which builds trust between the general population and medical professionals.¹⁰

NEXT STEPS

This policy change should be made via federal legislation. Lawmakers should use as models the presumed consent policies successfully enacted in Belgium and Spain. This policy requires partnership between lawmakers, medical organizations, and key allies such as Gift of Life or Donate Life.

An education campaign to inform the public about the policy change is necessary. Citizens must understand how the policy works and how to opt-out of donation. Organ donation is a personal decision and must be discussed with sensitivity. Citizens who are unsure of the process or their rights may opt-out due to confusion or fear. The education campaign should explain the policy change and dispel myths about donation.

Eliminating Cultural and Linguistic Boundaries in Healthcare: Creating Standards and Funding for Medical Interpreters

By Vineet Raman, *Univeristy of Georgia*

Thesis

Weak regulation has allowed states to leave the use of appropriate language services up to individual hospitals. Congress should require states to implement a standard level of interpreter to all limited English proficiency (LEP) patients in all healthcare settings.

Background and Context

The U.S. has increasingly become more culturally and linguistically diverse with the influx of migrants from around the world. As a result, the number of Americans who speak a language besides English at home has increased by almost 50 percent in the last two decades.¹ Additionally, the number of patients with LEP has increased by more than 50 percent over the last ten years.²

For LEP patients, healthcare providers use varying forms of language services. *Ad hoc* interpreters, such as family members, friends, or other untrained personnel, are the most readily available type of interpreter.³

⁴ However, generally more than half of physicians' questions are miscommunicated by these interpreters, negatively affecting patients' quality of care and their satisfaction.^{5,6} Additionally, LEP patients who do not receive language services are more likely to incur unnecessary charges by means of longer hospital stays and additional diagnostic tests.^{7,8}

Funding for interpreters is available through Medicaid and State Children's Insurance Programs in all fifty states.⁹ Only thirteen states reimburse through these programs for language services, despite findings that it would cost only \$4.04 more per visit to provide proper language services to all U.S. LEP patients—only \$4 more to provide safe, high quality medical care to 49.6 million Americans.¹⁰ Most of the remaining states opt out of providing language services on account of rising costs.¹¹

No stringent regulation regarding *ad hoc* interpreters exists.¹² In fact, physicians in regions with large LEP patient populations are less likely to

provide appropriate language services.¹³ Existing contradictory recommendations allow hospitals to implement language services at their discretion.¹⁴ Immediate action is necessary to properly meet the needs of an increasing LEP patient population.

Talking Points

Language should not be barrier to quality healthcare, but currently it can be. Ethnically and racially diverse states such as Texas, Florida, Hawaii, and Illinois have the greatest need of language services, yet they have failed to pass any legislation requiring standardized language services to every LEP patient. Funding for language services exists for patients covered by Medicaid and SCHIP. The number of LEP patients will only continue to grow and LEP patients will suffer if states remain inactive.

The Policy Idea

Congress should introduce a bill requiring states to fund more interpreter positions via a standard medium of their choice (telephone, professional interpreter, or bilingual provider) to serve LEP patients on Medicaid or State Children's Health Insurance Programs using reimbursement schemes through the respective third-party program (Medicaid or SCHIP). The medium should be certified by The National Board of Certification for Medical Interpreters, ensuring a consistent standard of interpreting regardless of medium. These funds should be disbursed with the stipulation that the hospitals reduce use of *ad hoc* interpreters by 50 percent and increase certified interpreter use by 50 percent over the next ten years. Hospitals not meeting the aforementioned targets will not receive the maximum reimbursement for the language services they provide.

Policy Analysis

The policy's funding is modeled after a bill proposed to tackle California's shortfall of interpreters. The bill had the state spend \$200,000 to gain access to \$270 million in federal funds authorized under the Affordable Care Act

KEY FACTS

- ▶ Untrained *ad hoc* interpreters misinterpret or do not interpret more than half of physicians' questions.²³
- ▶ Funds set aside by a state's Medicaid/SCHIP program can be matched by existing federal monies to fund trained interpreters.²⁴
- ▶ It would cost only \$4.04 (or 0.5 percent more) per physician visit to provide all U.S. patients with suitable language services.
- ▶ Patients who encounter language barriers have longer and more costly hospital visits.²⁵

to fund a state-certified interpreter system.¹⁵ States are allowed to choose the standard of language services they wish to provide so long as they hold all hospitals to the same standard. All hospitals and individual providers are eligible for reimbursements from Medicaid or SCHIP as long as they used a certified service. Physicians have been shown to use professional language services more often when third-party reimbursement is available, because they do not have to bear the full cost themselves.¹⁶ After ten years of this policy, hospitals must show that they have reduced *ad hoc* interpreter use by 50 percent and increased certified interpreter use by 50 percent to retain the maximum reimbursement.

LEP patients will benefit from standardized language services and a reduction in the use of *ad hoc* interpreters. Professional language services avoid unnecessary diagnostic tests and prolonged hospital stays, saving up to \$11 per LEP patient visit on average.¹⁷ The use of interpreters substantially increases patient-provider satisfaction with communication during visits.¹⁸ Implementing a similar policy of providing language services in most healthcare settings nationwide could save over \$300 million in unnecessary charges incurred by LEP patients.¹⁹ Though the cost of these changes would be about \$268 million, there would still be a net benefit of about \$30 million nationwide.^{20 21}

NEXT STEPS

Congress must act to establish a standard of language services across the country and eliminate use of *ad hoc* interpreters. The Office of Minority Health would support the policy, because it enforces its published standards regarding appropriate language services in healthcare.²² Within a year of implementation, providers will be required to provide baseline data regarding their *ad hoc* interpreter use. This data must be tabulated by an unaffiliated third-party such as a local health department.

The LEP community overlaps significantly with the Hispanic community, making Latino advocacy groups such as The National Alliance for Hispanic Health and The National Council of La Raza key advocates. Both groups are dedicated to improving health outcomes, which would be the case as more Hispanics would be able to communicate with their providers and would spend less money and time on visits. Other minority rights advocacy groups, such as the Southeast Asia Resource Action Center, would also be important advocates.

REACHing for Safety: Restructuring the Chemical Regulation Process in the U.S.

By Grant Rosensteel, *Georgetown University*

Thesis

To safeguard public health and reduce chemical related healthcare costs, the U.S. Congress should adopt a “guilty until proven innocent” regulatory system that imposes mandatory health evaluations on chemical manufacturers.

Background and Context

In the U.S., chemical regulation is fragmented under multiple federal agencies, such as the Food and Drug Administration (FDA), Environmental Protection Agency (EPA), and the United States Department of Agriculture (USDA). The intended use of each chemical determines which agency has jurisdiction. Under the Toxic Substances Control Act of 1976, the agency that has jurisdiction over the chemical bears the burden of proving the safety of that chemical.¹ Additionally, chemicals in cosmetics are not required to have FDA approval, and any substance that is “Generally Recognized as Safe” (GRAS) can be sold without testing.^{2,3} Under current legislation, manufacturers are not required to conduct health evaluations on chemicals before appealing to the government for approval.⁴ Many chemicals such as rBST, Nitrates, Potassium Bromate, and BPA are sold in the U.S. but banned internationally due to their negative health effects.^{5,6,7,8}

Allowing chemicals to be sold without extensive health and toxicological testing is costing the U.S. billions of dollars in healthcare-related costs.⁹ The inefficiency of the current system, described as an “innocent until proven guilty” approach, is demonstrated by the approval and subsequent ban of DDT after its detrimental effects on health and environment were discovered.^{10,11} The neurological effects of lead paint alone have cost the U.S. \$53 billion in healthcare expenditures.¹² By restructuring the way chemicals are regulated in the U.S., public health will be protected by ensuring that all chemicals used in food and consumer products pose minimal risk to individuals’ wellbeing.

Talking Points

Chemical regulation in the U.S. is divided between several federal agencies and fails to test all chemicals for potential health impacts.

American chemical regulation is less stringent than other nations. Chemicals in food and consumer products permitted under current regulation have the potential to harm the health of Americans.

Requiring manufacturers to prove that chemicals are not harmful before selling them, will reduce exposure to toxic chemicals and healthcare costs. Some chemicals currently permitted are known mutagens and have negative impacts on genetic code.

Policy Idea

The U.S. Congress should implement a “guilty until proven innocent” approach to chemical regulation, similar to that of the recently implemented Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) program in the European Union. Under such an approach, manufacturers would be mandated to test all chemicals for effects on human health and provide that research when seeking regulatory approval.¹³ Additionally, a single federal agency should be given sole authority to regulate all chemicals, and to conduct random audits.¹⁴ These audits would validate companies’ health documentation and ensure that manufacturers are submitting scientifically sound evidence. A three-tiered regulation process should also be implemented, in which all chemicals undergo tier one testing for absorptivity and general toxicity, and those that prove potentially harmful would move on to the second and third tiers for more intensive biochemical evaluations.¹⁵ All chemicals previously designated as “GRAS” should undergo the same toxicological screenings as new chemicals.¹⁶

Policy Analysis

Chemical regulation in the U.S. has failed to match the rapid development of new and complex chemicals, resulting in increased rates of chemical-related diseases, especially cancer and endocrine system disorders.¹⁷ In the

KEY FACTS

- ▶ The U.S. government currently does not have safety data on chemicals that were in use before the introduction of the Toxic Substances Control Act of 1976.²³
- ▶ The FDA cannot conduct research on a chemical unless there is reasonable suspicion that it poses a threat to human health.²⁴
- ▶ Phthalates, which are often used in plastics, are known to cause cancer in the reproductive system of lab animals, but are still allowed in consumer products.²⁵

U.S., approximately 75 to 80 percent of all cancers are caused by exposure to toxic chemicals and other environmental factors, costing over \$260 billion in medical bills and lost productivity.¹⁸ The healthcare costs of endocrine-disrupting chemicals, such as BPA, are estimated to be \$175 billion since initial production.¹⁹

Under the REACH program, thousands of chemicals have undergone safety testing. As a result, the impacts of chemicals on human biochemistry have been compiled and dozens of dangerous chemicals have been banned. Investing in the REACH program has a projected return on investment of \$6.2:1 over the next 10 to 20 years.²⁰ Based on the costs incurred by the European Union, the cost of implementing these regulations in the U.S. would be about \$3.5 billion a year. However, these costs will be recouped from decreases in chemical-related healthcare expenditures and lost productivity in the long term.²¹ Annually investing a small amount towards a new federal agency to oversee all chemicals and requiring strict health and safety testing will pay for itself and allow for focus on preventative care. By banning certain chemicals in foods, the U.S. will then be able to export products such as dairy, farm-raised fish, and meat that were previously banned for import by certain countries due to the presence of harmful chemicals.²² The chemical industry conducted the largest lobbying effort in EU history in an attempt to defeat EU REACH, and similar industry lobbying is expected to occur with the introduction of a similar program in the U.S. Implementing more rigorous safety measures will prevent harmful cumulative health effects, decrease societal costs of chemical exposure, and positively impact the American economy.

NEXT STEPS

Publicizing the dangers of the current regulatory process is the first step in implementing a REACH program in the U.S. This could be done by creating websites and billboards dedicated to the issue as well as having individuals who have been negatively impacted by current chemical regulations appear on national television and other media outlets. Public hearings with experts in the fields of medicine, public health, toxicology, and biochemistry should be held so that these experts can testify about the impacts of chemicals on health.

The next step would be to establish a new federal agency to review all chemicals, determine their safety, and institute a program modeled after the EU's REACH. Finally, after the legislative framework is established, manufacturers should be given a 5 to 10 year timeframe to comply with the new mandate of supplying health and toxicological studies on all new and existing chemicals.

Expanding Scope-of-Practice Laws to Meet the Primary Care Shortage

By Sarah Rudasill, Wake Forest University

Thesis

To meet the growing demand for primary care and preventative medical services, North Carolina must expand scope-of-practice laws for advanced practice registered nurses to authorize use of the full range of medical skills conferred by their advanced degrees.

Background and Context

Advanced practice registered nurses (APRN) are nurse practitioners and specialists who hold masters or doctoral degrees that permit direct patient care and population health management.¹ Over 240,000 nurses qualify for advanced practice, providing family, pediatric, gerontology, psychiatric, and emergency care for patients. In addition, APRNs are responsible for 27 million anesthetic procedures and 10 percent of U.S. births annually.² The role of APRNs is especially critical because the nation is facing a shortage of 29,800 primary care providers.³ North Carolina alone will need an additional 4,800 primary care physicians by 2020, with over half of its counties presently designated as full or partial health professional shortage areas.⁴ Rapidly rising chronic disease rates, accounting for 86 percent of all health care spending in 2010, are shifting focus to fill the gaps in preventative medicine for communities to combat the health and financial burdens posed by cardiovascular disease, diabetes, and cancer.⁵

APRNs are critical in providing the primary care that Americans need, but there is variation among states in defining responsibilities and roles. Regulatory barriers in some states hinder this highly educated workforce by mandating physician supervision and restricting prescriptive authority, despite the fact that APRNs possess the training to practice more independently.⁶ Although the Veterans Health Administration and armed forces health services have already secured federal approval for APRNs to practice the full extent of their training, North Carolina is one of thirty-one states that have not authorized full scope-of-practice status.⁷ Reducing restrictions on APRNs will alleviate the immediate primary care shortage with quality medical services, reducing healthcare expenditure and improving population health.

Talking points

- ▶ APRN are specialists who have completed advanced training in

patient care and population health management.⁸

- ▶ APRNs can alleviate the growing primary care need, but current scope-of-practice regulations must be changed to reflect the advanced training provided by their degrees
- ▶ APRNs provide equal or superior primary care services for a lower cost relative to physicians.

The Policy Idea

The North Carolina General Assembly should pass legislation authorizing APRNs to provide healthcare services within the full scope-of-practice permitted by their advanced degrees. By revising the state's nurse practice act to reflect evidence-based standards, the state legislature will meet the growing primary care gap for communities while improving population health and reducing overall healthcare expenditure. This model can ultimately be expanded to other states.

Policy Analysis

Expanded scope-of-practice laws would yield an estimated 24.4 percent more APRNs in the state by 2019, which will alleviate the primary care shortage by substituting APRNs for physicians, reducing supervision responsibilities to increase physician consultation time, and reducing hospitalizations associated with chronic disease through preventative disease management.⁹ North Carolina's primary care gap would be reduced by 83 percent through the creation of 3,800 new APRN jobs, and the legislation would eliminate the state's shortage of obstetricians and gynecologists while meeting 85 percent of its anesthesiologist gap.¹⁰ Opponents raise concerns about whether APRNs provide adequate care quality, but research demonstrates that APRNs provide equal or superior primary care services relative to physicians. Patients are more satisfied with care provided by an APRN, with no differences in health outcomes or the number of return consultations as compared to physicians.¹¹ APRNs are more likely to devote appointment time to disease prevention counseling,

KEY FACTS

- ▶ The primary care field faces a current shortage of 29,800 physicians nationally,¹⁵ with North Carolina alone requiring an additional 4,800 by 2020.¹⁶
- ▶ APRNs could eliminate North Carolina's shortage of obstetricians and gynecologists, while reducing the overall primary care shortage by 83 percent.¹⁷
- ▶ APRNs provide care of equal or superior quality for only 25 percent to 53 percent of the cost of physicians,¹⁸ saving up to \$4.3 billion annually for North Carolina.¹⁹

and this greater focus on health education results in a reduced rate and length of re-hospitalization for patients treated by APRNs relative to primary care physicians.¹²

The benefit of expanding scope-of-practice laws rather than training more physicians is that APRNs provide equal or superior care for significantly lower costs. Hospital costs were 27 percent lower for patients managed by an APRN, preventative care visits were between 25 percent and 53 percent the cost of physician appointments, and APRNs saw 10 percent more patients in an ambulatory setting relative to physicians.¹³ North Carolina could save an estimated \$433 million to \$4.3 billion annually in health costs by expanding scope-of-practice laws, while also generating increased economic output of at least \$477 million.¹⁴

NEXT STEPS

The key target is the North Carolina General Assembly, which is responsible for revising and updating the nurse practice act governing scope-of-practice laws in the state. Key allies include the North Carolina Board of Nursing, which makes recommendations for nursing practice, the American Association of Nurse Practitioners, which promotes the field, the North Carolina Nurses Association, which is the lobbying body for nurses in the state, and the Metrolina Coalition of Nurse Practitioners, which is the local promoter of the field. AARP and the Robert Wood Johnson Foundation will also be key allies because they have played a pivotal role in lobbying for scope-of-practice changes in seventeen other states across the country. These national organizations will be especially important in framing the policy change for the American Medical Association as a reduced regulatory burden on physicians, providing greater time for patient consultation and more assistance in operating clinical practices.

Maximizing the Value of Direct-to-Consumer Genetic Testing

By Sarah Rudasill, Wake Forest University

Thesis

To address medical concerns regarding inaccurate consumer interpretation of, and response to, genetic test results, North Carolina should require all direct-to-consumer (DTC) genetic testing companies to provide genetic results, interpretation, and guidance to clients through a licensed genetic counselor.

Background and Context

A DTC genetic test bypasses healthcare professionals to provide genetic information directly to consumers.¹ Whereas a physician administers traditional genetic testing, DTC genetic testing consists of a cheek swab or saliva sample sent directly to a company that provides results online, via mail, or over the telephone.² While some companies offer optional genetic counseling or recommend independent counselors to contextualize results, the majority do not integrate genetic counseling into their service models.³ This is problematic because the interpretation of genetic test results is medically complicated. Results may confirm a diagnosis, carrier status, or increased risk of disease, but tests may miss rare mutations or account for only a few genes of the 24,000 that influence phenotypes.⁴ Furthermore, genetics is just one factor influencing risk for complex illnesses such as heart disease or cancer. Environment, lifestyle, and medical history play critical roles in determining actual health outcomes.⁵ Consumers, who misinterpret results in 20 percent of cases, may risk their physical and mental health with medical decisions based upon inaccurate or exaggerated interpretations.⁶ Although the 1988 Clinical Laboratory Improvement Amendments set quality control standards for genetic testing laboratories, and the Food and Drug Administration (FDA) regulates test accuracy, there is no regulation governing consumer interpretation of complicated genetic results.⁷ Genetic counselors can fill this void and guide consumer understanding because they are trained to assess medical, familial, and psychosocial risk while providing culturally appropriate and non-coercive support.⁸ With a rapidly growing DTC market valued at \$230 million by 2018, governments must act swiftly to protect consumer health with licensed genetic counselors.⁹

Talking Points

- ▶ DTC genetic testing is an emerging field that provides personalized genetic information to consumers without a healthcare intermediary.¹⁰
- ▶ DTC genetic testing empowers consumers to be proactive in their health,

improving long-term outcomes.¹¹

- ▶ Consumers lack the ability to contextualize complicated genetic effects on health conditions that are also influenced by a multitude of social and environmental factors.¹²
- ▶ Genetic counselors are state-licensed professionals who are trained to support individuals in understanding the medical, psychological, and familial implications of their genetic results.¹³

Policy Idea

Recognizing the value of DTC genetic testing for early diagnosis and consumer health empowerment, the North Carolina General Assembly should pass legislation requiring DTC genetic testing companies to provide consumer test results and interpretation directly through a licensed genetic counselor. This policy can be scaled to the federal level upon successful implementation in North Carolina.

Policy Analysis

In 2013, the FDA stopped DTC genetic testing company 23andMe from offering health reports that ignored the complexity of genetic interpretation.¹⁴ When over 3,000 published research papers present contradictory evidence and differing severity estimates for the role of one Alzheimer's gene, accurate consumer risk interpretation is challenging.¹⁵ In one study, only 80 percent of participants correctly identified their carrier status, with comprehension significantly lower for minorities, the elderly, and those with less education.¹⁶

While interpretation is difficult, DTC genetic testing is valuable because confirmation of a diagnosis, carrier status, or increased risk empowers individuals to modify behaviors and improve long-term health. One study found that disclosing Alzheimer's disease risk compelled 53 percent

KEY FACTS

- ▶ The market for DTC genetic testing will skyrocket to an estimated value of \$230 million by 2018.²³
- ▶ While 91 percent of consumers engage in DTC genetic testing to learn about potential future diseases, over 20 percent incorrectly interpret their genetic test results.²⁴
- ▶ Only 39 percent of primary care physicians report feeling comfortable interpreting their patients' genetic test results,²⁵ and only 10 percent report a comprehensive understanding of genetics.²⁶
- ▶ Knowledge of mutations in the gene for Alzheimer's disease compelled 53 percent of study participants to positively change their health behaviors.²⁷

of participants to positively change their lifestyles.¹⁷ Knowledge of the BRCA1 mutation, which increases breast cancer risk to 55 to 65 percent and ovarian cancer risk to 39 percent by age 70, encourages early and intensive surveillance.¹⁸ Over 80 percent of consumers reported deriving empowerment from genetic knowledge, confirming the value of increased accessibility through DTC testing.¹⁹

However, state governments should require licensed genetic counselors to provide and interpret complex results. Genetic counselors are certified to explain disease transmission, familial implications, and mechanisms to cope with increased risk.²⁰ Genetic counselors will reduce the influx of consumers seeking genetic interpretation by physicians, who report feeling ill-equipped to explain implications.²¹ Since genetic counseling assures appropriate interpretation and action, marginalized populations may attain better outcomes through preventative measures that reduce health inequalities. Genetic counseling also has the potential to slow healthcare expenditure by fostering improvements in health behaviors and reducing consumer reliance upon physicians for genetic interpretation.²²

NEXT STEPS

The institution responsible for change is the North Carolina General Assembly, which must pass legislation mandating that a genetic counselor provides test results and interpretation as a part of the service provided by genetic testing companies. The state legislature may work in conjunction with the FDA, which only has the power to regulate the medical device's accuracy, clinical sensitivity, and specificity but is interested in protecting consumer health.

Allies for this policy include genetic testing companies seeking to reenter a market temporarily halted by the FDA; the National Society of Genetic Counselors (NSGC), which promotes the genetic counseling field; and the North Carolina Medical Genetics Association (NCMGA), which promotes access to genetic information for North Carolina residents.

Legal challenges to the requirement for an intermediary may be averted by formulating this policy in association with DTC genetic testing companies, which are eager to reenter and expand the genetic testing market. Furthermore, emphasis on genetic information protection laws such as the Genetic Information Nondiscrimination Act and Health Insurance Portability and Accountability Act may avert legitimate ethical concerns about the confidentiality of personal data. Key targets include the state legislature to pass legislation and the FDA, which must be convinced that this regulatory scheme ensures consumer safety. Thus the FDA will be confident that it can reinstate genetic testing companies who will provide accurate health information through licensed professionals.

Patients, Not Consumers: Limiting Drug Manufacturers' Tax Deductions for Advertising and Promoting Research for Rare and Orphan Diseases

By Tracee Saunders, University of North Carolina, Chapel Hill

Thesis

To de-incentivize direct-to-consumer advertising (DTCA) for prescription drugs, decrease state and federal health expenditure on pharmaceutical products, and promote innovation in the pharmaceutical sector, the federal government should prohibit drug manufacturers from claiming a tax deduction for any advertising expenditure that exceeds their research and development (R&D) expenditure for medicines for rare and orphan diseases. Congress needs to shift from a corporation-driven focus in legislation to a patient-driven focus.

Background and Context

Health care is the single largest industry in the U.S.¹, representing 17.3 percent of the gross domestic product (GDP) as of 2013.² Costs and prices of prescription drugs in the U.S. are unnecessarily increased by large investments in marketing.³ The U.S. and New Zealand are the only two countries that allow DTCA for pharmaceutical products,⁴ and in these two countries, branded (non-generic) prescription drugs tend to be considerably more expensive than in other developed countries. The U.S. spends more per capita on prescription drugs than any other nation, but its citizens are not proportionately healthier. In fact, they are less healthy and have a slightly lower life expectancy. The life expectancy at birth in the U.S. is 79 years, whereas in Iceland and Japan, life expectancy is 83 years.⁵ Iceland's and Japan's health expenditures as a percentage of their GDP are 9.1 percent and 10.3 percent respectively.⁶ Similar patterns are evident in France, Sweden, Switzerland, and Germany (see Figure 1.). Although the increased price of pharmaceuticals is by no means the sole reason for the U.S.'s health expenditure, it is a contributor. There are more effective way to spend healthcare dollars. To extend better health care to more citizens, the government claims to need more money. Ending DTCA tax deductions would mean billions of extra dollars in revenue.

In a comparison of U.S. drug prices with those in Norway, England, and Canada's province of Ontario, U.S. prices were higher for 93 percent of 40 top branded drugs available in all four countries.⁷ With these prices, Americans fund a majority of the global drug industry's profits. In 2013, Americans spent \$271.1 billion on prescription drugs alone.⁸ The U.S. pays more because of practical and philosophical differences in the way the U.S. health system provides benefits, drug manufacturers' lobbying power, and Americans' need for personal choice in health care. Although other countries, such as the U.K., treat the pharmaceutical industry much like

other industries and deduct all marketing costs from their income taxes, they don't allow DTCA, and their health systems are frequently able to negotiate more effectively with pharmaceutical companies. Their health expenditures are a fraction of U.S. expenditures. DTCA inflates demand for new, more expensive drugs, even though these drugs may not be more effective or chemically much different than their older, less expensive counterparts.⁹ Additionally, pharmaceutical companies currently have no monetary incentive to research medicines for rare and orphan diseases. Rare and orphan diseases are defined, in the U.S., as diseases that affect less than 20,000 people. Pharmaceutical companies have little motivation to invest in rare diseases because they do not offer much potential profit.¹⁰

Talking Points

- ▶ DTCA raises demand and encourages costly, unnecessary drug switching.
- ▶ DTCA indirectly increases the price of pharmaceutical products because of its effect on consumer demand¹¹ and increased advertising costs that trickle down to the consumer.¹²
- ▶ The average number of prescriptions per person increased 44 percent from 2000 to 2009 without correlating increase in health.¹³
- ▶ DTCA increases the risk of inappropriate and unnecessary prescriptions.¹⁴

The Policy Idea

The policy idea is to amend the Internal Revenue Code (IRC) of 1986 to limit pharmaceutical manufacturers' advertising deduction for prescription drugs to the amount that each company spends on R&D for rare and orphan disease. The IRC cites "ordinary and necessary" business expenses as tax deductible, and generally, advertising costs are included within these tax deductions.¹⁹ Pharmaceutical advertising is inherently different than other advertising. Prescription drugs have the ability to improve peoples' lives and health, but also come with a wide range of risks and negative consequences. Limiting tax deductions would incentivize research for drugs with less profit potential and de-incentivize DTCA without regulating free speech.²⁰ Pharmaceutical companies often defend pharmaceutical advertising as a form of free speech. Several court precedents establish that ads cannot be banned outright because they are a form of commercial free speech and reflect the right of a for-profit company to make a profit.²¹ These rights have been

KEY FACTS

- ▶ For every dollar spent on advertising, drug companies make four.¹⁵
- ▶ Pharmaceutical companies' spending on advertising has increased 30% since 2013.¹⁶
- ▶ Last year, Pfizer spent \$7.15 billion on R&D, making \$44.51 billion. Merck and Co. spent \$6.53 billion on R&D, making \$36.61 billion.¹⁷ Similar data for advertising expenditures could not be found.
- ▶ Physicians are nine times more likely to prescribe an advertised drug than a non-advertised drug.¹⁸

upheld as protected by the Constitution. However, revocation of tax deductions is constitutional. Eliminating tax deductions would not violate the corporations' right to commercial speech, but it would de-incentivize DTCA and raise revenue for the federal government.²² Pharmaceutical companies are rewarded for innovation and discovery with extensive patents and full tax deductions for any R&D expenditure. Losing a portion of the tax deduction for advertising should not significantly hurt profit margin, especially if companies respond by downsizing or ceasing DTCA campaigns.

Policy Analysis

In May 2002, the Fair Advertising and Increased Research (FAIR) Act was introduced to Congress. Similar to this proposal, the bill called for limits in tax deductions for pharmaceutical companies' advertising, but also appropriated the resulting tax revenue to the Hospital Insurance Trust Fund.²³ The Hospital Insurance Trust Fund partially funds Medicaid. The bill was not made law. The political divisiveness of expanding Medicaid support and funding jeopardized support of the rest of the bill. Opponents of the 2002 proposal argued that a limit on tax deductions would decrease incentive for R&D. Since the proposal still allows for advertising deductions equal to the deductions claimed for R&D for rare and orphan diseases, R&D is actually further incentivized because increases in R&D expenditure for medicines with less profit potential will allow commensurate increases in marketing expenditures. Because marketing investments have proven to have a 300 percent return on investment, companies will want to take advantage of this economic opportunity.²⁴ Pharmaceutical spending on advertising nearly doubled between 2001 and 2005, growing from \$654 million to over \$1.19 billion.²⁵ Yet, no tax limiting legislation has been introduced in Congress since 2003. Pharmaceutical lobbying has made legislation that encroaches on the sector increasingly difficult. There is an absence of reliable data on the pharmaceutical industry's cost structures.²⁶ This allows partisans anywhere on the political spectrum to cite figures favorable to their own positions. A reliable estimate is key for policymaking. In many cases, data from the various pharmaceutical market intelligence firms do not agree with estimates based on the information in the annual reports of the pharmaceutical companies.²⁷ It seems that the pharmaceutical companies themselves are skewing the data, or paying the market intelligence firms to skew the data to favor their position. In a 2008 study, Canadian researchers Marc-Andre Gagnon and Joel Lexchin concluded that U.S. pharmaceutical companies are spending almost twice as much on marketing as on R&D.

NEXT STEPS

Congress needs to enact a patient-driven focus in their legislation to reduce health care costs, while emphasizing more appropriate health care solutions for patients. A key ally for this policy could be the American Medical Association, which called for a ban on DTCA on Nov. 18, 2015.

The Study Drug Problem: Reducing the Abuse of Amphetamines on College Campuses

By Preston Simmons, *University of Louisville*

Thesis

To combat the abuse of amphetamines on college campuses, the Kentucky state legislature should pass a bill that creates a stricter set of qualifications to diagnose Attention Deficit Hyperactive Disorder (ADHD) and prescribe amphetamine-based drugs. This would decrease the number of amphetamine-based drugs prescriptions and their subsequent abuse by college students.

Background & Context

In response to increasing pressure for academic and social success in college, many students seek out amphetamine-based drugs such as Adderall, Ritalin, or Vyvanse to gain an advantage over their peers. These drugs, which are meant for the treatment of ADHD, mimic the effect of chemical epinephrine in the sympathetic nervous response, creating a rush of energy that focuses attention and combats hunger.¹

Fraudulently accessing these drugs violates the student code of conduct and creates academic disparities when some students can study longer due to drug use. As well, abuse of amphetamine-based drugs is detrimental to the health of young adults; they are highly addictive, and chronic abuse can result in weight loss, insomnia, irritability, and, in severe cases, psychosis.² Adderall, and most other amphetamines, are considered Schedule II substances—which means they have a large potential for abuse—and can result in psychological or physical dependence.

Between 2007 and 2012, the number of adults with prescriptions to treat ADHD tripled from 5.6 million to almost 16 million.³ This figure includes those who were given a legitimate prescription, but the inclusion of those who sought false diagnoses further inflates it. Emergency room visits resulting from the abuse of non-prescribed stimulants tripled from 2005 to 2011 among people between the ages of 18 and 34.⁴

Kentucky ranks among the top states in the nation for diagnosis of ADHD,⁵ and this is in large part due to the use of self-reported screenings to diagnose ADHD, which allows college students to easily create the illusion of having the disorder. A study conducted by Pennsylvania State University and Arizona State University found that 93 percent of students who wanted a diagnosis for ADHD were successful, thus gaining access to a prescription for

Adderall or similar amphetamines.⁶

Talking Points

- ▶ The illegal use of amphetamines has increased rapidly over the past decade on college campuses, largely because of the method of diagnosis for ADHD via self-evaluation at hospitals, clinics, and university health centers.
- ▶ Students with prescriptions for amphetamines often sell the drugs to other students.
- ▶ A combination of psychological evaluations, continuous performance tests, and even further medical assessments prove to be much more effective in correctly diagnosing ADHD, reducing the possibility of a false diagnosis and the potential abuse of amphetamines.

Policy Idea

ADHD screening among college students is mainly self-reported and subjective. To decrease the abuse of amphetamine-based drugs on college campuses, a stricter screening process should be created and subsequently enforced for the diagnosis of ADHD. This screening process would include psychological evaluations, performance tests, and further medical assessments that create a multi-disciplinary approach to the diagnosis of ADHD. Better screening would decrease the number of false diagnoses, which would, in turn, reduce access to amphetamine-based drugs on college campuses.

Policy Analysis

Research studies have found that a majority of college students who express a desire to obtain prescriptions for ADHD drugs were able to do so.⁷ While it holds true that more rigorous screening for ADHD costs more than self-reported assessments (\$600 to \$1800 vs. \$125)⁸, the cost is small compared to the cost of emergency room visits due to complications that accompany the abuse of ADHD drugs. In 2010, 8,148 emergency room visits were made by young adults ages 18-25 as a result of the abuse of ADHD drugs. With

KEY FACTS

- ▶ Nationwide estimates of the percentage of college students that have illegally taken amphetamine stimulants range from 6.9 percent to 35.6 percent.¹¹
- ▶ Approximately 13 percent of American teens have abused Ritalin or Adderall at some point in their lives, adding up to 2.7 million young people taking powerful pharmaceuticals without a prescription.¹²
- ▶ In 2009, 67 percent of people admitted to an emergency room for complications with prescription amphetamine stimulants had other drugs in their system.¹³

an average cost of \$7,600 per stay for patients who abuse drugs, hospital expenses total almost \$62 million per year.⁹ In addition, up to 30 percent of hospital visits related to stimulant abuse also involved alcohol, adding yet another dangerous layer to this already harmful habit. While this problem could be addressed by limiting the number of pills dispensed to any person with a prescription to reduce the amount of “leftover” pills that could then be sold or given to someone without a prescription, this solution would be unethical because it could prevent students who do need the drugs to treat ADHD from obtaining enough medication.

Because this is currently an overlooked problem nationwide, there has been little research proving the effectiveness of creating a stricter screening process for ADHD. However, we can assume that with stricter diagnostic criteria, the percentage of students with access to these amphetamine-based drugs will decrease. This strategy has the potential to decrease the number of college students for whom prescription drugs are easy to obtain, which has been reported to be as high as 82 percent.¹⁰

NEXT STEPS

The current form of diagnosis for ADHD through self-reporting is archaic and ineffective. The first step to correcting this system is to assemble a team of health experts from the state of Kentucky to create a new statewide, standardized screening for ADHD that incorporates a multi-disciplinary approach. Funding could come from various sources including the state government and private and public insurance companies. After new criteria have been established, the Campus Health Services at the University of Louisville, where most students who attend the university come for their medical needs, should run a pilot program. If the pilot program is a success, it could then be expanded to the University of Louisville Hospital and other local clinics in the area that specialize in the treatment of ADHD. Success at the local level would provide the impetus to take a new screening process for ADHD to the state legislature and lobby for statewide implementation. Ideally, after seeing the results in Louisville, the Kentucky Department of Public Health and its local partners—such as Campus Health Services at the University of Louisville—would advocate for this new, more effective screening process and move for statewide action, facilitating a smooth and efficient transition.

Blocking D.C.'s School-to-Prison Pipeline Using Improved Mental Health Resources

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*Preventing
Bankruptcy from
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Now in its eighth year, the *10 Ideas* series promotes the most promising student-generated ideas from across our network. This journal, which includes submissions from schools located from California to Georgia to New York, stands as a testament to the depth and breadth of our network of innovators.

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As you explore these ideas, we encourage you to take special note of the “Next Steps” sections. Here, our authors have outlined how their ideas can move from the pages of this journal to implementation. We invite you to join our authors in the process. Contact us on our website or by tweeting with us @VivaRoosevelt using the hashtag #RooImpact.

Thank you for reading and supporting student generated ideas.

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Young people are incredibly important to the American political process. Millennials and Generation Z now make up the same portion of eligible voters as the Baby Boomer generation. This emerging generation is also the most diverse in our nation's history: Half of all eligible Latino voters in 2016 are between the ages of 18 and 35. We're told we can make the difference every election, and candidates and elected officials ask for our votes, time, and money—but they don't ask for our ideas.

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The *10 Ideas* journals, one of our oldest and most competitive publications, elevate the top student-generated policy ideas from across the country. In this year's journals, you will find solutions to problems in places ranging from South Dakota to North Carolina to Oregon to New York. Whether seeking to make Pittsburgh an immigrant-friendly city or to reduce recidivism in the state of Massachusetts, the following proposals take a creative and locally focused approach to building opportunity for all.

Rooseveltians are also committed to turning their ideas into action. Whether that means meeting with decision-makers, writing opinion pieces in their local papers, or organizing actions in their communities, we intend to see the solutions we propose become reality.

Why? As the generation that will inherit the world shaped by today's decisions, we have the most to lose or gain. Involving the emerging generation in the policy process will lead to outcomes that benefit everyone. We believe it matters who rewrites the rules, and we have ideas for how to change them.

I hope you enjoy reading the proposals in this journal as much as we did.

Onward,

A handwritten signature in black ink, appearing to read 'Joelle S', with a long, sweeping horizontal line extending to the right.

Joelle Gamble

National Director, Network, Roosevelt Institute

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Preventing Bankruptcy from Limiting Water Access

By Maggie DeHart and Kathryn Wissman,
Michigan State University

Thesis

Access to water should not be dependent on the wealth of a city or of an individual. The Michigan Legislature should vote to categorize water as an essential human right for all citizens and guarantee unhindered access to it. Measures should then be taken to unify Michigan's water infrastructure while cutting costs for low-income households.

Background & Context

Michigan's Local Financial Stability and Choice Act permits the governor to appoint emergency managers in times of critical financial need and allows those emergency managers to take almost uninhibited action to cut spending. In the past five years, the law has been applied in two major Michigan cities, Detroit and Flint. Flint's emergency manager cut costs by using Flint River water rather than remaining on Detroit's water system. As a result, Flint is suffering from dangerously low water quality. These cuts affect the poorest citizens, who cannot afford filtered water or even pay their current water bills, forcing them to drink water with lethal levels of lead. According to the EPA, the level of lead that warrants concern is 5 parts per billion and the average Flint citizen's water was measured at 27 parts per billion.¹ The quality of the city's water had been compromised for nearly 18 months before health officials advised citizens not to drink it.² Despite these problems, residents are being threatened with shutoffs if they do not pay their bills.³ This is a serious humanitarian issue that requires an immediate resolution.

Talking Points

- ▶ In an attempt to cut costs, Flint's emergency manager has created irreparable health problems for the city's residents, especially children.
- ▶ Both Detroit and Flint have shut off water to their residents, disproportionately affecting lower-income citizens.
- ▶ President Obama recently declared a state of emergency in Flint, bringing this issue into the national spotlight and demonstrating the urgent need for action.⁴
- ▶ Our policy would attempt to address the inequality of water access in Michigan and its initial causes.

Policy Idea

Michigan legislators need to pass a bill declaring water as a human right for all citizens, including discounted rates for low-income citizens and bill forgiveness. A referendum to Public Act 436 of 2012 (Legislative Council, State of Michigan 2013) should be passed that prevents Emergency Managers from adjusting water infrastructure, raising water bills, or shutting off water to residents. The state of Michigan should work to standardize water infrastructure and source the safest water, not the cheapest. This includes replacing old pipes and connecting cities to the cleanest available water nearest them.

Policy Analysis

This policy would combat several of the main factors that contribute to Michigan's growing water problem, including the power of emergency managers to make adjustments to water infrastructure and policy that can have severe consequences for a majority of citizens. If the proposed solution is not enacted soon, the cost to both the state and the cities involved will be staggering. For example, in 2014, the city of Detroit hired a private contractor to carry out the task of physically shutting off residents' water. Homrich, Inc., charged the city and its taxpayers \$5.2 million.⁵ In Detroit, around 40 percent of residents had their water shut off by the city's emergency manager in 2014.⁶ This plan would guarantee the rights of all citizens to fresh and clean water while also preventing water shutoffs for those who cannot afford water. In Flint, attempts to cut the cost of water have effectively made it non-potable.⁷

KEY FACTS

- ▶ United Nations Resolution 64/292, enacted in 2010, declares that water is an essential human right.⁹
- ▶ In 2014 and 2015, more than 120,000 accounts were shut off by the Detroit Department of Water and Sewage—roughly 40 percent of the city's residential consumers¹⁰
- ▶ From fiscal years 2006 to 2014, the City of Detroit's allotted budget for its water and sewage systems has been reduced by about \$1.57 billion.¹¹
- ▶ The mass shutoffs in 2014 and 2015 cost the City \$5.2 million in the form of a two-year contract with demolition contractor Homrich, Inc.¹²

NEXT STEPS

The proposal would require support from the Michigan Legislature as well as the citizens of the cities that it would affect. Jim Ananich, whose state senate district includes the city of Flint, could be a valuable ally. Senator Ananich is currently the senate minority leader and has formally requested hearings to examine the Flint water crisis.⁸ He could be convinced to support an effort to resolve the issues as pressure from his district mounts. There are already citizen organizations in Flint and Detroit that would, through grassroots movements, support actions to guarantee safe and accessible water. These groups include the Detroit Water Brigade, the People's Water Board, and the Coalition for Clean Water.

Building Public Trust with Transparent Campaigns

By Joshua Ferrer and Maria D. Rodriguez, Amherst, Whittier

Thesis

Increasing transparency encourages participation in elections and enhances political accountability, both of which are sorely needed in Illinois. Establishing a contribution reporting schedule tied to Illinois's election dates would strengthen the state's currently weak campaign disclosure laws, addressing the crisis of public trust in state government.

Background & Context

The American public consistently expresses concern over the influence of money in politics.¹ In order to build the public's trust, legislators should enact policies that promote transparency. As the public trains its attention on political donations, campaign finance disclosure has proven to be a viable method of doing this.² Modern communication technology allows reporting to happen up to Election Day.³

This policy could have a particularly strong impact in Illinois, where public trust in government is the lowest in the nation by far.⁴ In a 2014 Gallup Poll, only 28 percent of residents reported trusting their state government "a great deal" or a "fair amount."⁵ Low voter turnout rates in state and local elections, and it has created a toxic climate for politics and policy-making in Illinois.^{6,7}

Despite strengthening its election laws in recent years, Illinois maintains an egregious reporting loophole that undermines the logic of its disclosure regulations.⁸ Current reporting dates do not align with the dates of consolidated state and local elections.⁹ This loophole consistently allows over 20 percent of last-quarter political contributions to go unreported on Election Day.¹⁰ In the 2015 election, donations under \$1,000 made between January 1 and March 31 did not have to be reported until a week after the election took place.¹¹ In 2016, this loophole will leave the public unaware until the following year of many donations made to candidates between October 1 and Election Day.¹² This loophole will allow unprecedented amounts of money to influence local elections without the public's knowledge, further eroding trust.

Talking Points

- Strong campaign disclosure laws correlate with increased public trust.¹³

- ▶ Implementing time-sensitive reporting dates could eliminate unreported last-quarter contributions.¹⁴
- ▶ A deficit of trust in Illinois has led to record-low election turnout throughout the state.¹⁵
- ▶ Mandating reporting dates tied to elections would put Illinois on par with other states with strong campaign finance laws.^{16 17 18}

The Policy Idea

One way to ensure transparency and gain the public's trust is simple: provide full election reports aligned with election dates. We propose two election-sensitive reports in addition to the four quarterly reports required each year. One would be due a month before an election and would cover contributions received since the last quarterly report up to 72 hours prior to publication. The other would be due one week before an election and would cover all contributions received since the previous report up to 72 hours prior to publication.

Policy Analysis

Several states have similar disclosure policies that have informed the public without overburdening candidates. In Massachusetts, all contributions over \$500 made in the two weeks leading up to Election Day must be reported within 72 hours of deposit.¹⁹ In Oregon, all contributions over \$100 received in the final 30 days before an election must be reported within seven days of receipt.²⁰ Alabama requires disclosure of contributions over \$100 every week in the month before an election.²¹ In case legislators worry this would create an undue burden, Illinois election law only applies to campaigns that meet a minimum monetary threshold of \$5,000, meaning only relatively large campaign organizations would have to follow this reporting protocol.²²

KEY FACTS

- ▶ Only 28 percent of Illinois residents trust their state government, the lowest of any state.²⁶
- ▶ On Election Day 2015, voters didn't know about 22.4 percent of all donations made in the final reporting quarter.²⁷
- ▶ In Cook County, the City of Chicago, and Springfield alone, unreported donations on Election Day 2015 amounted to \$4,224,676 out of \$18,824,606 spent in the final quarter.²⁸
- ▶ In the 2016 general election, smaller contributions made between October 1 and November 8 will go unreported until the next year, January 7, 2017.²⁹

The emergence of instant online journalism has increased the possibilities and stakes of reporting.²³ Just as donors can contribute more quickly than ever before, journalists can instantaneously report those donations—if strong disclosure policies are in place. Establishing election-sensitive reports would allow journalists to inform the voters about virtually all political contributions made to campaigns.²⁴ This would be an important step forward, not only to increase transparency in elections, but also to regain sorely needed trust in Illinois’s government.

NEXT STEPS

In order to pursue policy implementation, we will connect with relevant stakeholders and legislators who can move our policy forward through the Illinois legislature. We have already reached out to Representative Will Guzzardi, a progressive leader, along with the Illinois branch of the Roosevelt Institute network and Illinois PIRG. All were very receptive to our policy idea. We have also received political advice from the Illinois Campaign for Political Reform. We will seek support from Illinois Senators Julie Morrison and Matt Murphy and House Majority Leader Barbara Flynn Currie, who recently sponsored legislation reforming expenditure disclosures.²⁵ We will reach out to other groups active in Illinois election reform, including the Citizen Advocacy Center and the League of Women Voters of Illinois, and will continue to work with our existing partners to move this policy forward. The first step toward implementation will be gaining endorsements from relevant organizations and getting a legislative sponsor for our policy.

Low-Income Single Mothers and Their Children: A Co-Housing/Co-Operative Hybrid Solution

By **Samantha R. Galina**, *University of North Carolina Chapel Hill*

Thesis

There is a profound scarcity of low-income housing for single mothers and their children living in North Carolina. A co-housing/co-operative hybrid would provide a cost-effective environment in which women would function as family units while emphasizing the importance of saving and homeownership.

Background

In 1937, the U.S. Housing Authority established the first public housing program. The original intent was to provide housing for those temporarily affected by the Great Depression. Currently, affordable housing serves the poor. The number of extremely low-income renters increased due to the Great Recession. From 2007 to 2011, their numbers grew from 9.6 million to 12.1 million, but only 6.8 million housing units were available.¹ Additionally, the minimum wage adjusted for inflation has decreased by 30 percent since 1968.² A combination of lower real wages and less affordable housing has created a housing crisis for low-income families. This is readily apparent in North Carolina, where, in 2013, 45.6 percent of the 1.7 million people living in poverty were single mothers with children.³

A viable solution to break the cycle of poverty is the development of a co-operative/co-housing hybrid in Durham County, NC. Co-housing is an intentional community in which private living quarters surround shared spaces; there are more than 160 co-housing communities across 37 states in the U.S.⁴ Co-operatives are government-subsidized and residents do not have any equity in their units. In comparison, the hybrid model integrates the evidence-based results of each housing solution, removes the pitfalls, and generates long-term wealth accumulation strategies and habits by providing residents with government subsidies and limited equity while emphasizing communal living, shared responsibilities, and the pride associated with homeownership.

Policy Idea

The policy idea is a limited equity co-operative/co-housing hybrid specifically designed for low-income mothers in Durham County, North

Carolina. Prior to becoming residents, the mothers would need to agree to the terms of the hybrid. The families would live in single-family residences with bedrooms and bathrooms and share a communal kitchen, laundry room, and living room. The mothers would be divided into three groups, with each group assigned different responsibilities; these would include (1) cooking, cleaning, and chores; (2) childcare; and (3) outside employment. Income earned would be distributed equally among the families. The women would collectively save money to repay loans, emphasizing the importance of saving and homeownership. This model would also give mothers more quality time with their children rather than forcing them to invest time in all three sectors.

Policy Analysis

Homeownership and self-sufficiency are integral to ending the cycle of poverty. The children of homeowners are 33 percent less likely to give birth as unmarried teens, 35 percent less likely to receive welfare, and 62 percent more likely to complete postsecondary education.⁵ The HUD-sponsored program Family Self Sufficiency (FSS) targets low-income families and helps them work toward self-sufficiency by increasing their earnings. Job training can be accessed through the U.S. Department of Labor. Government grants can pay for short-term training or vocational school.⁶

The hybrid is a more effective housing model than federally subsidized limited dividend and nonprofit housing. Co-operatives are economically sound; average operation costs were 15 percent lower than nonprofit housing and 35 percent less than the costs of limited dividend housing.⁷ Single mothers cannot supervise children while working; therefore, child

KEY FACTS

- ▶ In Durham County, 18.5 percent of the population lives in poverty.¹⁰
- ▶ Statewide, 43 percent of children live in “low-income” families; 25 percent live in poverty.¹¹
- ▶ In 2013, 43.1 percent of single women with children in the U.S. made income below the poverty line.
- ▶ In 2013, single mothers headed 45.5 percent of households in North Carolina.¹²
- ▶ North Carolina’s minimum wage is currently \$7.25. \$13.33 is the hourly wage necessary to afford a two-bedroom apartment at “Fair Market Rent” in North Carolina, which is more than 180 percent of minimum wage.¹³

care is imperative. Annual child care costs for an infant as a share of full-time minimum-wage earnings in North Carolina are 61 percent.⁸ Children left unsupervised are 27 percent more likely in the future to get “drunk/high,” 28 percent more likely to “steal something,” and 24 percent more likely to “hurt someone.”⁹

NEXT STEPS

The institution responsible for the change would be a nonprofit real estate developer focused on creating affordable housing for hard-working, low-income families. The nonprofit would borrow funds through HUD’s Mortgage Insurance for Rental and Cooperative Housing Section 221(d)(4). This program insures mortgage loans made by private lending institutions to facilitate cooperative housing projects. The U.S. Department of Labor would provide vital job and child care training in conjunction with local businesses. Key allies include the proposed community of Durham County, UNC Law School’s NC Poverty Research Fund, Durham Housing Authority, and Durham’s Homeless Shelter for Women and Mothers with Children. Such organizations are natural allies because they will benefit from a decrease in poverty, truancy, crime, substance abuse, and welfare recipients. Additionally, families receiving such services will benefit most directly from this policy through safer, more affordable places to live and access to child care while they work. Most importantly, this policy would strengthen community ties and encourage self-sufficiency.

Eliminating the TANF Asset Limit in the District of Columbia

By **Stephanie Gill**, *George Washington University*

Thesis

Government assistance should not only provide temporary financial relief but also encourage behaviors that will lift program recipients out of poverty. To reach these goals, the District of Columbia should eliminate the asset limit as part of eligibility for Temporary Assistance for Needy Families (TANF) and implement a financial services information program designed to encourage low-income families to save money and accumulate wealth.

Background and Context

Created in 1996 under the Clinton Administration, TANF is temporary cash assistance for families living in poverty.¹ Starting in October 2016, recipients of TANF will lose their benefits completely once they reach a 60-month lifetime limit.² TANF eligibility varies by state; D.C. currently relies on factors such as income and participation in a GED or job training program, in addition to an asset limit of \$2,000 excluding household cars.³ While the purpose of TANF was to “end welfare as we know it,” D.C.’s asset limit creates paradoxical consequences.⁴ The asset limit can actually be a disincentive for families to save and accumulate wealth, as it threatens their eligibility.⁵ However, asset accumulation is greatly beneficial for families in poverty both in the short and long term, as it provides financial stability during emergency situations and fosters individual economic development.⁶ Encouraging families to save money while also receiving TANF benefits will help lift families out of poverty permanently, which is imperative given the new TANF time limits.

Talking Points

- ▶ Eliminating the TANF asset limit will not necessarily lead to an increase in the number of families receiving TANF.⁷
- ▶ Eliminating the TANF asset limit will also simplify the application process and reduce administrative costs.⁸
- ▶ Encouraging families to accumulate wealth and increase self-sufficiency will fulfill TANF’s goal of “[reducing] dependency” on the government for public assistance.⁹

Policy Idea

The D.C. Department of Human Services (DHS) should eliminate asset limits for TANF eligibility and should actively encourage families to save and accumulate wealth by promoting financial literacy. The DHS should work with private banks to help families receiving TANF establish savings

accounts and collaborate with nonprofit organizations to provide resources such as financial education classes and financial coaching sessions.¹⁰

Policy Analysis

As of July 2014, eight states (Alabama, Colorado, Hawaii, Illinois, Louisiana, Maryland, Ohio, and Virginia) have eliminated TANF asset limits.¹¹ D.C. should join them because it is not only equitable but also efficient to do so. States have found that eliminating the asset test actually reduced administrative costs, because time and money are not spent on verifying assets.¹² Resources spent on verifying assets were wasted, as few cases were denied due to excess assets.¹³ Furthermore, eliminating the asset test does not lead to a significant increase in the TANF caseload.¹⁴ In fact, the savings in administrative costs “far [outweigh] the cost of any additional caseload.”¹⁵ For example, while Virginia spent an additional \$127,200 on TANF benefits after eliminating the asset limit test, it also saved \$323,050 in administrative costs.¹⁶ States that eliminated the asset limit also streamlined the application process for applicants by reducing the amount of paperwork needed.¹⁷ Alternatives, such as raising the limit, are not as efficient because resources would still be spent on verifying assets.¹⁸ Ultimately, eliminating the asset limit could prove to be a cost-saving measure for D.C.

KEY FACTS

- ▶ Low-income families can and do save, albeit at slow rates, enough to gradually improve their social status.²⁰
- ▶ This policy would impact approximately 5,600 families in the District of Columbia.²¹
- ▶ 12 percent of families in D.C. do not have savings accounts, while 25 percent of families are underbanked.²²

NEXT STEPS

Ultimately, the D.C. City Council would have to pass legislation to implement this policy change. Throughout the process, working with the DHS and anti-poverty organizations would be imperative. Additionally, lobbying and gaining support from councilmembers would increase traction. Possible councilmembers to support or draft legislation include Yvette Alexander, chair of the Committee on Health and Human Services, and David Grosso, who is on the same committee and co-authored a progressive paid leave bill.¹⁹ Support from the private sector and their cooperation with financial literacy programs would ease the burden on the D.C. government. The public image benefits of participating in such programs would be an incentive for socially responsible banks. Advisory Neighborhood Commissions would also serve as valuable allies to host town halls and raise awareness and support for this policy change.

Expanding Absentee Voting: Removing Unfair Restrictions on College Voters

By Walter Hanley and Mario Gruszczynski,
Michigan State University

Thesis

To encourage student voter participation and expand democratic access in Michigan, the State should allow all registered student voters to obtain absentee ballots.

Background/Context

Democracy works best when all citizens have a say in the policies that govern us. Young people, however, are underrepresented in our politics—especially those students who have substantial commitments outside of the classroom. In local elections for the East Lansing City Council in November 2015, the five precincts on Michigan State University’s campus averaged a voter turnout rate of 1.15 percent.¹ While those on campus represented 12.9 percent of registered voters, they accounted for only 0.7 percent of actual voters. This underrepresentation stems from the transient nature of college students, who float between their hometowns and universities. For example, the 2016 presidential primary occurred during Michigan State’s spring break, leaving students unsure of where they would be on Election Day. Rather than discouraging voting, Michigan should encourage students to have a larger role in our elections.² Some states, such as Oregon, have taken steps to encourage their residents to participate in the democratic process by expanding absentee voting.³ Michigan should follow their lead in treating voting as a fundamental right and not a privilege.

Talking Points

- ▶ Students represent a disproportionately small share of our voting population.
- ▶ Given the unpredictable conditions under which college students vote, the government should undertake policies that encourage college students to engage in politics.
- ▶ Universal absentee voting for college students would provide much-needed flexibility in the voting process.

Policy Idea

The state of Michigan allows certain groups of voters to vote absentee without fault, such as senior citizens.⁴ The right to request an absentee ballot should be extended to all college students registered to vote in Michigan, even if they currently reside where they are registered. This would allow college students to have a more proportional role in state and local politics.

Policy Analysis

Easing the restrictions on absentee voting in Michigan would be a potent tool

to address a key barrier to student election participation: access to the polls. Students registered to vote at school must find a way to get to the polls during a thirteen hour voting window, creating an unreasonable obstacle for college voters, especially those with work commitments. College students often have uniquely hectic schedules that keep them tied up for the entire voting window, such as those students who work at the while they carry a full credit load. These issues would be rectified by an absentee voting system that explicitly allowed student voters to vote by mail. Absentee status would give students certainty in their ability to vote, regardless of schedule or location on Election Day. Currently, Michigan state law only affords college students an absentee ballot if they plan on being out of town on Election Day. Instead, election law should encourage all college voters, especially those who plan on voting in the local elections.

A common argument against expanding absentee voting is an appeal to an increased risk of voter fraud. Increasing absentee voting, it is argued, increases the risk that votes will be coerced or fraudulently obtained. However, this argument ignores the astonishingly low rate of absentee voter fraud in the U.S. From 2000–2012, there were only about 491 cases of absentee voter fraud nationwide.⁵ ⁶ In addition, the rate of absentee voter fraud varies independently of absentee voting access, casting further doubt on the correlation between absentee voting and rates of fraud.

KEY FACTS

- ▶ On Michigan State University's campus, only about one in 100 registered voters actually casts a ballot.⁷
- ▶ While students on MSU's campus make up nearly 12.9 percent of registered voters in the most recent election, they represent only 0.7 percent of voters.⁸
- ▶ States that expand access to no-fault absentee voting experience a long-term increase in voter participation.⁹

NEXT STEPS

Because election law is largely decided at the state level, this policy must be enacted through the Michigan legislature. A coalition must be formed among like-minded actors, such as college students and university groups focused on voter turnout. This coalition will be key in mobilizing allies and lobbying for this change. These allies understand that college students face unique difficulties in the voting process, and that action must be taken to ease those difficulties. Students should present their experiences to members of the state legislature. State representatives and senators who represent districts that include college campuses will be key targets in this effort. Their support will be instrumental in passing legislation and swaying public debate.

Get to Work: An Employer–Transit Partnership to Connect the Boroughs of New York City

By Robert Godfried, Sarah Esteban, Saba Mundlay,
and Sarah Manney, *Columbia, Hofstra, Wheaton, and Stanford*

Thesis

In order to address the long commute times of low- and moderate-income (LMI) workers in New York City’s outer boroughs, the Metropolitan Transportation Authority (MTA) should work with anchor institutions and innovative startups to analyze employee commute data and create better bus routes.

Background/ Context

Between 1990 and 2008, residential, commercial, and industrial growth in the outer boroughs—Queens, the Bronx, Staten Island, and Brooklyn—has surpassed that in Manhattan by more than 30 percent.¹ Unfortunately, transportation systems have not caught up, leaving dozens of burgeoning LMI neighborhoods disconnected from new centers of job growth.² Within boroughs, transit times are often over an hour and can be highly unpredictable. These underserved areas, termed transportation “deserts,” pose a distinct challenge for LMI workers who tend to face more rigid schedules and less job security. To empower these individuals economically and support job growth, the MTA must address the significant deficiency in inter- and intra-borough transportation.

Think tanks focused on public–private partnership, such as the Center for an Urban Future and the Pratt Institute, have called on the MTA to expand bus service in order to address this problem. Unfortunately, because of budget restraints and political stagnancy (not to mention a debt surpassing \$34 billion), these well-researched proposals have been met with little action. Meanwhile, the MTA continues to pursue expansions in Manhattan while ignoring the needs of outer-borough residents.³⁴ An explanation for this disinterest is that employers have minimal input in MTA bus route planning. A lack of employer involvement in route design wastes valuable knowledge about the demographics, schedule, location, and commutes of workers. Employer involvement in transportation planning can enhance route efficiency and job access.

Talking Points

- ▶ This plan will enable LMI commuters to get to work more efficiently.
- ▶ The MTA transportation network should be expanded in the outer boroughs.
- ▶ A competitive bidding system leads to the most effective routes.
- ▶ Employers, LMI workers, and the MTA have overlapping incentives to work together.

The Policy Idea

Through a public–private partnership between the MTA and anchor institutions (large institutions that drive local economies) in outer boroughs, we can harness employer data to design routes that best serve LMI workers. Then, in a partnership termed a Transit Service Contract (TSC), the MTA would allow employers to bid for prospective routes servicing their area.⁸ This partnership would be fueled by overlapping mutual incentives: Employers benefit from an expanded job pool and increased worker retention while the MTA achieves increased fare revenues and LMI ridership.⁹

Policy Analysis

Employers possess detailed data about LMI commuters, including their residency demographics and route times, which the MTA currently doesn't utilize when developing routes. The Employer–Transit Partnership would bridge this gap by connecting the MTA with valuable employer knowledge, allowing the MTA to learn how to best serve LMI workers and reduce their commute times. In return, employers would receive a host of benefits. As one major employer in northern Queens explains, "Improved mass transit would allow our expanding business to draw from a larger labor pool, improve our ability to attract and retain new workers and make us a more competitive manufacturer."¹⁰

KEY FACTS

- ▶ The Urban Mass Transportation Administration concluded that competitive contracting resulted in large reductions in operation cost, between 10 and 50 percent per unit of output.¹⁵
- ▶ The average commute time is 52 minutes in Brooklyn and 69 minutes in Staten Island.¹⁶
- ▶ In Staten Island, 29 percent of workers are low-wage earners; in Queens, 37 percent; in Brooklyn, 41 percent; in the Bronx, 52 percent.

The MTA's incentives are also numerous. By setting targets for service provision for LMI workers in transportation deserts, the MTA can achieve a more expansive outer-borough transportation network. In addition, data shows that such routes could be highly profitable for the MTA: Ridership within the outer boroughs totals 1,671,815 riders per weekday compared to only 447,585 per weekday in Manhattan.¹¹

The current political climate is favorable toward such a proposal. Our policy connects the public-private partnerships endorsed by Governor Andrew Cuomo with Mayor Bill de Blasio's call for transportation expansion in the outer boroughs.^{12 13} Specifically, our proposal would help to achieve Mayor de Blasio's OneNYC goal that "in 2040, 90% of New Yorkers can access at least 200,000 jobs within 45 minutes by transit."¹⁴ It would also satisfy Governor Cuomo's focus on reducing costs through competitive application and use of specific employer knowledge.

NEXT STEPS

The New York City Council as well as the NYC Department of Transportation (DOT) are the institutions responsible for implementing this policy proposal. Additional partners include agencies such as TransitCenter, which could gather more information and prove the feasibility of this project. Lastly, a grassroots operation could improve public relations and recruit LMI workers for the purposes of lobbying and winning City Council support for the bill.

To Protect and Serve: Enhanced Transparency and Training for Volunteer Law Enforcement

By Nathan Leys and Michelle Bennett, *George Mason University*

Thesis

Volunteer reserve police officers commonly operate with little accountability or preparation. Police departments should require equivalent training for armed reserves and regular police, and should improve transparency in their selection and oversight.

Background & Context

More than half of police departments nationwide rely on reserve officers, or unpaid and often unprepared volunteers who serve the same functions as regular police.¹ When budgets tightened after the Great Recession, departments turned to reserve officers, who almost never draw salaries.² As a result, reserve officers have moved beyond their original functions, such as directing traffic or completing paperwork, and begun conducting drug busts and armed patrols, exacerbating the risk of violent confrontation and mishandled justice for officers and citizens alike.³ Additionally, the prevalence among reserve officers of wealthy donors to police departments has raised questions of “buy-a-badge” or “pay-to-play” schemes.⁴ In fact, 69 percent of reserve officers are permitted to carry their weapons while off duty.⁵ Additionally, reserve officers are permitted to carry guns into weapons-free zones like schools where ordinary concealed carry licenses do not apply, and are sometimes exempted from other measures like bans on high-capacity magazines.^{6,7} One Michigan attorney noted of his town, “Essentially, there are no prohibited areas whatsoever with this permit.”⁸ Occasionally, individuals have become reserves in towns they have never visited. The lack of restrictions on firearms for reserve officers, and the potential for pay-to-play arrangements, calls into question the charitable nature of at least some reservists’ donations. There are currently no national standards for how police forces use reserve officers, and the Department of Justice has not conducted a nationwide study since 2006, when it counted 400,000 reserve officers.^{9,10} For comparison, the most recent Department of Justice Census of State and Local Law Enforcement counted approximately 765,000 sworn personnel.¹¹ With little public awareness, state and local departments have created a system in which at least a third of officers are not professionals. While the Black Lives Matter movement and related protests have raised much-needed awareness over systemic police brutality and created a political climate conducive to law enforcement agency reform, state and local communities cannot afford to ignore the dangers posed by opaque and unaccountable reserve officer programs.

Policy Idea

In order to ensure transparency and accountability from police forces, departments should take the lead on three main levels. First, the Los Angeles Police Department has an ideal model, creating a tiered system of reserve officers in which

only the top tier is allowed to carry weapons. This level of officers is composed solely of reserve officers who were previously full-time police officers or active-duty military. Further, any reserve officer with arrest powers or who is armed should receive the same training as full police officers. Finally, to prevent buy-a-badge schemes like those in Oakley, Michigan, and Tulsa, Oklahoma, donors to police departments should be ineligible to become armed reserve officers. Working in Fairfax County, VA, which has extremely lax requirements for reserve officer training, we hope to raise awareness of this issue and demonstrate the potential for reform in the home county of many national policymakers.

Policy Analysis

Following the events in Ferguson, much investigation and reform has occurred on a national scale. Unfortunately, reserve officers remain untouched by federal reform largely because the 10th Amendment devolves police powers to states and localities. Reform must occur on the local level, where departments not only have authority over their reserve officers, but also familiarity with the communities they protect. Policy alternatives focusing on police reform more generally do not address the specific issues regarding reserve officers. With police use of force under intensified scrutiny, many have called for enhanced police training. Research suggests more training would reduce police use of force overall—a widely-cited 2013 meta-analysis found a number of studies in which different professional development programs for police reduced violent interactions with civilians.¹² But reserves may not benefit from improved training because they will not receive it in many places. For example, in Fairfax County, VA, where George Mason University is located, reserves receive just 120 hours of training compared to the 760 hours completed by the average regular police officer.^{13,14} As local departments reexamine traditional police training and introduce new methods like implicit bias training, reserve officers should be included in professional development.¹⁵

Police training incurs small upfront costs but could save money down the road. Fairfax County's Internal Affairs Bureau investigated 112 citizen complaint cases in 2014 alone. Given how expensive lawsuits and settlements can be for cities and police departments, including armed reserve officers in training programs would reduce the potential for costly litigation resulting from confrontations involving reserves.¹⁶

KEY FACTS

- ▶ 69 percent of reserve officers can carry weapons while off-duty.¹⁹
- ▶ When the last national count was taken in 2006, more than 400,000 reserve officers were serving.²⁰
- ▶ Oakley, Michigan, requires reserve applicants to donate \$1,200 in exchange for a badge and gun but doesn't require reserves to do any actual work.²¹
- ▶ The average police officer completes 760 hours of training before being sworn in, but in some states, reserves spend as little as 120 hours in training.²²

Another potential alternative would be to simply strip weapons from reserve officers. However, this would be counterproductive and potentially dangerous; increases in the number of mass shootings and attacks on police make the presence of well-trained, responsible, and armed reserves beneficial for public safety in cases where full-fledged officers may not be immediately available.^{17,18} A more effective policy would be a department-level mandate that all reserve officers empowered to carry weapons and make arrests receive the same training as professional officers. Additionally, as more departments begin requiring armed officers to wear body cameras, reserve officers carrying weapons should be issued the same equipment and accompanying guidelines.

Talking Points

- ▶ Jurisdictions that accept contributions from and issue reserve officer badges to the same people create the potential for “buy-a-badge” schemes.
- ▶ Armed reserve officers are often not required to receive adequate training before being placed in communities.
- ▶ Local communities must ensure their own safety by demanding transparency and accountability from police department leadership.

NEXT STEPS

Next steps require contact with stakeholders on all levels. Each jurisdiction’s policies on reserve officers will be slightly different, but each state has branches of the ACLU and police unions. Although nongovernmental, these organizations are committed to defending the rights of civilians and police and should push local departments and government to protect both. Additional pressure needs to be placed on those with tangible authority within municipalities. For example, local candidates for sheriff’s offices—like Fairfax County’s sheriff, Stacey Kincaid—usually hold public forums or town halls where those interested in reform can ask questions about a candidate’s stance on reserve policing reform. Pressing this issue during election seasons forces local government officials and sheriffs to go on record during races. If adopted, Fairfax County police could potentially apply for an Edward Byrne grant, a federal justice assistance program. If necessary, the incoming money could enable the department to effectively improve its training.

Additionally, as this issue has remained quantitatively unexplored for too long, departments should be provided with best practices for the effective and appropriate use of reserves. To obtain this information, the Department of Justice must be petitioned to conduct a new nationwide survey of reserve officers. To increase momentum for federal fact-finding, reformers should consider pushing state representatives or municipal leaders for smaller-scale studies. At a campus level, university students should consider contacting their criminology departments about the possibility of speaking to students interested in a law enforcement career.

Rescuing Surplus Food from Landfills: Addressing Food Insecurity in Chicago

By Douglas Ortiz, Rahul Shah, and Jennifer Kim,
DePaul, University of Georgia, and Cornell

Thesis Statement

In order to increase the capacity of food programs serving food insecure individuals in Cook County, the Chicago Department of Procurement Services (DPS) should require all city food contracts to be awarded to businesses that participate in the Food Rescue Programs of the Greater Chicago Food Depository (GCFD).

Background

The United States Department of Agriculture (USDA) defines food insecurity as a household-level economic and social condition of limited or uncertain access to adequate food.¹ Food insecurity is caused by low wages, poverty, unemployment, and high housing costs.² For households with incomes near or below the federal poverty line, households with children headed by single parents, and Black- and Hispanic-headed households, rates of food insecurity are substantially higher than the national average.³ In Cook County, Illinois, more than 812,000 individuals, or 232,110 households, are currently food insecure.⁴ Chicago, in particular, makes up approximately 54 percent of the population of Cook County.⁵ Many of these individuals receive food assistance from the GCFD network of 650 pantries, soup kitchens, shelters, mobile programs, children's programs, and older adult programs.⁶

The rate of food insecurity in Cook County is alarming and has been growing in recent years. In a 2014 study, 68 percent of GCFD programs reported an increase in the volume of clients seeking food assistance over the prior 12 months.⁷ As a result, 29 percent of the GCFD's food pantries reported having to turn away clients, citing many reasons including the lack of food resources.⁸ Seventy-three percent of GCFD clients have reported having to choose between paying for food and paying for utility bills, and, with food pantries reporting shortages, a policy intervention is needed to tackle food insecurity in the county.⁹

Talking Points

- 812,000 individuals in Cook County suffer from food insecurity and depend on the emergency food services and programs of the Greater

Chicago Food Depository, such as food pantries and soup kitchens.

- ▶ Over the last year, in the face of increasing demand for emergency food assistance, many of these food programs have had to turn away clients due to food shortages.
- ▶ In the United States, vast amounts of wholesome food are thrown away by various food outlets, including restaurants, caterers, and retail grocers.
- ▶ To increase food donations to emergency food assistance programs, the city of Chicago should leverage its purchasing power to require that food vendors participate in the GCFD's Food Rescue Program in order to be awarded a city contract.

The Policy Idea

The DPS, which is responsible for the procurement of all goods and services for the City of Chicago, should leverage its purchasing power to require that all food contracts that it awards go to businesses that participate in the GCFD's Food Rescue Program. This will allow the GCFD to rescue wholesome, edible food from many food outlets when it would otherwise have been thrown out.

Policy Analysis

Food rescue is the process of recovering wholesome, still-edible food by diverting it from landfills. Businesses throw away food for a variety of reasons unrelated to edibility, including labeling errors, aesthetic concerns, and inadequate storage.¹⁰ Chicago throws out 55 million pounds of food each month; much of this waste is generated by food businesses such as wholesalers, restaurants, and grocery retailers.¹¹

By diverting food to pantries, more food assistance can be provided to food-insecure communities. Benefits include increased worker productivity, better child development and performance in school, and better physical

KEY FACTS

- ▶ In Cook County, Illinois, more than 812,000 individuals, or 232,110 households, are currently food insecure.
- ▶ Chicago awards contracts for more than \$2 billion of goods and services annually through an open bid and solicitation process, and much of this amount is awarded to food businesses.¹⁹
- ▶ The Greater Chicago Food Depository's Food Rescue Program rescues excess food from more than 240 retail groceries in Cook County. As a result of this program, more than 12 million pounds of food was rescued last year.²⁰

and mental health as a result of mitigating food insecurity.¹² Participating in food rescue programs can also benefit the vendors through existing tax deductions and reduced trash disposal. Food rescue also benefits the environment by reducing landfill waste and vehicle miles needed for food disposal.¹³

Other solutions to fight food insecurity are politically difficult or costly to implement. For example, the House Budget Committee's plan would slash SNAP benefits (federal food assistance for the poor) by \$125 billion between 2021 and 2025, suggesting that increased federal spending of food assistance is unlikely.¹⁴ SNAP currently provides about \$200 per household, but greater participation in food rescue can provide food more cost-effectively.¹⁵ Rescued food is donated, so there is no direct cost incurred to GCFD in terms of purchasing food. And GCFD picks up the rescued food directly from food businesses, so there is no cost to vendors to transport the food.¹⁶

NEXT STEPS

The city council will need to pass legislation in order for the DPS to adopt this policy. Key supporters are the GCFD, which would benefit most from this policy, and the Illinois Public Health Institute (IPHI). The IPHI will be a useful partner because of its history of working on implementing policy changes of this nature and because it maintains a number of key partnerships with other health- and food-based institutions that can provide more support for the policy. The IPHI has also already reviewed this policy and expressed enthusiasm about bringing it to action.¹⁷ Key organizations include those currently involved in helping the food-insecure and the DPS itself, which can put pressure on the city council. Most importantly, constituents of the mayor and the aldermen will have to be organized for their political support. Many of the constituents who rely on emergency food assistance are located in areas with a high concentration of need, which include neighborhoods to the south and west of downtown Chicago.¹⁸ These constituents have a direct stake in ensuring that leaders who support the innovative food rescue initiatives of the Greater Chicago Food Depository are elected.

Decreasing D.C. Gun Violence: Attaching Breathalyzers to New Guns

By Anna Primosch, *Georgetown University*

Thesis Statement

The District of Columbia can reduce alcohol-induced gun violence by funding the research and development of breathalyzer-equipped gun technology, with the eventual goal of taxing guns without breathalyzers to fund gun safety programs.

Background and Context

The U.S. ranks highest in worldwide firearm ownership. *The Washington Post* estimates that in 2013, America's 357 million privately owned guns outnumbered its 310 million citizens.¹ As gun ownership has swelled, so has gun violence, particularly in the nation's capital. Homicide in D.C. claimed 162 victims in 2015, increasing 54 percent from 2014.²

Despite widespread public exasperation with persistent gun violence, Congress has struggled to pass comprehensive gun legislation. Well-funded lobbying groups such as the National Rifle Association have defeated proposed legislation that would have banned the sale of assault weapons or required more stringent background checks on would-be gun owners and have already dismissed President Barack Obama's recently proposed executive action against gun violence.³

Local ordinances have been more effective than national policy in deterring gun violence. In August 2015, the Seattle City Council levied a \$25 tax per firearm sold in Seattle, which local officials estimate will raise hundreds of thousands of dollars for gun violence prevention.⁴

Identifying the small, local factors behind gun deaths would help generate more tailored solutions that chip away at larger patterns of gun violence. One of those factors is substance abuse. Alcohol consumption increases impulsive behavior and inhibits one's memory, judgment, and other executive functioning abilities.⁵ The British Medical Journal estimates that one-third of gun deaths are alcohol-induced, as firearm owners are far more likely to consume alcohol than non-owners.⁶

The Policy Idea

D.C. should selectively award research grants to nonprofits or government

agencies to develop a prototype breathalyzer-equipped gun. If non-equipped firearms were taxed at a higher rate than equipped firearms, the latter would appeal more to price-conscious consumers. This incentivizes manufacturers to attract new customers by adding breathalyzer-equipped guns to their brand. A strategically placed breathalyzer would prevent the trigger from firing until the person pulling it has demonstrated a blood alcohol content (BAC) under 0.08 percent, the same BAC at which an individual is legally considered too intoxicated to drive.⁷

Policy Analysis

Breathalyzers have been effectively used to reduce automobile accidents. All 50 states and the District of Columbia have some type of law requiring individuals convicted of driving under the influence or while intoxicated to install an ignition interlock device—better known as a breathalyzer—in their cars.⁸ The ignition will not operate until the driver blows into the device, which then determines whether the driver's BAC is low enough to operate the vehicle. To ensure that the driver does not start drinking while behind the wheel, the car stops periodically to require additional tests.⁹

Although breathalyzers have not yet been manufactured specifically for guns, the technology of the device is simple enough to be applied to firearms. Small enough to be marketed as a smartphone accessory, breathalyzers are also inexpensive to produce; they are available for purchase for as low as \$20 apiece online.¹⁰ The device takes between 30 seconds and a minute total to warm up, measure one's BAC, and produce results.

Gun rights activists might counter that a breathalyzer would hinder someone in dire circumstances from using a gun in self-defense. Their argument rests on the incorrect assumption that guns are primarily used for

KEY FACTS

- ▶ Between 1997 and 2009, there were 395,366 victims of gun violence in the US, averaging about 30,000 gun deaths per year.¹³
- ▶ Someone under the influence of alcohol or drugs is seven times more inclined to commit a violent crime than a sober individual.¹⁴
- ▶ 51 percent of D.C. residents favor the reinstatement of the D.C. ban on gun ownership overturned by the U.S. Supreme Court in 2008.¹⁵
- ▶ In July 2014, a federal judge overturned the District's ban on concealed carry weapon permits, starting a new series of court battles over gun rights in D.C.¹⁶

self-defense purposes; in a survey of 4,348 Americans, the *British Medical Journal* found that less than 1 percent of respondents have used a gun in self-defense, either by posturing with the weapon or firing it.¹¹ Furthermore, a breathalyzer would not hinder D.C. recreational hunters, as the District already lacks viable hunting space.

Talking Points

- ▶ Gun violence plagues the U.S., particularly in urban areas like the District of Columbia.
- ▶ Encouraging the sale of breathalyzer-equipped guns in D.C. is less controversial than sweeping gun regulations that have been proposed at the national level but ultimately fail.
- ▶ D.C. needs to generate micro-solutions to combat different forms of gun violence before concealed carry permits become commonplace.

NEXT STEPS

The Council of the District of Columbia should launch a positive marketing campaign to generate public support for the tax. It should hold public forums and send surveys to registered gun owners' homes to determine the tax threshold at which they would rather buy a breathalyzer-equipped firearm. The council should then temporarily place said tax on all firearms currently sold in the District to fund long-term research on a breathalyzer-equipped gun prototype. If manufacturers are interested in developing the prototype for sale, the tax will continue to apply to guns that are sold without breathalyzers but will not apply to breathalyzer-equipped guns. Whether or not breathalyzer-equipped guns make it to market, once the prototype is complete, the council should redirect the tax to help fund Project ChildSafe, a national gun safety awareness program that distributes free gun locks to registered D.C. gun owners through the District's Metropolitan Police Department.¹²

Drug-Related Restrictions in Public Housing: Decreasing Recidivism by Reuniting Families

By Michael Vitelli, *City College of New York*

Thesis

New York City should discontinue eviction proceedings for low-level offenses, remove outdated zero-tolerance policies, and expand the reach of the New York City Housing Authority's (NYCHA) Family Re-entry Pilot Program for its public housing tenants. These changes will unite families, combat homelessness, and reduce recidivism.

Background and Context

NYCHA is responsible for providing housing to the city's low-income residents through Section 8—the federal housing program—and other housing subsidy programs. In 1988, Congress passed its first attempt to oust violent, drug-related criminals living in federally subsidized Section 8 housing. In response to the crack epidemic, the Anti-Drug Abuse Act of 1988 required each public housing administration (PHA)—a local or state public housing administrator—to include a lease provision allowing the PHA to terminate a whole family's tenancy if a tenant, or even a guest of a tenant, is ever engaged in any drug-related criminal activity.¹ The Clinton administration's 1996 "One Strike and You're Out" policy only served to reiterate those strict drug restrictions.² The one-strike policy explicitly encouraged PHAs to evict any tenant who engaged in "drug-related activity," meaning any person convicted or even charged with manufacturing, selling, distributing, or possessing illegal drugs. Regardless of circumstance, the federal government gave local PHAs authority to evict tenants for drug-related activity. Those policies were enforced with zero tolerance and opened the window to excessively punitive eviction proceedings. Zero-tolerance eviction policies adversely affect the lives of many low-income families reliant on Section 8 and other forms of subsidized housing programs, leading to increased rates of recidivism and homelessness among ex-offenders.³ While the city should be committed to ensuring the safety of its public housing residents, the drug-related policies implemented to protect NYCHA tenants are unnecessary and harmful.⁴ In certain instances, excluding drug-related offenders might be necessary to protect NYCHA's tenants, but the termination of tenancies often disrupts the lives of families without any corresponding net benefit. However, the city, among other organizations, has made strides to address these issues; the NYCHA Family Re-entry Pilot Program (FRPP) is designed for individuals who are leaving prison or jail to reunite with their families who live in NYCHA housing, and the program also provides re-entry services. Furthermore, to help the

participants get back on their feet after being incarcerated, the FRPP provides case managers to ease their entry back into society.

Talking Points

- ▶ Outdated zero-tolerance policies are detrimental and counterproductive to the current NYCHA population and sever important community and family ties and relationships. These family ties and relationships help combat homelessness and recidivism.
- ▶ People recently released from prison are less likely to return to crime or live on the street if they are able to live with their families.
- ▶ Policies modeled after the Family Re-Entry Pilot Program can be introduced in other states' PHAs to achieve the same effects: uniting families, combating homelessness, and reducing recidivism.

KEY FACTS

- ▶ People with criminal records are banned from NYCHA premises, even for petty crimes like minor possession.¹⁰
- ▶ Mayor Bill de Blasio has persistently tried to make it easier for PHAs to evict tenants with criminal records.¹¹
- ▶ Exclusions of non-tenants in NYCHA units have risen by 20 percent, from 344 to 415 in the past year.¹²

Policy

NYCHA should remove the pre-existing zero-tolerance administrative policies, such as the one-strike rule, which prevent people from reuniting with their families, and adopt a less punitive strategy. In order to stop punitive eviction proceedings for low-level offenses, NYCHA should not accept the New York City Police Department's nor the District Attorney's recommendations to pursue evictions of low-level offenses that target underrepresented tenants. Finally, NYCHA should expand the Family Re-entry Pilot Program to unite families, combat homelessness, and reduce recidivism rates.

Policy Analysis

The issues of housing, homelessness, and incarceration are deeply intertwined. The expansion of the FRPP will alleviate some of the major burdens on former prisoners by giving them access to public housing, and allowing them to live with family.⁵ If provided with adequate re-entry assistance and the ability to legally reside with their families, the likelihood of ex-convicts returning to crime should diminish significantly. Since the creation of the FRPP in 2013, the program reportedly has not received the influx of referrals and applications that the program's administration originally expected; however, it is not an issue of effectiveness, but an issue of NYCHA's lack of advertising.⁶

Bringing more people into this program would decongest the courts' landlord-tenant cases and open space in homeless shelters. The money spent on expanding the reach of the program would be nominal compared to the money spent on shelters and prisons. In 2012, the city spent an average of \$167,731 per inmate.⁷ In addition, the city also spent an average of \$37,603 to house a family in a homeless shelter in 2013, a 2 percent rise from 2012.⁸

NYCHA's current policies are needlessly broad, and, in response to the crack epidemic, adversely affect a larger population than originally intended. The expansion of the FRPP can serve as a close vetting process to determine which people deserve and are ready to re-enter public housing, and to separate those who are potentially true dangers to residents. The FRPP, by providing case managers, can also assist participants diagnosed with mental illnesses so that they can be integrated back into society and live with their families in public housing. Coupled with ending administrative evictions proceedings for low-level offenses, harmless circumstances will no longer put many families in danger of eviction.

NEXT STEPS

Tenants in public housing should be allowed to enjoy housing stability and security. Within the first few months, the expansion of the FRPP should be discussed between NYCHA, the Vera Institute for Justice (the partner organization for the FRPP), the New York City Council, and other grassroots organizations dedicated to re-entry platforms. These bodies would be responsible for the expansion of the FRPP and the creation of an advisory board made up of representatives from different nonprofit and governmental bodies, can also be implemented to ensure proper leadership for future action. Additionally, certain city council members are sympathetic to re-entry and decriminalization positions.⁹

Initially, the aim of the collaboration should be to increase awareness of the FRPP and find suitable candidates among the pool of recently released convicts who are NYCHA and Section 8 tenants. These changes will benefit local governments by decreasing demands on homeless shelters and reducing recidivism and prison costs. In addition, more tenants will be able to work, improving the financial position of public housing agencies through more stable incomes. Many current and formerly incarcerated people with family ties to NYCHA housing would benefit from the policy changes and can be organized to contact their local representatives to advocate for these issues through phone calls and through the work of already established housing and re-entry non-profits. Organizations like The Center for Urban and Community Services (CUCS), The Supportive Housing Network of New York, and the Fortune Society are dedicated to supporting people and families with re-entry and housing information mirroring the goals of NYCHA's FRPP.

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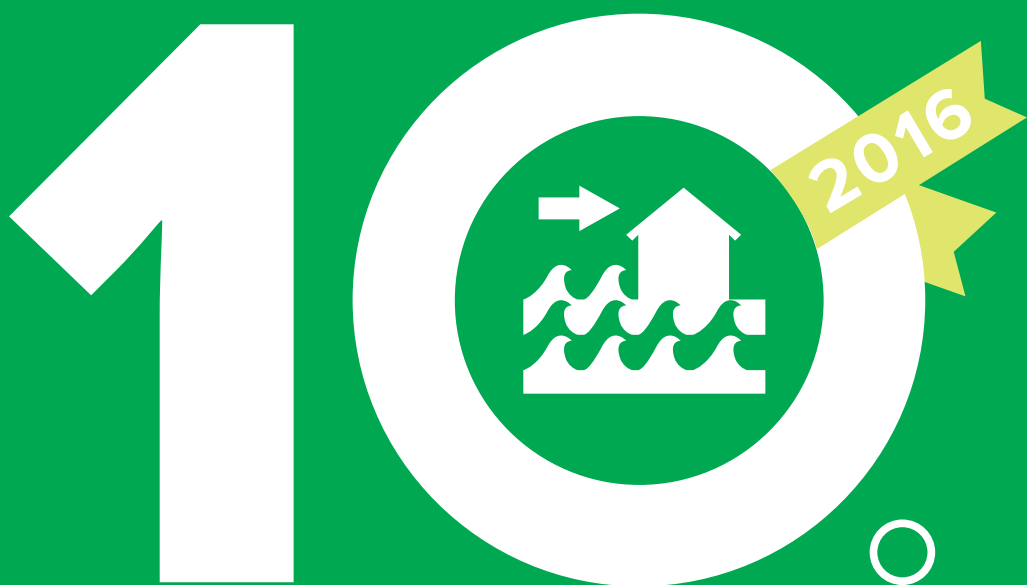
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Now in its eighth year, the *10 Ideas* series promotes the most promising student-generated ideas from across our network. This journal, which includes submissions from schools located from California to Georgia to New York, stands as a testament to the depth and breadth of our network of innovators.

Our *10 Ideas* memos are selected for publication because they are smart, rigorously researched, and, most importantly, feasible. We want to see these ideas become a reality.

How You Can Join

As you explore these ideas, we encourage you to take special note of the “Next Steps” sections. Here, our authors have outlined how their ideas can move from the pages of this journal to implementation. We invite you to join our authors in the process. Contact us on our website or by tweeting with us @VivaRoosevelt using the hashtag #RooImpact.

Thank you for reading and supporting student generated ideas.

Together we will design the future of our communities, from towns to countries and all that lies in-between.

Dear Readers,

Young people are incredibly important to the American political process. Millennials and Generation Z now make up the same portion of eligible voters as the Baby Boomer generation. This emerging generation is also the most diverse in our nation's history: Half of all eligible Latino voters in 2016 are between the ages of 18 and 35. We're told we can make the difference every election, and candidates and elected officials ask for our votes, time, and money—but they don't ask for our ideas.

Young Americans continue to transform our economy and culture. Now it's time for us to disrupt our political system.

The *10 Ideas* journals, one of our oldest and most competitive publications, elevate the top student-generated policy ideas from across the country. In this year's journals, you will find solutions to problems in places ranging from South Dakota to North Carolina to Oregon to New York. Whether seeking to make Pittsburgh an immigrant-friendly city or to reduce recidivism in the state of Massachusetts, the following proposals take a creative and locally focused approach to building opportunity for all.

Rooseveltians are also committed to turning their ideas into action. Whether that means meeting with decision-makers, writing opinion pieces in their local papers, or organizing actions in their communities, we intend to see the solutions we propose become reality.

Why? As the generation that will inherit the world shaped by today's decisions, we have the most to lose or gain. Involving the emerging generation in the policy process will lead to outcomes that benefit everyone. We believe it matters who rewrites the rules, and we have ideas for how to change them.

I hope you enjoy reading the proposals in this journal as much as we did.

Onward,

A handwritten signature in black ink, appearing to read 'Joelle S', with a long, sweeping horizontal line extending to the right.

Joelle Gamble

National Director, Network, Roosevelt Institute

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Fighting Fire with Fire: Better Forest Fire Prevention in South Dakota

By Brendan Clemente, Zachary Cendejas, and Lane Haskell,
Notre Dame University

Thesis

South Dakota fire prevention is underfunded and restricted by U.S. Environmental Protection Agency (EPA) regulations. The South Dakota Forest Service should allow more logging near residential areas, prescribe more burning in remote forests, and petition the EPA to loosen regulations that restrict these methods.

Background and Context

Between 1985 and 1990, the U.S. spent about \$2.2 billion on fire suppression, the costly endeavor to control or extinguish forest fires. Between 2010 and 2015, it spent about \$9.5 billion.¹ Congress has funded this increase by diverting funds away from fire prevention methods.² In 1995, 16 percent of the U.S. Forest Service's budget went towards fire suppression. In 2015, fire suppression comprised 50 percent of the budget. If current trends continue, by 2025, it will comprise 67 percent of the budget.³

Reactively focusing funding on suppression has helped extinguish or control fires, but diverting funds away from preventative measures, such as thinning, has allowed forests to grow thicker, which allows fires to spread more easily.⁴ This, combined with climate change, which dries out forests and provides more fuel, has made the forest fires of today more destructive than in the past.⁵

EPA air quality regulations and the protection of wildlife areas called "protected activity centers" (PACs) exacerbate these problems by limiting the use of prescribed burning, a primary fire prevention method.⁶ This trend has created economic, environmental, and health challenges for the state of South Dakota. In 2012, South Dakota experienced more wildfires than all but seven states.⁷ That year, the White Draw Fire killed four people and destroyed 9,000 acres.⁸ More of the state's population is moving into residential areas that intermix with forests, called Wildlife Urban Interfaces (WUI), such as the Black Hills region where 29 percent of the state's population now resides.⁹

Policy Idea

The Black Hills Forest Service of South Dakota should pursue a policy

of active prevention of forest fires by contracting out limited logging opportunities in WUIs, and using funding from those contracts to finance prescribed burning in remote wilderness areas. Additionally, the South Dakota state government should petition the EPA to loosen both air quality restrictions and the regulation of PAC's to allow for more prescribed burning and management of naturally occurring fires.

Policy Analysis

The diversion of the forest service's budget to fire suppression results in insufficient funding for preventative measures. Preventative measures are also inhibited by EPA air-quality restrictions and PAC-zone regulations. These two factors result in wildfires that require increasing funds to suppress.

The proposed policy would contract limited logging opportunities to private parties in forests near residential areas and use this revenue to finance prescribed burns in remote forests. Prescribed burns lessen the chance of large, destructive fires by preventing the accumulation of debris and a heavy density of trees. At \$86 per acre, compared to \$1,000 per acre for mechanical thinning, they are the preferable method in remote areas.¹⁴ However, thinning must be used in forests near residential areas because it is low-risk and more precise.¹⁵ The policy mitigates this cost by contracting to private loggers. Additionally, the cost of logging is less than suppression near residential areas. Just south of South Dakota's Black Hills region, the Black Forest Fire near Colorado Springs, Colorado, for instance, burned 489 houses, killed two people, and cost \$420 million in insured losses.¹⁶

Petitioning the EPA to loosen air quality and PAC limitations on preventative burning will improve the environment because the forest fires they prevent damage the environment more than preventative

KEY FACTS

- ▶ Wildfires burn twice as much land area today as they did in 1970.¹⁰
- ▶ Each year, wildfires emit a total of 1.5 to 2.5 million tons of particulate matter. This is more than is emitted by better-known particulate matter sources such as fuel combustion, industrial processes or transportation.¹¹
- ▶ The six worst fire seasons since 1960 have all occurred since 2000.¹²
- ▶ Trends and projections of climate and fire responses suggest that new strategies to mitigate and adapt to increased fire are needed to sustain forests.¹³

burning does. Carbon emissions from forest fires are far higher than those from preventative burning.¹⁷ Additionally, environmental studies indicate that wildfires damage PAC zones more than unprotected areas. A study performed by the Society of American Foresters found that two 2007 wildfires in the Sierra Nevada, home to the California spotted owl, decimated the species' population in PACs designated to protect it. The owl population survived in unprotected areas where preventative burning lessened the fire's damage. While prescribed burning does some damage to species in PAC zones, those species will be better protected by taking measures to limit the threat of forest fires in their habitats. The escalating diversion of funds to wildfire management has taken funds away from the research and maintenance projects for which the Forest Service is chiefly designed. Allowing more preventative measures will lessen the need for fire suppression spending and allow the Forest Service to refocus on projects that sustain the environment.

Talking Points

- ▶ Loosening EPA regulations regarding air quality and PACs that will allow for the use of prescribed burning will better protect air quality and endangered species.
- ▶ A policy of active prevention of forest fires through contracting out limited logging opportunities will reduce the threat of forest fires in WUIs.
- ▶ Revenue generated by logging contracts will contribute to fire prevention by financing prescribed burns in remote wilderness areas.
- ▶ Active fire prevention will promote the development of healthy forests and reduce the need for fire suppression.

NEXT STEPS

The institution responsible for implementing the proposed policy is the Black Hills Forest Service, which manages the forest and determines fire management policies. Key allies are citizens who live in the WUI of the Black Hills; the current policy of suppression jeopardizes their lives and homes. Other allies are park rangers and employees of the forest service who maintain the forest, and logging companies that will profit from additional selective logging opportunities. Key targets are employees of the supervisor's office, who administer the policies implemented in the Black Hills. The Black Hills Forest Service should work with these stakeholders to establish contracts with logging companies for selective logging as well as petition the EPA to remove restrictions that prohibit prescribed burns.

Oh Deer: Managing Deer Overpopulation in Western Pennsylvania with Birth Control

By Joseph Doyle and Aidan Semanco, George Mason University

Thesis

The destructive overpopulation of Western Pennsylvania white-tailed deer can be solved on a county level with the use of porcine zona pellucida (PZP). PZP is a natural immunocontraceptive (birth control), which can be administered via dart by sharpshooters already employed by the Pennsylvania Game Commission.

Background and Context

An overabundance of deer has been a major issue in the suburbs of Pittsburgh, Pennsylvania, leading to environmental and public health concerns. Deer in suburban areas lead to vehicular collisions, contributing to dozens of injuries and deaths among local citizens each year.¹ Deer carry ticks that spread dangerous illnesses such as Lyme disease. As well, deer pose a significant environmental threat. Deer prefer to eat leaves of young trees, damaging saplings and preventing trees from maturing. The loss of these trees prevents smaller animals and insects from thriving, resulting in an imbalance in the local food web in favor of the deer population.² Recently, local governments have implemented an ineffective and dangerous policy of paying sharpshooters and recreational hunters with bows and arrows per head of deer they kill in residential areas.

The root of white-tailed deer overpopulation is the predator-free habitat resulting from Pittsburgh's suburban sprawl. As edge dwellers, deer prefer to consume saplings, which are closer to the ground and have more tender leaves. After housing developments displace the trees in the deer's natural habitat, young decorative trees are planted; the deer thrive on these saplings.³ The decline of natural predators such as wolves and cougars in these areas as a result of overhunting and suburban development has greatly contributed to the overpopulation of white-tailed deer.⁴

The imbalance created by the decline of deer's natural predators demonstrates that overhunting causes a serious disruption to local ecosystems. There is currently no safe and effective solution being undertaken to address overpopulation of white-tailed deer in Allegheny County.

Talking Points

- ▶ Areas that have implemented the use of PZP have experienced a 20 to 30 percent decrease in deer population in the first year.⁵
- ▶ Hiring sharpshooters is not safe to the public and cannot guarantee painless death for deer.
- ▶ Culling of deer can lead to a reproductive rebound. After a cull, deer often birth more twins and triplets, which results in an overall increase in deer offspring.⁶
- ▶ The use of PZP would not cause an additional burden on taxpayers because the funds would be derived from the current deer management budget in Allegheny County.

Policy Idea

Allegheny County will begin a program of injecting 14,000 white-tailed deer annually with biodegradable PZP darts, which render deer infertile for 3 to 5 years. Trained professionals already employed by the Game Commission and volunteer sport hunters will administer the PZP darts. PZP injection will be repeated annually for 5 years, or until the deer population reaches a sustainable level. Fifty deer per square mile is recommended by experts at the University of Pittsburgh, a level equivalent to the deer population in the area before the suburban sprawl of Pittsburgh in the 20th century. After this goal has been reached, PZP injection will take place every four years. Estimates of the deer population after the first cycle of PZP will be analyzed as Allegheny County reviews the results of the immunocontraceptive injection program.

Policy Analysis

PZP implementation is dramatically safer and markedly more humane than culling. By eliminating the use of lethal weapons to cull white-tailed deer, residential areas in Allegheny County will be safer.

A 2012 survey concluded that 54 percent of residents in Allegheny County strongly or moderately supported birth control to control deer population. Seventy-one percent opposed trapping and killing.⁷ Trapping and killing

KEY FACTS

- ▶ Before the 2014 hunting season, upwards of 100,000 deer were reported to occupy Allegheny County.¹⁴
- ▶ Pennsylvania drivers have one of the highest rates of vehicular collisions with deer in the nation, ranked 4th out of 50 states and the District of Columbia.¹⁵
- ▶ There are more than 800 cases of Lyme disease in Allegheny County per year,¹⁶ and, in 2014, Pennsylvania had the most cases of Lyme disease in the country.¹⁷

exercises are more than just a threat to the community's safety; it is also a threat to civilians' wallets. The end cost of a sharpshooter killing one deer can be as high as \$1,000,⁸ compared to a \$17 dart of PZP, capable of lasting 5 years.⁹ The use of PZP would eliminate the cost of transporting and butchering deer carcasses. This policy would allow sharpshooters using PZP to earn \$200 to \$300 per deer as a result of spending less on transportation and butchering.

Not only is culling more expensive, it is ineffective. When population suddenly decreases due to culling, more resources are available to the surviving population, creating ideal breeding environments. Long term, culling paradoxically perpetuates the overpopulation problem.¹⁰

If not addressed soon, the already unsustainable population of deer will continue to rise. Deer-related vehicular collisions, which have already risen to 3,000 annual crashes in Allegheny County alone, will also increase.¹¹ Lyme disease, caused by ticks specific to white-tailed deer, will be a growing threat to the citizens of Allegheny County.¹²

Deer overpopulation will wreak havoc on the local ecosystem. The hay-scented fern, which should cover less than 3 percent of the forest floor, now covers more than a third of Pennsylvania as a result of deer consuming its competitors. This imbalance has resulted in the hay-scented fern choking out other necessary plants and herbs in the Pennsylvania ecosystem.¹³

NEXT STEPS

Lobbying Allegheny county government officials will communicate that this policy is safer and more cost effective than current policy. It will be necessary to gain additional support from non-profits such as the Western Pennsylvania Humane Society, who will bolster the policy's legitimacy. The Humane Society is a national organization, which will garner widespread support in communities across the country. Allegheny county government officials will work with local legislators to propose this policy to the Pennsylvania Game Commission, who will train sharpshooters to safely dart deer. The Pennsylvania Department of Transportation will be a crucial stakeholder because they are responsible for dealing with the aftereffects of vehicular collisions with deer, including carcass disposal and emergency vehicle response.

Changing the Face of Nuclear Energy

By Max Kontorovich, *University of Michigan*

Thesis

Nuclear energy is the most cost-effective and expedient solution to the global energy crisis, but its development is inhibited by concerns about safety and waste management. The education system, specifically at the high school level, should increase awareness of clean and safe reactor models, in particular Molten-Salt Reactors (MSRs), in an effort to align public opinion with reality.

Background & Context

Nuclear energy is substantially cheaper than other competing forms of clean energy, so economics would predict a booming nuclear industry in the U.S. Further, political rhetoric and public opinion agree that the U.S. should push towards energy independence, and nuclear energy is a quick way to achieve that goal. Despite this, only a minority of Americans would like to see an increased reliance on nuclear energy. The two biggest concerns regarding nuclear expansion are safety and waste management.¹ These concerns have seriously slowed research and development of fourth generation nuclear reactors even though they run on existing waste and are “walk-away safe,” which means “that even if all power is lost and the coolant leaks and the operators flee the scene, there will be no meltdown of the core, no fire in the spent fuel rods, and no bursts of radioactive steam into the atmosphere.”²

Several nations, including Russia and China, have made significant steps in the development of modern nuclear technology.³ However, public opinion and government policy are much more closely tied in the U.S. than in China. Thus, moving forward with the development of the waste reducing and “walk-away safe” Molten Salt Reactor (MSR) model in the U.S. is highly contingent upon public opinion. To that end, it is important to change public opinion. The education system is the optimal tool to raise awareness of MSR technology as a safe, cheap, and clean energy source.

Talking Points

- ▶ In many states, nuclear energy is the cheapest base load power source
- ▶ MSR technology addresses the flaws of nuclear energy as it is safe and practically waste-free
- ▶ MSRs can run on existing waste, helping to rid the environment of radioactive material from previous generations
- ▶ Educating people on the benefits of MSR technology is the only way

to facilitate an industry-wide embracement of the safest and most pollution-free form of nuclear energy

The Policy Idea

MSR technology should be part of the Advanced Placement Environment Science (APES) curriculum. Due to the complexity of explaining the advantages of MSR technology, an advanced high school class is an appropriate time to introduce the concept. The APES course already covers nuclear technology of similar complexity.⁴ Technical exposure to MSR technology would help dispel myths about modern nuclear technology. As part of the APES curriculum, it would also reach a population of students with high potential to work in the energy sector where this increased exposure would make the largest difference.

Policy Analysis

When it comes to carbon free energy, it is abundantly clear that nuclear must play a major role in replacing coal and natural gas due to pricing alone. The Energy Information Administration (EIA) estimates the levelized cost of nuclear energy in 2020 will be \$95 per megawatt-hour, compared to solar at \$125 per megawatt-hour and offshore-wind at \$196.9 per megawatt-hour.⁵ On-shore wind and geothermal are competitive with nuclear, but the intermittence of wind⁶ and the low-availability of geothermal⁷ make them unsuited to become primary electricity providers on a national scale.

MSR technology addresses the two primary sources of hesitance about nuclear power: waste and safety. MSRs produce as little as 3 kilograms of high-level waste per year. A conventional nuclear power plant, by contrast, produces around 20 metric tons of high-level nuclear waste per year.⁸ For the same reason, MSRs can run on less enriched uranium, so no weapons-grade enrichment need ever be produced.⁹ MSRs are also extremely safe and by definition cannot have meltdowns. The ‘cooling plug’ feature allows them to be completely “walk-away safe”¹⁰, meaning the worst-case scenario

KEY FACTS

- ▶ Most people oppose nuclear energy because of concerns about waste and safety, but MSR nuclear technology addresses both concerns.
- ▶ MSR technology reduces nuclear waste by 98 percent, and can run on existing waste.
- ▶ MSR is completely “walk away safe,” and the chance of a meltdown is zero, even in theory.
- ▶ Because MSRs can run on less enriched uranium, no weapons-grade enrichment need ever occur for energy production.

is that the reactor stops producing energy. There is no threat of radioactive spills or casualties. The technology is straightforward to explain and simpler than traditional light-water reactors, whose design is already covered in APES. Putting MSRs in APES curriculum should not be controversial, because it is the only base load energy source that is safe, both fiscally and environmentally responsible, and can lead to energy independence.

NEXT STEPS

Should this technology be included in national curriculum, it should first be tested on a small set of students to ensure that it can be delivered in a captivating yet understandable way. One such set can be found in Ann Arbor's Huron High School APES class. I plan to reach out to Andrew Collins, the head of science at Huron, who has the potential to pilot this curriculum. While this would be slow, ideally a few schools could add this to their curriculum if it works at Huron, building up eventually to the state and national level. At the same time, I will be contacting the authors of the AP Environmental Science curriculum to initiate the process of incorporating MSRs into national curriculum. The larger goal of this policy is to change public opinion on nuclear energy by exposing the public to MSR technology, and while that process is slow, it has the potential to change the energy infrastructure.

Addressing Recycling Apathy: Furthering Extended Producer Responsibility

By Anna McAnnally, *College of William and Mary*

Thesis

To address the problem of Americans not recycling -- either because they do not feel it is worthwhile, or do not understand how to recycle -- federal legislators should further European-style recycling policies known as Extended Producer Responsibility (EPR) to hold producers more accountable for proper disposal of waste.

Background and Context

Recycling reduces greenhouse gas emissions and diverts waste from accumulating in landfills. Since curbside recycling programs began in 1973, recycling has increased from six percent of waste to nearly a third of our individual waste.¹ However, in America, only about 28 percent of recyclable materials actually get recycled.² Often, waste does not get recycled is because consumers are unaware of what is, and is not, recyclable; bins are contaminated with non-recyclable materials, or recyclable materials are thrown in with garbage. Additionally, curbside recycling programs still do not exist in all cities, and even the programs that do exist do not always accept all recyclable materials.³ We see the consequences of this in our landfills and our oceans, where products alternately end up. A prime example of this is the growing mass of plastic bags in the Pacific Ocean, all of which could be recycled. EPR holds the producer of waste accountable for its sustainable disposal through two avenues: an emphasis on recyclable and compostable packaging, and fines. A certain degree of federal EPR has been adopted through policies regarding the proper disposal of batteries, thermostats, auto switches, electronics, and leftover paint.⁴ However, these policies are not nearly as comprehensive as the EPR policies implemented in European countries. The EPR legislation implemented in Sweden and Germany in 1990 requires producers to consider the ecofriendly nature of all packaging, taking into consideration biodegradability and recycling labeling. Thus, not only are more product packages recyclable and compostable, they are also more clearly labeled, resulting in a more universal understanding of recycling protocol. Corporations may feel that under this policy they must unfairly absorb all the cost of the EPR program while consumers face no additional cost. However, economic theory suggests that consumers will

share some of the financial burden when increased production costs are factored into the sale price of products.

Talking Points

- ▶ EPR holds producers accountable for their impact on the environment
- ▶ EPR helps facilitate a better understanding of the impact both producers and consumers have on the environment
- ▶ EPR has the potential to greatly increase recycling nationwide

Policy Idea

EPR is a federal policy that requires producers of products to design responsible and sustainable packaging, and pay for the disposal of the packaging. Producers, rather than consumers, are responsible for sustainable waste

protocol.⁵ This means that the producers must construct packaging, which is as recyclable or biodegradable as possible, and is correctly labeled as such so that the consumer understands the proper way to dispose of the product.⁶ EPR legislation, as it is a federal program, could be passed through congress, but could also manifest as an executive order, as the program's enforcement falls to the EPA. The major effect of EPR is a greater degree of recycling, due to greater consumers awareness of how to properly dispose of waste through more appropriate labeling.⁷ The main industries affected by EPR legislation are packaged food companies, cleaning supplies companies, and auto part suppliers, but almost every industry would be affected by the legislation.⁸ The EPA must review and approve all materials used in packaging for products produced in the United States, an effort that should be funded by corporations. Approved packaging must contain only recyclable types of metals, plastics, and papers, unless the company has a valid need to construct the packaging using a different kind of material. Ideally, all packaging would be constructed from plastics one and two, aluminum, and paper, as those are the most easily recycled materials.⁹

EPR also includes requiring the companies to pay for the recycling programs, which collect their packaging. These payments would begin immediately upon implementation, and would also include a temporary tax

KEY FACTS

- ▶ EPR legislation would reduce American greenhouse gas emissions due to waste by up to 47 percent.
- ▶ EPR legislation would save Americans taxpayers 8 billion dollars per year, as local governments no longer have to provide funding for recycling programs.
- ▶ EPR legislation would reduce waste in landfills by 37 million tons of trash per year.¹⁹

on non-sustainable packaging, which would be lifted as new packaging was developed.¹⁰ In the United States, transitioning recycling responsibilities to the state may make this easier. In the time it takes to establish more expansive recycling programs in places where they do not already exist, a state run recycling program would enable recyclables to be shipped to a town which could process them.

Policy Analysis

Under current conditions, waste contributes to 36 percent of all greenhouse gas emissions.¹¹ After adopting a policy of EPR, Belgium's recycling rate increased to 91.5 percent, which is comparable to Germany's 88.1% and the Netherlands's 74.9 percent.¹² Assuming these rates are normative, the U.S. could assume an average recycling rate of around 84.8 percent after implementing EPR. Under these conditions, waste would only contribute 20 percent of the greenhouse gases in the United States, which would be a 16.6 percent reduction in waste-based greenhouse gases, the equivalent of 1,116 tons of carbon dioxide. Currently, Americans pay between \$30 and \$40 per capita for recycling programs.¹³ Under EPR, recycling costs per capita could be reduced to an average of \$10.58, saving a total of around \$8 billion per year. This is enough money to purchase and install a quarter of a million solar cell systems,¹⁴ 93 thousand wind turbines,¹⁵ or produce 5 billion gallons of ethanol fuel.¹⁶ Also, under EPR, more products will be biodegradable, and properly labeled for compost. Currently, 28 percent of our waste is biodegradable, but only about 1 percent gets composted.¹⁷ Other countries that have implemented EPR have seen an increase in composting. Under EPR, America could expect to see an increase in composting as well.

NEXT STEPS

First, curbside recycling programs should be expanded into all municipalities throughout the country to provide the proper waste management channels to all Americans. This will also ensure that EPR efforts are not wasted due to lack of accessibility. Lobbying local governments for better access to these programs is imperative. Ideally, the outcome of these efforts would be full recycling programs in every locality, so that every American has the ability to recycle all recyclable items through a curbside recycling program.

EPR legislation could be passed by Congress, but might also be passed via executive order since the program falls under the EPA. Traditionally, EPR legislation is implemented one industry at a time, beginning with the food packaging industry.¹⁸

Bioswale Implementation: Reducing Total Pollution Output into the Willamette River

By Max Morrison, *University of Oregon*

Thesis

To combat heightened water pollution levels in the Willamette River, Eugene, Oregon, should implement multiple biological infrastructure systems, called bioswales, along a portion of the river to increase the filtration of their stormwater runoff.

Background and Context

As a major water source for the Willamette Valley region of Oregon, the Willamette River contains over 16,000 miles of streams, providing water to five cities along its path with 17 other communities recognizing it as a quality water source for recreation and consumption.^{1,2} Pollution—in the form of pesticides, chemical solvents and fuels, harmful levels of mercury, among others—are a byproduct of the growth of these cities that rest along the river's path.

Moreover, with any urban growth, including that of Oregon cities in the 20th century, there comes a need for infrastructure that successfully drains water to major sources such as rivers and creeks to reduce flooding in urban areas. Storm water runoff in urban areas causes what is called nonpoint source pollution. Nonpoint source pollution includes any particulate matter from parking lots, lawns, and other land that drains into local water sources. With upwards of forty-five unique chemicals (twenty of which are current-use pesticides) found in the Willamette River, the Oregon Department of Environmental Quality labeled the river a threat to human and aquatic life. The river is Oregon's most toxic waterway.³

Talking Points

- ▶ Nonpoint source pollutants have a wide range of negative effects on both humans and aquatic life, including thyroid disorders, kidney and brain damage, birth defects and developmental complications, as well as endocrine and nervous system issues.^{4,5,6}
- ▶ As one of the nation's largest rivers by volume, the Willamette River crosses through or is adjacent to cities with a total population of 1.13 million people. It also serves as a major source of recreation and water consumption.⁷

- ▶ Bioswales are a form of green infrastructure that filter out harmful chemicals and sediment from storm water runoff by concentrating the flow through specific kinds of vegetation and particulate-eating microbes.

Policy Idea

To combat the point and nonpoint source pollution along a nine-mile stretch of the Willamette River, Eugene should create and implement a bioswale filtration system project. Eugene's effort to reduce pollution in the Willamette River through green infrastructure will serve as a model to other cities along the river's 187-mile path.

Policy Analysis

Bioswales accumulate storm water runoff and reduce drainage speed, which allows suspended particulate matter to be filtered through dense vegetation at the bottom of the bioswale. Harmful chemicals are digested by microbes housed within the soil surrounding these plants. Water processed by a bioswale is significantly cleaner than untreated storm water runoff. A University of Oregon case study conducted in 2006 by Hannah Cooley and Stephanie Young explored the effectiveness of a bioswale in downtown Springfield, Oregon. By studying the levels of toxins in the water before and after filtration, the team found that there was an 86.7 percent reduction in total suspended solids that included lead, cadmium, chromium, and petroleum measurements.⁸

The cost-effectiveness of a bioswale filtration system is also attractive to local and state governments. According to Claudia Copeland, a Specialist in Resource and Environmental Policy at the Congressional Research Service, "green infrastructure is 5 percent to 30 percent less costly to construct and about 25 percent less costly over its life cycle than traditional infrastructure." The Natural Drainage Project in Seattle, Washington,

KEY FACTS

- ▶ Oregon's Department of Environmental Quality reports upwards of 45 chemicals in the Willamette River, which officially tops the list of Oregon's most toxic waterways.¹¹
- ▶ With a lifespan of 25 years, a 900-square-foot bioswale has an annual cost of only \$600 including installation and maintenance.¹²
- ▶ As biological filtration infrastructure, bioswales can remove upwards of 90 percent of total suspended solid particulate matter, metals, organics, and bacteria in water runoff compared to non-filtered storm water.¹³

showing cost savings equivalent to \$100,000 per square block, and New York City's \$187 million investment in green infrastructure in 2012 deferred approximately \$2 billion in capital costs compared to traditional construction.^{9 10}

Bioswale implementation at multiple sites along the Willamette River is a smart short- and long- term economic investment.

NEXT STEPS

Organizations responsible for the proposed policy include the City of Eugene Parks and Recreation Department and the Eugene Water and Electric Board. These institutions should provide the overarching expertise and support network vital to the creation and quality of the project.

This policy needs the support of legislators such as Mayor Kitty Piercy and Eugene State Senator Chris Edwards, chair of The Senate Environment and Natural Resources Committee, the University of Oregon's Sustainability Director Steve Mital, and groups such as the City of Eugene Park Stewards. These individuals and groups will help garner support for the project through lobbying city legislators and engaging communities in the Eugene area that have connections to the river.

In Hog (Farm) Heaven: Improving Hog Waste Management in Rural North Carolina

By Thomas Poston, *Wake Forest University*

Thesis

North Carolina should require existing industrial hog farms to implement waste-to-energy technologies to cut greenhouse gas emissions, reduce nutrient pollution, and protect the environmental and public health of some of the state's most marginalized communities.

Background and Context

Concentrated animal feeding operations (CAFOs)—indoor factory farms raising thousands of hogs each—first appeared in North Carolina in the 1970s.¹ Today, with annual revenues of \$8 billion, North Carolina's hog production ranks second nationally.² More than 90 percent of the state's 2,000 CAFOs are clustered in the rural east, home to large low-income and minority populations.^{3,4}

Most CAFOs store their waste in open-air pools the size of football fields, called lagoons.⁵ The untreated waste, containing nutrients, pathogens, and toxins, is sprayed onto croplands as fertilizer via sprinklers (the “sprayfield” system), which erodes air quality and pollutes nearby watersheds.⁶ Living near these CAFOs has serious health consequences. Symptoms such as skin and eye irritation, respiratory difficulty, and anxiety have all been linked to proximity to lagoons and sprayfields.^{7,8} The consequences are especially severe given the socioeconomic disadvantages these communities already face.⁹

A 2007 state law banned lagoons on future farms, but allowed existing farms to continue using lagoons and sprayfields.¹⁰ In 2014, after the North Carolina Department of Environment and Natural Resources (now the Department of Environmental Quality) renewed permits yet again without requiring improved waste-management systems on all hog farms, environmental justice advocates filed a civil rights complaint with the EPA, noting the geographical correlation between CAFOs and communities of color. The EPA opened an investigation in 2015, boosting public awareness and creating new impetus for reform.¹¹

Talking Points

- ▶ Prevailing CAFO waste management practices threaten the environment, erode public health, and unjustly affect the poor and people of color in eastern North Carolina.
- ▶ Implementing waste-to-energy technology (which generates electricity using hog waste, a renewable biomass) on hog farms reduces greenhouse gas emissions, protects watersheds, and eliminates the most harmful health impacts of CAFOs.
- ▶ Requiring all (including existing) CAFOs in North Carolina to implement waste-to-energy technology protects marginalized communities and holds the industry accountable for the negative externalities of its activities.
- ▶ Hog farm operators can benefit from waste-to-energy technology by selling the renewable energy their systems produce back to their utility providers.

The Policy Idea

Rather than allow existing hog farms to continue with harmful waste management practices, North Carolina should mandate that all hog farms in the state abandon the lagoon-and-sprayfield model and implement waste-to-energy technology, which converts hog waste into renewable energy. Farms that fail to implement waste-to-energy technology should face penalties such as fines or, if necessary, the revocation of DEQ permits. The timeline set for implementation may vary based on each farm's size and location.

Policy Analysis

Existing regulations require only new farms to forego lagoons in favor of

KEY FACTS

- ▶ North Carolina hog CAFOs are nearly 10 times more likely to occur in communities in which greater than 12 percent of the population lives in poverty and in which nonwhites make up more than 10 percent of the population.¹⁹
- ▶ Five contiguous counties in eastern North Carolina are home to over 7.5 million hogs.²⁰
- ▶ A large CAFO, housing as many as 800,000 hogs, can generate more than 1.6 million tons of manure per year, or 1.5 times the waste produced annually by the population of Philadelphia.²¹
- ▶ Waste-to-energy systems reduce emissions of methane, which is 21 times more potent a greenhouse gas than carbon dioxide.²²

“environmentally superior technologies” (ESTs). The state’s voluntary Lagoon Conversion Program, which offers cost-sharing opportunities for existing farms, has been ineffective due to lack of interest. As of October 2014, only two farms had fully implemented a Lagoon Conversion Program contract.¹²

Loyd Ray Farms, a CAFO in Yadkin County offers a model of EST implementation.¹³ The farm installed a waste-to-energy system that captures the methane generated by hog waste, uses it to power a turbine that creates electricity for use in the farm’s facilities, and recycles the leftover wastewater.^{14 15} During its first fifteen months of operation, the system produced an average of 25 megawatt-hours of electricity monthly, reducing the farm’s greenhouse gas emissions by 2,087 million metric tons of carbon dioxide equivalent.¹⁶

This waste-to-energy technology is more expensive than the primitive lagoon-and-sprayfield system, but requiring farms to make the additional investment internalizes the costs of their waste, which are otherwise borne unjustly by already-marginalized communities in the form of higher health expenditures, lower property values, and decreased quality of life. That being said, waste-to-energy technology also entails a significant economic upside for farms.¹⁷ Because North Carolina’s Renewable Energy Portfolio Standard requires utility providers to meet a portion of their energy needs by generating or purchasing power from renewable energy facilities, farms may sell renewable energy credits from their waste-to-energy systems back to their utility providers for additional revenue.¹⁸

NEXT STEPS

North Carolina’s General Assembly and Department of Environmental Quality should mandate, via legislation and regulation, the use of waste-to-energy technology by all hog CAFOs in the state. The ardent support of environmentalists and civil rights groups in the state will be essential to the success of the policy, but the most effective coalition will also include organizations with heavily rural membership, such as veterans’ advocacy groups, which hold significant influence over more conservative lawmakers, and through which we might target key representatives and senators from rural, eastern districts. Similar CAFO regulations could be pursued at the federal level, most likely through the EPA, which could potentially provide recourse if state-level efforts fail. The EPA continues to investigate possible civil-rights violations in North Carolina. Eventual nationwide implementation of waste-to-energy systems would be ideal, and would contribute significantly to meeting national emissions reduction targets and ensuring socioeconomic justice.



Modernizing Stormwater Management Around Rhode Island's Mashapaug Pond

By Carley Przystac and Julian Del Prado,
University of Massachusetts-Amherst

Thesis

The Rhode Island Department of Transportation (RIDOT) should install bioretention media in the area surrounding Mashapaug Pond to reduce total levels of aquatic nitrogen and phosphorous and to keep pace with an increasing amount of stormwater pollution resulting from rapid urban development.

Background and Context

Mashapaug Pond was listed on The Rhode Island Department of Environmental Management (RIDEM)'s 2006 303(d) list of impaired waters for hypoxia, nutrients, and pathogens in response to requirements of the Federal Clean Water Act (CWA). In October 2015, RIDOT signed a Consent Decree after the U.S. Environmental Protection Agency (EPA) filed a complaint alleging that RIDOT had violated standards set forth in the CWA.¹

Indigenous people created a cultural center at Mashapaug Pond before the area was colonized by European settlers. The area has become increasingly developed. By 1960, the Huntington Business Park construction replaced gardens and lawns with commercial buildings and pavement.² This increase in impervious cover had serious consequences for the area's stormwater management.

Bioretention strategies are a type of low-impact development recognized as a best management practice in urban environments by environmental engineering professionals.³ Increasing the bioretention area around Mashapaug Pond will allow for natural stormwater treatment. Further, water treated in bioretention systems will not need to be transported to a treatment plant for pollutant removal, leading to cost savings. The Environmental Justice League of Rhode Island has already implemented small-scale green infrastructure projects in the area, which treats 2.6 million gallons of stormwater annually.⁴ This should be expanded to increase the volume of water treated by the system.

Talking Points

In a 2007 Total Maximum Daily Load (TMDL) report, RIDOT identified stormwater runoff as the most significant source of phosphorous to Mashapaug Pond.⁵

Bioretention is a low-impact development strategy requiring little maintenance and supplements existing storm drains by converting surface water flow to groundwater.

The creation of bioretention areas around Mashapaug Pond provides a buffer zone to slow stormwater flow, while reducing phosphorous levels in the water by promoting nutrient uptake before discharging water into the pond.

Policy Idea

RIDOT and local property owners should construct bioretention facilities around Mashapaug Pond to slow the flow of stormwater into the pond and to aid in filtering out dangerously high levels of nutrient contamination currently causing an explosion of bacterial growth in the pond. By cleaning up Mashapaug Pond, subsequent water bodies, including Narragansett Bay, will benefit from decreased pollutant input. A reduction in current pollutant levels may also lead to a re-opening of the pond to fishing, swimming, and other recreational activities to allow greater community enjoyment of this natural area.

Policy Analysis

Eutrophication of Mashapaug Pond from high phosphorous loading is causing excessive algal and bacterial growth, and the death of aquatic organisms. As a result, the pond has been closed to swimming and other recreational activities.⁶ These restrictions negatively affect residents of surrounding neighborhoods in Providence and Cranston.

Bioretention areas are a low-impact development strategy well suited to urban areas. A vegetated infiltration basin is an example of a bioretention strategy. A basin has been constructed at J.T. Owens Park near Mashapaug

KEY FACTS

- ▶ Rhode Island has an average impervious surface cover of 12 percent¹⁰, compared to a national average of approximately 4 percent.¹¹
- ▶ In more urban areas, such as Mashapaug Pond's watershed, impervious surface cover is closer to 61 percent.¹²
- ▶ Rhode Island has identified stormwater as the most significant input of phosphorous into Mashapaug Pond.¹³

Pond. At first glance, this project may appear to be gardens constructed in a depression. Those gardens, though, treat approximately 2.6 million gallons of stormwater runoff per year, remove 6 pounds of phosphorous, and prevent sediment and bacteria from reaching the pond, while reducing flooding and erosion.⁷ The expansion of sites such as this will allow for better stormwater treatment, improving the water quality of Mashapaug Pond and the surrounding areas.⁸

Maintenance requirements of bioretention systems are relatively low and mostly comprise aesthetic improvements. Examples of routine maintenance include: removal of trash, pruning, mulching, and mowing. Training for system maintenance is relatively easy, and can likely be completed with existing staff. Specific maintenance requirements are dependent on the system design.

The EPA has compiled a list of relevant green infrastructure funding opportunities. Because of green infrastructure's far-reaching impacts and the non-point sources of the pollution that it combats, projects can be funded without the use of city or state funds. Examples of funding sources available to bioretention projects include: the EPA Clean Water Act Nonpoint Source Grant, the EPA Clean Water State Revolving Fund, and energy efficiency tax credits and rebates.⁹

NEXT STEPS

RIDOT would be largely responsible for implementing changes in land use surrounding highways and impervious roads because they own the land adjacent to these impervious surfaces. Many community groups—including the Environmental Justice League of Rhode Island, the Urban Pond Procession, and Groundwork Providence—are already engaged in activism and education surrounding Mashapaug Pond pollution. Local community groups, RIDOT, and RIDEM are expected to support this policy because it comes at a low cost to them and helps to solve the long-term issue of stormwater pollution in Rhode Island. RIDOT and RIDEM should take a leadership role when applying for grants and in project management, in partnership with the cities of Providence and Cranston. Local colleges and universities are encouraged to assist with monitoring and evaluation when possible, to both provide project support and to increase young professional's knowledge of system design and effectiveness.

Urban Agriculture: A Solution to Food Deserts

By Joshua Sacks and Emily Bramhall,
The College of William & Mary

Thesis

Richmond, Virginia, is a densely populated food desert. The city should adopt an urban agriculture initiative to supply fresh produce by incentivizing, through tax breaks, the use of vacant lots as farms.

Background and Context

More than 23 million Americans live in areas designated as food deserts.¹ As defined by the U.S. Department of Agriculture, food deserts are “urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food.”² These neighborhoods are more prominent in communities of concentrated poverty. Of the 23.5 million people living in food deserts, 11.5 million live in low-income households.³ Food deserts either lack traditional food retailers or the only easily accessible food sources are fast food restaurants and convenience stores that provide almost exclusively pre-packaged and nutritionally deficient foods. A diet consisting mainly of these kinds of foods can lead to higher rates of obesity, diabetes, and other diet-related illnesses, treatment of which accounts for 70 percent of U.S. health costs annually. Many of the impoverished residents of food deserts depend upon public health care programs (Medicaid, SCHIP, and Medicare), meaning the cost of treating these illnesses falls on taxpayers.⁴ In Richmond, 22.8 percent of the urban population lives in a state of food insecurity. This is compared to 12.7 of the population in Virginia and 14.9 in the U.S.⁵ There are currently movements to address the existence of food deserts within the city, such as bringing in produce from surrounding farms to sell at convenience stores in poor areas. These efforts, while well intentioned, have been too small to have a significant impact.⁶

Talking Points

- ▶ Urban agriculture will bring fresh produce to areas of Richmond that lack access to fruits and vegetables due to the absence of conventional grocery stores.
- ▶ Minimum of three-year leases of vacant lots will allow farmers to grow and sell food to make a profit.
- ▶ Property-tax exemptions will encourage private landowners to lease their land to farmers and farm cooperatives.

- ▶ To help ensure access to the produce by food desert residents, urban gardens will be required to accept WIC vouchers and SNAP for the purchase of produce.

Policy Idea

Following the framework of the D.C. Urban Farming and Food Security Act of 2014, Richmond should combat food insecurity by repurposing vacant lots for urban agriculture to make fresh produce available for purchase by food desert residents. This initiative would also provide an economic boost for both landowners and local farmers. Landowners that lease their land to farmers and farm cooperatives will receive a property-tax abatement, and farmers who work on the land will be able to sell their food for profit.^{7,8}

KEY FACTS

- ▶ Twenty-three percent of Richmond, Virginia, residents live with food insecurity.
- ▶ Richmond is the largest food desert in the country for a city of its size.
- ▶ A half-acre plot of land can provide enough produce for about 150 people per year.

Policy Analysis

Due to the commercial nature of leasing land to farmers, nonprofit organizations that attempt urban agriculture efforts such as this risk losing their status as a tax exempted 501(c) 3 and therefore the ability to operate.⁹ Our proposed act would circumvent this concern by extending property tax abatements to private landowners who choose to lease their land to farmers. Farmers will be able to sell the food they grow with a three-year minimum lease to allow them to profit, creating a further incentive to use the land for urban agriculture.

The use of vacant lots requires farming techniques that function within small plots of land, raising the concern of small yields. However, existing agricultural undertakings have proven the efficiency of urban agriculture. In New York City's community gardens, urban plots produced an average of 1.2 pounds per square foot with a half-acre plot, providing enough fruits and vegetables for almost 150 people per year.¹⁰ Additionally, farms in urban areas are in close proximity to large consumer bases, making direct marketing from the farmer to the community possible. This arrangement is the most efficient way to get produce into the homes of community residents.

Evidence indicates a positive relationship between healthy food access and fruit and vegetable consumption among low-income families.¹¹ Private urban agriculture will use otherwise vacant lots to bring fresh produce to families living in food deserts, allowing them to lead healthier lives.

NEXT STEPS

Richmond should identify plots of vacant land that would be suitable to lease to farmers and recruit these landowners for the program. The city should then alter zoning ordinances and designate the plots as agricultural land for urban agriculture for three years, with an option for renewal. Tax breaks on the land will incentivize landowners to lease the land. Requiring a three-year minimum lease will allow farmers to be confident in their ability to profit from cultivating the land. To ensure that the produce benefits the residents of food deserts, contracts for leasing the land will stipulate that the produce must be sold within the city limits of Richmond, and that the farmers must accept WIC vouchers and food stamps.

Reducing Cigarette Litter in New York City with Public Ashtrays

By Samuel Schaffer, *University of Georgia*

Thesis

Cigarette litter is harmful to the integrity of New York City's urban environment. The city should place ashtrays on commercial street corners to alleviate cigarette litter in the city while also revitalizing the health and safety of New Yorkers and their property.

Background and Context

On average, between 14 and 17 million cigarettes are littered in New York City per day.^{1,2,3} In one year, this adds up to roughly 6.2 billion cigarette butts disposed of improperly in the city alone. Besides the well-known health risks associated with smoking cigarettes, tobacco product litter poses a severe threat to the environmental integrity of the city by leaching toxins and causing fires. In New York's unique urban environment, cigarettes do not biodegrade easily, thus cigarette litter compounds upon cigarette litter.⁴ The consequences of improper cigarette disposal are property fires, accidental poisonings, and water pollution.^{5,6,7} Smoking culture encourages smokers to cast cigarettes on the ground when there is no ashtray, despite the fact that cigarette litter is illegal.⁸ On the streets of New York, extinguishing a cigarette underfoot is extremely common. Of course, cigarette litter is not unique to New York; any city with smokers must face the consequences of cigarette butt litter. However, New York is well positioned to implement change because a policy shift would encompass millions of city residents in a compact, dense area. Past policy efforts nationwide have largely focused on smoking cessation—rather than smoking-related litter—through increased taxes and smoking bans, yet the litter persists.^{9,10} New York City must address this public health and environmental crisis by facilitating ashtray placements on city streets to keep the community and environment safe. These ashtrays may be standalone or attached to refuse bins.

Talking Points

- ▶ Cigarette litter is a safety hazard that can ignite fires and poison young children and pets.¹¹
- ▶ Cigarettes are the most littered item in the U.S.¹²
- ▶ Since 1986, the Ocean Conservancy has collected more than 55 million cigarettes during ocean clean-up activities, making cigarette litter the most pervasive litter found at sea year after year.¹³

Policy Idea

The New York City Department of Sanitation (DSNY) already employs a “request a receptacle” feature online that allows city residents to request a trashcan for a commercial street corner. However, no such program exists for cigarette receptacles. DSNY should make cigarette receptacles available for

placement because accessible ashtrays have been proven to reduce the amount of cigarette litter in public locations.¹⁴

Policy Analysis

Reducing cigarette litter is dependent on changing smokers' behavior. Smokers report that they are more likely to take advantage of receptacles when accessible, and receptacles placed in urban environments have been found effective in reducing cigarette litter.¹⁵ Currently, about \$1.2 million of DSNY's annual budget is allocated for trashcan maintenance; a portion of this fund should cover the placement and maintenance of cigarette receptacles in the city.¹⁶ Alternate policy

options include a large-scale public awareness campaign. However, an awareness campaign has steep financial costs for citywide ad placement. Considering the average cost of a cigarette receptacle may be around \$100 (some NYC composting bins are as cheap as \$23), providing 500 cigarette receptacles, for example, would only cost \$50,000, a manageable expense for a city the size of New York.¹⁷ The DSNY budget topped \$1.4 billion in 2014; \$50,000 is a mere .0036% of this total.¹⁸ Other large cities, such as San Francisco, have estimated that annual cigarette clean-up costs more than \$10.7 million. New York has a much larger population than San Francisco and may have even higher clean up expenses that may be alleviated with this receptacle policy.¹⁹ The number of cigarette receptacles placed will influence the reduction in cigarettes littered. Five hundred ashtrays placed in highly trafficked pedestrian areas of the city would divert more than 8.5 million cigarettes from litter every single day.²⁰ This is a 47 percent improvement from the status quo.

KEY FACTS

- ▶ 500 cigarette receptacles placed on New York City street corners may reduce cigarette litter by 8.5 million butts per day.
- ▶ Receptacles are cheap and easily serviced by existing municipal sanitation workers.

NEXT STEPS

Implementing a cigarette receptacle placement program should be relatively easy as the New York Department of Sanitation already maintains a budget for the placement and maintenance of public waste receptacles. The department's duties can expand to service cigarette bins in conjunction with public trashcans. The costs associated with servicing these ashtrays may even be cheaper and more time efficient than the cost of sweeping the streets to remove litter. All New York City residents who smoke, as well as commuting professionals and tourists alike, can use public cigarette bins, thus keeping cigarette butts off of the sidewalks and streets. Options to consider in the future include cigarette recycling and reprocessing once the majority of cigarettes are routinely disposed of in the correct receptacles.



On-Bill Financing: Lowering the Upfront Cost of Energy-Saving Home Upgrades

By Andrew Smalley, *University of Denver*

Thesis

To provide effective relief for homeowners facing the high upfront costs of home energy retrofitting improvements, the state of Colorado should expand on-bill financing. On-bill financing allows homeowners to pay the costs of home energy upgrades via small installment added to utility bills over time.

Background and Context

Energy-efficient home renovations represent potential savings for homeowners and reduction of environmental impact. Unfortunately, these renovations are expensive. Energy efficient equipment remains more expensive than traditional, less efficient appliances and systems.¹ This price discrepancy is widespread and found in nearly all markets and building types.

This issue impacts millions of homeowners who cannot afford the upfront costs of energy upgrades that would reduce their spending in the long run. While recent price trends show energy efficient products such as residential solar are becoming cheaper², most efficient energy systems involve more advanced technology, which drives prices higher. These prices remain higher because of the high cost associated with new technologies.

Current efforts to support energy efficient upgrades primarily rely on tax-credits. These credits cover some of the cost of home renovations ranging from solar panels to geothermal systems.³ Tax credits help reduce the cost of some improvements, but their narrow scope and temporary nature limit their effectiveness. Additionally, tax credits create a burden on the state and are opposed by many Conservatives who see the measure as market interference.⁴

Talking Points

Upgrades to a home such as solar panels, better home insulation or more efficient appliances can substantially reduce energy usage and cost to homeowners.

On-bill financing spreads the cost of home energy efficiency upgrades out

over longer periods of time, reducing their high upfront costs.

On-bill financing applies the cost of the renovations to the homeowners' monthly electrical bill and is paid to the utility. On-bill financing can be combined with rebates and other tax incentives to dramatically reduce the high cost of home energy upgrades such as solar.

Policy Idea

The state of Colorado should introduce on-bill financing programs that aims to reduce the high upfront costs of home renovations by dispersing cost via small installments that are paid on a homeowner's utility bill. On-bill financing creates a payment plan to help homeowners pay off their energy-efficient home improvements.⁵ Since home energy use varies from month to month and the new renovations will lower use over time, the payment structure can be set up to avoid massive increases on a homeowner's bill.

Policy Analysis:

With proper implementation, on-bill financing has tremendous potential to save consumers money and reduce environmental impact by boosting home energy efficiency. By dispersing the cost of renovations over a longer period of time, homeowners see only a modest and manageable increase in their expenses. This means more homeowners will be able to afford substantial renovations on their homes.⁶ When combined with rebates and tax credits, on-bill financing makes energy efficient home upgrades drastically more affordable.

On-bill financing also leverages the relationship between ratepayers and utilities to create an affordable payment structure to finance home upgrades and ensure repayment.⁷ Under this system, the utility would pay the upfront costs of the renovations and then bill the homeowners monthly for the cost of the renovations.

KEY FACTS

- ▶ In 2014, residential and commercial buildings consumed 41% of all energy consumption in the United States.⁹
- ▶ As much as 50 percent of energy and water used in buildings is wasted because of inefficient technology.
- ▶ Ratepayers nationwide could save \$64 billion a year through home energy efficiency upgrades.
- ▶ Twenty-three states have already begun implementing some form of on-bill financing to reduce the cost of energy efficient upgrades.

The Center for American Progress estimates that ratepayers nationwide could save up to \$64 billion a year with substantial home energy upgrades funded by on-bill financing.⁸ In Colorado, where a few utilities have already started offering on-bill financing, the potential for savings is vast.

The main challenge to this policy is that utility companies must comply with local lending laws. Utilities would have an incentive to undertake this action because it would allow them to ensure strong relationships with customers while improving efficiency. Additionally, consumers would need to be educated on what improvements can best increase energy efficiency depending on their home. However, these issues would be easily manageable with prudent oversight and planning. On-bill financing represents a very low cost policy change that has a substantial impact on homeowners.

NEXT STEPS

To implement this policy on the statewide level in Colorado, it should be enacted by the State Legislature. Previous efforts have failed in the state legislature, but, this time, the policy should have the combined support of utilities, homeowners and traditional allies, such as environmentalists. Utilities and homeowners will need to be educated about how on-bill financing serves their interests and their bottom line.

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9 U.S. EIA. (2015). U.S. Energy Information Administration - EIA - Independent Statistics and Analysis. Retrieved March 07, 2016, from <http://www.eia.gov/tools/faqs/faq.cfm?id=86>



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***Modernizing Stormwater
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Policy Of The Year

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IDEAS

EDUCATION

POLICY OF THE YEAR NOMINEE

*Increasing the
Graduation Rate:
Syracuse Students
as Reverse-Mentors*



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The Roosevelt Institute, working to redefine the rules that guide our social and economic realities, is home to the nation's largest network of emerging doers and thinkers committed to reimagining and re-writing the rules in their communities to create lasting change. Our members, organizing in 130 chapters in 40 states nationwide, partner with policy makers and communicators to provide them with clear, principled ideas and visionary, actionable plans. Our members are actively influencing policy on the local, state and national level – from introducing legislation on protections for LGBTQ youth to consulting with local governments on natural disaster flood prevention.

What You're Holding

Now in its eighth year, the *10 Ideas* series promotes the most promising student-generated ideas from across our network. This journal, which includes submissions from schools located from California to Georgia to New York, stands as a testament to the depth and breadth of our network of innovators.

Our *10 Ideas* memos are selected for publication because they are smart, rigorously researched, and, most importantly, feasible. We want to see these ideas become a reality.

How You Can Join

As you explore these ideas, we encourage you to take special note of the “Next Steps” sections. Here, our authors have outlined how their ideas can move from the pages of this journal to implementation. We invite you to join our authors in the process. Contact us on our website or by tweeting with us @VivaRoosevelt using the hashtag #RooImpact.

Thank you for reading and supporting student generated ideas.

Together we will design the future of our communities, from towns to countries and all that lies in-between.

Dear Readers,

Young people are incredibly important to the American political process. Millennials and Generation Z now make up the same portion of eligible voters as the Baby Boomer generation. This emerging generation is also the most diverse in our nation's history: Half of all eligible Latino voters in 2016 are between the ages of 18 and 35. We're told we can make the difference every election, and candidates and elected officials ask for our votes, time, and money—but they don't ask for our ideas.

***Young Americans continue to transform our economy and culture.
Now it's time for us to disrupt our political system.***

The *10 Ideas* journals, one of our oldest and most competitive publications, elevate the top student-generated policy ideas from across the country. In this year's journals, you will find solutions to problems in places ranging from South Dakota to North Carolina to Oregon to New York. Whether seeking to make Pittsburgh an immigrant-friendly city or to reduce recidivism in the state of Massachusetts, the following proposals take a creative and locally focused approach to building opportunity for all.

Rooseveltians are also committed to turning their ideas into action. Whether that means meeting with decision-makers, writing opinion pieces in their local papers, or organizing actions in their communities, we intend to see the solutions we propose become reality.

Why? As the generation that will inherit the world shaped by today's decisions, we have the most to lose or gain. Involving the emerging generation in the policy process will lead to outcomes that benefit everyone. We believe it matters who rewrites the rules, and we have ideas for how to change them.

I hope you enjoy reading the proposals in this journal as much as we did.

Onward,

A handwritten signature in black ink, appearing to read 'Joelle', followed by a long, sweeping horizontal line that extends to the right.

Joelle Gamble

National Director, Network, Roosevelt Institute

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Creating Stipulations on Tenure at Mount Holyoke College

By Danielle Brown, *Mount Holyoke College*

Thesis

Mount Holyoke College should not wait to evaluate tenure status until after faculty members commit infractions. Appraisal of intellectual and moral competency, re-education of social standards and phased retirement should become tenure stipulations for the sake of an improved faculty.

Background

Tenure is necessary in a job market that is ever changing and fluctuating. The appointment gives college professors the confidence necessary to explore their academic pursuits without fear of backlash.¹ It is a reasonable award for those who dedicate their lives to increasing public knowledge and teaching.

However, there are also significant downsides to tenure. Most faculty under protection were tenured during a previous era, when a highly different population was present at Mount Holyoke College: a rather affluent, privileged and homogenous student body.^{2,3} Times have changed but many professors have not. Tenured faculty at the College can often make mistakes involving microaggressions such as misgendering, classist, ableist or racist statements. They sometimes fail to recognize when their teaching quality has faltered or become ineffective.

These problems don't require immediate dismissal. The issue is that when certain tenured faculty members refuse to remedy problems, there is rarely any real discipline or re-training aside from temporary suspension, often with pay. Rather than learning from their slip-ups and listening to the criticism of their students or colleagues, tenured faculty benefit from a system that only reprimands with a slap on the wrist.

This policy revolves around how and why some tenured professors stop placing much effort into their careers by refusing to evolve as teachers and thinkers. Tenured professors are not at risk of losing their jobs.⁴ Because tenure, once achieved, is seemingly unconditional and lacks stipulations, quality of teaching and care for students' needs can decline simultaneously and without repercussion.⁵ Poor teaching quality can range from an unbalanced focus on research to lack of interest to a dearth of up-to-date knowledge in their fields. But, educators need and deserve job security,

absent a suitable alternative tenure should not be eradicated.

Talking Points

- ▶ Colleges that have implemented post-tenure reviews of their professors do not often terminate tenured professors.⁶
- ▶ Faculty members as diverse as the student body at Mount Holyoke College would better meet the needs of students.⁷
- ▶ The goal of this policy is not to eliminate faculty but rather to offer a choice of improving their quality of teaching or to retire when necessary.⁸
- ▶ Student evaluations are a highly important factor in determining continuation of faculty appointments. They should continue to matter even after a professor achieves tenure.

KEY FACTS

- ▶ By 2000, 37 states had established some form of post-tenure review.¹⁸
- ▶ Post-tenure review can occur under the rights of due process.¹⁹
- ▶ Mount Holyoke College only reviews student evaluations when 50 percent of the students taught by a professor complete the evaluations.²⁰

The Policy Idea

Mount Holyoke College's faculty legislation needs to be amended to add a "triggered" post-tenure review model spurred by different possibilities. Amendments should also include the appropriate selection of dismissal or completion of an improvement plan following a post-tenure review under which the faculty member is found to be substandard. The college should implement and yearly review a student evaluation system. In addition, the college should recognize that post-tenure reviews and student evaluations should matter more after a faculty member has spent many years at the university, not less.

Policy Analysis

In the words of former research associate and director, Dr. Cathy A Trower said, "Rather than changing tenure, or considering alternatives, we toil endlessly to work around it, through it, or over it, as if it were some magical, immovable force rather than a man-made employment policy."⁹ It does not harm academic freedom for tenured faculty to coexist with the possibility of being challenged.¹⁰

The "triggered" post-tenure review model would be enacted by request of students and other faculty and administrators who have previously filed

grievance reports through the proper channels or a certain number of substandard or highly positive annual reviews. It would serve as not only a check for poor professional performance, but also confirmation of excellent performance.¹¹

An improvement plan would be created by the faculty member in question, his or her department chair, and the Dean of Faculty when and if a faculty member is found to be substandard within a post-tenure review. The plan should include retraining programs that make the faculty member accountable for change.¹²

To better the circumstances under which student comments are received, the college will need to update student evaluation surveys to clarify inquiries, and perform a regular collection and analysis of surveys, regardless of participation percentages.^{13 14}

Because junior faculty members are often critiqued more harshly than their senior counterparts, weight of faculty performance reviews would become heavier over time.^{15 16}

Faculty, and others, who may be worried about what this policy change means for academic freedom and job security should note that a review system is only necessary for those who are performing very well or very badly. An excellent review would ensure that a faculty member is recognized and rewarded for his or her work. A substandard review would most likely only arise after multiple evaluations because the faculty member has failed to attempt to remedy the problems that the evaluations have identified.

NEXT STEPS

The Faculty Conference Committee should meet and discuss the details of this plan with faculty members. Once approved, as determined in the Mount Holyoke College Faculty Legislation, the Faculty Conference Committee and the Education Committee of the Board of Trustees should meet to consult one another over this change.¹⁷ Implementation would be targeted for the following academic year.

Increasing the Graduation Rate: Employing Syracuse High School Students as Reverse-Mentors to Educators

By Rachel Brown-Weinstock, *Syracuse University*

Thesis

To increase the graduation rate of the Syracuse City School District (SCSD), the SCSD Board of Education (BOE) should implement a professional development policy that employs high school students at risk of dropping out as mentors to their teachers in creating culturally responsive classrooms.

Background and Context

There was a 14 percent gap between the New York State (NYS) and SCSD graduation rates in 2005. That gap increased to 25 percent by 2014, with graduation rates that year of 76 percent and 51 percent, respectively.¹ The NYS Department of Education has declared 19 of 30 district schools “Priority Schools”² because they are among the lowest performing 5 percent of schools in the state in terms of test scores and graduation rates.³ National achievement gaps between minority, low-income, and Limited English Proficient (LEP) students and their more advantaged peers contextualize SCSD’s low performance. Of about 20,000 SCSD students enrolled during the 2014–2015 year, 77 percent were racial/ethnic minorities, 76 percent were economically disadvantaged, and 15 percent were identified as LEP.⁴

A survey of students by the National Center for Education Statistics (NCES) found that the primary cause of school dropout is too many absences, followed by poor grades/failing (ranked third), not liking school (fourth), not getting along with teachers (ninth), and working (seventh).⁵ Many of these causes are related to culturally unresponsive schools, characterized by opposition between school culture, structure, and instruction, and many students’ home culture.⁶ Cultural unresponsiveness occurs due to a disconnect between the backgrounds of America’s diverse student body and those of educators who are white and from middle-class and monolingual families.⁷ Characteristics of culturally responsive schools include educators with positive perceptions of minority students; knowledge of different minority groups’ values, societal contributions, and learning styles; effective educator-student cross-cultural communication; and curriculum that incorporates students’ lived experiences.⁸

Talking Points

- ▶ The SCSD has one of the lowest graduation rates in the state. Primary causes for low graduation and high dropout rates are related to school culture/home culture dissonance.
- ▶ Employing the most at-risk students as mentors to teachers would incentivize students to come to school, build relationships with supportive adults, and create culturally- responsive classrooms and schools for all students.
- ▶ The policy has other benefits, including reducing teacher turnover rates, fostering career skill development, lowering suspension rates and violence, and strengthening the school community overall.

The Policy Idea

The SCSD BOE should provide participation in student-teacher reverse mentoring as an option for teacher professional development. Reverse mentoring is a concept typically used in the business sector when mentors are younger than mentees and recognized for their unique cultural and personal experiences.⁹ Students are qualified to advise on cultural responsiveness as experts on their home culture and educational experiences. Mentors would be students most at risk of dropping out as defined using criteria in Section 612, Subdivision 6 of the New York Education Law.¹⁰

Students would be paired one-on-one with their own teachers and receive paid employment for their mentorship services. The SCSD has employed students in custodial work during school hours before, so student employment would not be without precedent.¹¹ Students would meet weekly with teacher mentees to build culturally responsive classrooms by discussing their home experiences, advising on teaching practices, and helping plan lessons using material and learning techniques relevant to their lives. Other job responsibilities include: planning large-scale professional development sessions, surveying and speaking for other students about desired changes, advising administration on improving parent and community engagement, and measuring the outcomes of their own advice.

KEY FACTS

- ▶ The annual cost of employing all mentors is \$43,312.50. Employing each teacher after school would also cost \$35.78 per hour, 25 but cost can be minimized because teacher professional development is integrated into the school day.²⁶
- ▶ Volunteers from Syracuse University's Maxwell School of Citizenship and Public Affairs are willing to teach reverse-mentors the skills—such as data collection and analysis—necessary to their job responsibilities, and are willing to provide technical assistance.

Policy Analysis

This policy would boost graduation rates by targeting individual students and the entire student population simultaneously. For individual mentors, employment reduces the necessity to dropout for work and incentivizes strong attendance and school engagement because studying the school is their job. Further, pairing mentors one-on-one with their own teachers builds strong student-teacher relationships, which correlates with educational persistence.¹² To benefit the entire student population, teachers would build culturally responsive classrooms that can increase student achievement.¹³

While this policy has never been implemented, it has high potential because it unites evidence-based strategies that address the NCES causes for dropping out. For example, “student voice” is a school reform strategy in which students consult faculty on issues such as cultural responsiveness. One high-minority, high-dropout school’s student voice club substantially improved teacher efficacy, student-teacher relations, and students’ perceptions of school.¹⁴ Further, the non-profit National Urban Alliance for Effective Education, which incorporates student voice into teacher professional development for cultural responsiveness, boasts gains in math and English Language Arts across all grade levels in partner schools.¹⁵ For the employment aspect of the policy, monetary education incentive programs targeting low-income and minority students increase positive behaviors such as attendance, doing homework, and engaging in classwork.¹⁶ The policy has supplementary benefits as well. It teaches mentors career skills, and may reduce school suspension if teachers better understand students and students perceive the school environment as more fair.¹⁷ Pairing new teachers with mentors may also reduce the district’s high teacher turnover rate,¹⁸ which was 25 percent in 2012-2013.¹⁹

NEXT STEPS

The policy should be piloted in Henninger High School, which had the lowest 2014-2015-graduation rate of district high schools that will remain open.²⁰ Henninger administrators should determine how to market the program to new teachers in particular, and faculty should nominate students as mentors. Nominees should apply for the positions. A committee of teachers and administrator mentees should select fifteen student mentors.²¹ The committee should be in charge of creating monthly work schedules for mentors of 10 hours per week (within hours worked by SCSD students employed through a local non-profit).²² The committee also should be in charge of case management for students who are not fulfilling their job responsibilities. The district’s Special Programs office should apply for federal, state, and local grants and use funding from their 21st Century Community Learning Center grant to cover costs for the first two years of the policy.²³ If successful, the BOE should allocate money from general funds to support expansion.²⁴

Increasing Michigan State University's Research Capacity through a Virtual Campus Supercomputing Center

By Nathan Feather, Michigan State University

Thesis

Michigan State University (MSU) should fix their lagging mass computing capabilities by creating a Virtual Campus Supercomputing Center (VCSC) to use idle university computers' power for faculty and student research.

Background and Context

MSU is falling behind in the critical area of mass computing. Data-intensive research, which requires millions of mathematic calculations, can only be done through mass computing, usually by supercomputers. Large amounts of groundbreaking research—such as observing high-energy space particles,¹ modeling segregation and cohesion in communities,² and performing large-scale simulations of water and contaminants in the Great Lakes³—is conducted at MSU through mass computing. Better computation output leads to more accurate models.

The demand for mass computation is so great that MSU created a High Performance Computer Center (HPCC).⁴ However, the faculty must pay thousands of dollars to use the HPCC due to high demand.⁵ This stifles potentially revolutionary research, as the faculty is not given the tools they need at an accessible price. Meanwhile, thousands of computers across MSU sit idle each day when they could be computing groundbreaking research.

The creation of a VCSC would fix this problem. A VCSC is a distributed computing network that delegates small parts from large research projects to idle computers on campus. In effect, it would dramatically increase the research potential of MSU at a cost 1/50th of the current rate, launching MSU into the future of mass computing, and establishing the university as a pioneer in this critical research area.⁶ If MSU wants to advance as a leading research university, investing in a VCSC is a cost effective way to significantly increase research potential.

Talking Points

- Faculty is required to pay thousands of dollars for some HPCC use, hindering professors' capability to conduct research at MSU.⁷

- ▶ A VCSC would establish MSU as a premier institution for mass computing, which is a major technology of the future.
- ▶ World-class resources would attract acclaimed faculty to do their research at MSU.

The Policy Idea

The university should create a VCSC, a distributed mass computation network that sends each one of Michigan State University's idle computers tiny, proportional tasks of large data research projects for them to compute. Each computer's small tasks combine to complete research significantly faster, meaning more research can be done. The Institute for Cyber-Enabled Research will be the facilitators of this grid, which will be a free resource for students and faculty.

KEY FACTS

- ▶ A VCSC would produce 10 times the current computational output at MSU for around 1/50th of the cost.¹³
- ▶ The use of a VCSC has saved another university \$187,863 per year compared to MSU's current model.¹⁴
- ▶ Since Syracuse instituted a VCSC, they have had a computing surplus of more than 29.831 teraflops,¹⁵ or almost 30 trillion individual calculations.¹⁶

Policy Analysis

MSU needs to remain on the cutting edge of computational technology to be considered a premier research university. MSU's administration understands this urgency; it recently established a department just for this purpose, the Department of Computational Mathematics, Science, and Engineering.⁸ This department cannot be effective without the proper tools and needs the greater computational power a VCSC provides.

A 10,000-computer network could attain 10 times MSU's current output for just 1/50th of the current \$500,000 initial setup cost.⁹ Syracuse University, a significantly smaller university, already has a VCSC that provides more than 50 percent more computing power than MSU currently has.^{10 11} The University of Westminster uses a VCSC and spends \$187,683 less per year than MSU.¹² A VCSC is a cost-effective way to increase the mass computational power for any university, which helps produce substantive research with far-reaching effects.

NEXT STEPS

MSU's administration must be lobbied. This proposal aligns with the university's goals of education and advancement, and this policy will help achieve those goals in a cost effective manner. One of the main allies on campus will be the Department of Computational Mathematics, Science, and Engineering, because a VCSC would provide resources to expand their capabilities. Another key ally on campus is the Institute for Cyber-Enabled Research. This proposal would further develop the department and align with its current projects.

A comprehensive proposal will outline the potential upgrades needed to MSU's IT infrastructure and the projected costs. Next, the coalition will lobby the offices of Information Technology Services, Research and Graduate Studies, and University Advancement for funding as soon as possible while applying for various grants. Once in place, this idea can be spread to other universities and institutions, making mass computing widely available and generating impactful research across the globe.

Leveling Educational Opportunities: Integrating NYC High Schools

By Nicole Felmus, *Columbia University*

Thesis

In New York City, selective academic hubs draw the best teachers, have the most parental involvement, and present a culture of academic success, which prevents minority and low-income students from receiving a quality education. New York City Council should replace their specialized high school system with magnet programs—specialized academic curricula for select students in standard high schools—to level educational opportunities.

Background and Context

Currently, there are 235,852 students in NYC public high schools. Only 27,000 of them attend specialized high schools. Across all five boroughs, there are nine specialized high schools that aim to “serve the needs of academically and artistically gifted students,” which students test into in 8th grade (excluding LaGuardia High School of Music & Art and Performing Arts).¹ These schools, such as Stuyvesant High School, are predominately Asian and White, and therefore unrepresentative of the city’s population. All other NYC schools are more diverse.^{2,3} This creates several problems that include the fact that underrepresented groups are less likely to receive the same parent participation, underrepresented groups have less educational opportunities than peers at specialized high schools, and students at specialized high schools receive access to better quality teachers than those at non-specialized high schools. There is evidence that the measures of teacher quality—including experience, licensure exam score, and value-added estimates of effectiveness—are distributed unevenly, concentrating high quality teachers in specialized high schools.⁴

A study published in April of 2015 by the Independent Budget Office (IBO) found that 26 percent of students who attend specialized public high schools were in the top income quintile, compared to 7 percent in other high schools.⁵ Furthermore, a 2014 study published by the NYC IBO shows that teachers at high-poverty high schools have 2.3 fewer years of experience than teachers at low-poverty high schools.⁶ This perpetuates a cycle of poor education, which makes access to and preparation for specialized high schools even harder to achieve for students from high-poverty schools. Additionally, NYC’s standard high schools have great room for improvement, only 4 in 10 offer access to both chemistry and physics classes.⁷

Teacher attrition rates in high-poverty schools are 14 percent higher in a two-year span than teachers in low-poverty schools. Many policy makers propose creating more charter schools to improve educational opportunities, yet these further exacerbate the problem, increasing the achievement gap--otherwise known as the education debt.⁸

Talking Points

- ▶ Specialized high schools expanding the growing educational debt between students from different socio-economic backgrounds.
- ▶ Replacing specialized high schools with magnet programs at all schools would spread high quality teachers among all schools.
- ▶ Replacing specialized high schools with magnet programs would create more racially diverse schools, which fosters more innovation and cross-racial relationships.
- ▶ Higher quality teachers can help reduce the school-to-prison pipeline when applied to high-poverty schools.⁹

Policy Idea

New York City should end its specialized high school program and replace it with magnet programs within every high school. Teachers should be redistributed to help lead the magnet programs and teach magnet program classes as well as courses offered in the normal school environment. This allows for the sharing of best practices, specifically in schools that are struggling to meet standards set by the city, state, and country to work towards eliminating educational disparities among minority groups. Additionally, magnet centers provide an opportunity of knowledge transfer between students of varying levels.

To transition from the current specialized high school system, students

KEY FACTS

- ▶ Only about 27,000 of the 235,852 students enrolled in New York public schools get to reap the benefits of specialized education, leaving behind the other 205,000 students.¹⁵
- ▶ Students in specialized high schools come from homes with an average income \$20,000 greater than those who attend non-specialized public schools.¹⁶
- ▶ Specialized high school demographics are unrepresentative of NYC's demographics, specifically underrepresenting Black and Latino populations.¹⁷
- ▶ The teacher attrition rate for high poverty high schools in NYC is 44 percent in two years.^{18 19}

currently in a specialized public high school would be given the opportunity to pick their magnet program of choice.

Policy Analysis

If the academic meccas of the nine specialized high schools were dismantled and funneled into magnet programs within non-specialized high schools, students from both arenas would benefit. Some studies have shown that racially diverse work environments lead to innovation.¹⁰ Studies also show that students at racially diverse schools are more likely to develop cross-racial friendships. If this policy were instituted, schools would better reflect the NYC population and teacher quality would be spread more evenly. In addition, more experienced teachers are more likely to use culturally responsive teaching, a method that takes into account the cultures that students come from and legitimizes these backgrounds in the classroom. This method has been proven to work towards reducing the school-to-prison pipeline.¹¹ While charter schools offer greater educational choices, they often use a lottery system for admission and take away funding from regular city schools.¹² If New York City were to implement a magnet schools system, they could divert some of the \$1.5 billion allocated to charter schools to normal public high schools, giving more students the opportunity to receive a quality education.¹³

NEXT STEPS

The New York City Council should redesign the current school choice and specialized high school programs. Through this process, the council should consider the racial demographics of specialized high schools, with specific attention to underrepresentation of Black and Latino students. This investigation can be done under the provisions of the School Diversity Accountability Act recently passed by the New York City Council.¹⁴ Legislative action should be taken to replace the specialized high school system with magnet programs in all high schools.

Closing the Diversity Gap: Creating Support Programs for STEM Minority Students

By Heather Huynh, *University of Georgia*

Thesis

To counteract the lack of diversity in the computer science department, the University of Georgia should integrate a year-long mentorship component into the current curriculum and create support for underrepresented students through minority focused clubs.

Background and Context

Enrollment in U.S. institutions of higher education has been on the rise. In 2009, the enrollment rose to 20.7 million students from 14.5 million in 1994.¹ Even though enrollment has been increasing, there is still a gap in capable and diverse workers in the computer sciences. In 2013, 51 percent of the science and engineering workforce were white males.² This is due to a lack of diversity in many undergraduate computer science programs. In 2010, only 38 percent of freshmen were planning to study a science and engineering (S&E) related field and among these, the proportion of men planning to major in S&E fields was higher than for women in every racial group.³ While women earned 57.3 percent of all bachelor's degrees in 2011, women only received 18.2 percent of computer science bachelor's degrees.⁴ This number is even lower for minority women where only 4.8 percent of degrees earned are in computer science.⁵

To increase diversity in the computer science workforce, it is necessary to increase the number of women and minorities graduating from computer science programs. The issue will not resolve itself without action, particularly in an environment such as the University of Georgia where 70.1 percent of the undergraduate population is white.⁶ Increasing the enrollment and graduation from computer science programs at the undergraduate level for women and minorities will increase the number of skilled workers from these groups who are able to join the workforce, which, in turn, will increase diversity on a larger scale.

Talking Points

- Diversity in technology has been a big topic recently due to dismal diversity statistics released by big companies such as Google, Microsoft, and Apple.

- ▶ Women who actively engage in the academic community and participate in activities that make STEM an accessible career path are more likely to graduate with a STEM degree than those who do not.⁷
- ▶ Universities should create learning environments that promote peer-to-peer interaction, co-curricular involvement, and access to undergraduate research opportunities specifically for minority students.⁸

The Policy Idea

To increase women and minority participation in the computer science program at the University of Georgia, the department should create support for these students by integrating a year-long mentorship component for every student into the curriculum. Through this program, students would meet one-on-one with faculty or another role model to discuss their progress. Through this mentorship, students may be exposed to research opportunities in computer science and encouraged to join computer science related clubs such as the Association of Computing Machinery. Co-curricular activities will be encouraged, not required, but the mentorship portion of the policy should be integrated into the current computer science curriculum as a year-long requirement.

Policy Analysis

Studies show women of color who join a major-related club are 7.38 percent more likely to persist in a STEM field when compared to women who don't.⁹ Mentorship has also been shown to be critical in increasing STEM student retention. In a pilot program at Louisiana State University, mentorship increased the retention of students in STEM programs to 94 percent, a significant increase over the six-year graduation rates of students not enrolled in the program, which is around 34 percent.¹⁰

KEY FACTS

- ▶ In 2015, women received 50.4 percent of science and engineering degrees, but only 18.2 percent of computer science degrees.¹⁴
- ▶ In 2013, women accounted for 47 percent of the total workforce. They were substantially underrepresented in computer and mathematical occupations when compared to their total participation in the workforce.¹⁵
- ▶ As of 2012, even though minority participation in S&E fields had risen, underrepresented minorities only earned 19.4 percent of undergraduate degrees in S&E.¹⁶

This policy proposed that meetings with a mentors should be “intervention meetings,” which work to identify what issues students are running into, communicate academic progress, and give students the mindset that they have the ability to learn “hard” material.¹¹ The meetings should sometimes be accompanied by assignments to commit students to improving themselves once problems are identified.¹² Mentoring should help students envision and then realize their self-identity as STEM scholars with potential to offer meaningful contributions to their disciplines.¹³

Unfortunately, in the computer science program, there are only 23 faculty members who teach nearly 700 students, so the burden of mentorship won’t only rest on them. Mentors should be recruited from among the local startup community and alumni of the program. Upperclassmen students might also be able to contribute as mentors.

NEXT STEPS

The mentorship program should be a required component of the degree program, which will involve convincing the department head of the idea’s benefits. Community leaders at organizations such as Four Athens and computer science faculty should be allies to the mentorship program.

After the computer science department agrees to the mentorship program, students should be made aware of the proposal and invited to collaborate with the undergraduate coordinator to head up the efforts to increase participation in major-related clubs as well as create major related clubs for minorities. For example, a women in computer science club is in the process of being created this semester.

The mentoring and research components should be formalized on a bill presented to the Student Government Association by students in the department and a Franklin College senator to put pressure on the administration to enact changes.

Learning for Life: Practical Health Literacy Education

By Emily Lau & Saumya Bollam, *Georgetown University*

Thesis

Low health literacy has both individual and societal consequences in the form of poorer health outcomes and unnecessary healthcare expenditures. California should adopt a new health education curriculum that prepares students to interact with the healthcare system and make decisions about their own healthcare.

Background and Context

Health literacy is recognized as an important part of encouraging people to make decisions that positively impact their health.¹ Forty-six states and D.C. have some form of mandatory health education between grades K-12.² However, the health education curriculum in many states focuses on theoretical health concepts, personal health decisions, and community influences on health while ignoring the practical knowledge that a person needs to navigate the healthcare system.

In California, where health education is mandatory at all levels of education, the content standards for K-12 students focus on “enabl[ing] students to make health choices and avoid high risk behaviors.”³ To meet that goal, California has established eight content standards that aim to introduce students to the determinants of health, reduce risky behaviors, and enhance individual and interpersonal health.⁴ Despite claiming to provide the knowledge needed to make decisions that enhance health outcomes, these educational standards only address the healthcare system in a superficial way.⁵ Without education on how to navigate the healthcare system or make decisions regarding care, students lack an essential part of the foundational knowledge needed to make informed health decisions.

Talking Points

- ▶ Low health literacy costs the U.S. between \$106 billion and \$238 billion annually.⁶
- ▶ According to the National Assessment of Adult Literacy, only 12 percent of the adult population in the U.S. has a proficient level of health literacy.⁷
- ▶ Health literacy is a stronger predictor for health outcomes than any other social determinant of health.⁸

Policy Idea

The California State Board of Education should adopt a new set of Health Education Content Standards that includes a ninth content standard on basic interactions with the healthcare system such as the processes of health

insurance, essential components of using primary care, how to interpret and follow drug instructions, and navigating managed care. This new content standard should be developed based on free curriculum resources such as those provided by the National Institute for Literacy.

Policy Analysis

Improving the Health Education Content Standards means that California students would receive a practical introduction to the healthcare system and how to make decisions regarding access to care.⁹ An additional content standard and goal that addresses issues of care utilization would be complementary to California's already robust content standards.

Since this content standard would simply be an addition to existing standards, there is no cost above that which would usually be spent to update content standards, which already occurs regularly. Additionally, new teaching materials would not need to be purchased for schools because free curriculum resources have been made available by organizations such as the National Institute for Literacy.¹⁰ In fact, due to the dynamic nature of healthcare systems it is more practical to teach using the most up-to-date online materials rather than tying curriculum to a textbook.

KEY FACTS

- ▶ In 2006, the costs of inadequate health literacy would have been equivalent to providing health coverage to every uninsured person in the U.S.¹¹
- ▶ Approximately 80 million Americans have limited health literacy, which results in poorer health outcomes and access to care.¹²
- ▶ California already has statewide health education content standards and somewhat limited mandatory health education requirements.^{13 14}

NEXT STEPS

Testimonials about the detrimental effect of lack of familiarity with healthcare knowledge should be sought from adults aged 26-30 who previously attended California high schools. Additionally, it will be important for physicians to testify to the importance of health literacy since they can speak, personally, to their experience with patients who have had trouble accessing and navigating the healthcare system. We would need to target individual legislators to persuade them to introduce a bill that would direct the Board of Education to revise health education content standards. Presenting a robust set of testimonials from former students who can speak to the value of having this education, as well as physicians who can speak to improved health outcomes, will have the most promising impact.

Academic Redshirting: Fighting the Gender Gap in College through Primary Education

By Kate Loving, George Mason University

Thesis

The Fairfax County Public Schools should require boys to enter kindergarten at age six, one year later than girls, to combat an exponentially growing gender gap in higher education. This gives boys an opportunity to mature properly before starting school, positively affecting intersectional aspects of their adult lives.

Background and Context

Since 1981, the gender gap has affected more than wages and job opportunities, the widening gap in college graduation rates between men and women is drastic.¹ The graph below represents the number of men and women in the U.S. who receive undergraduate degrees.² In 2012, 34 percent more women than men graduated from college. Within the next ten years, that number will reach nearly 50 percent.³

During the college admissions process, many qualified women are rejected for less-qualified men in an attempt to combat the gender gap.⁴ The gender gap in college also affects the social behavior of men and women on campus. Elevated rape rates have a direct correlation with a scarcity of men, clearly showing a crucial need for gender-equitable practices in education policy.⁵

The reason for the widening college gender-gap can ultimately be attributed to the age at which boys and girls begin primary education. During maturation, the brain becomes more efficient and develops the capability to streamline cognitive behaviors and actions.⁶ While this process of development occurs in all genders, female maturation occurs much earlier, similar to puberty.⁷ Generally, the intellectual and social maturity of a five-year-old girl is equivalent to that of a six-year-old boy. This is most apparent in reading, writing, and mathematics. Introducing boys into a classroom before they are ready severely disadvantages them because they may lack the ability to consciously learn and retain information.⁸ To keep from falling behind, boys develop coping mechanisms, which ultimately deter them from continuing their education.⁹ These coping mechanisms trace back to kindergarten, where instead of gaining a thorough understanding of why $1+1=2$, boys simply memorize it as fact.¹⁰ While this may not seem to be

hindering early education, it will hinder later understanding of more complex mathematics.

Talking Points

The gender gap in college also affects the social behavior of men and women on campus.

- ▶ Introducing boys into a classroom before they are ready severely disadvantages them because they lack an ability to consciously learn and retain information.¹¹
- ▶ Redshirting boys does not give anyone the upper hand in gaining an education, but rather evens the playing field of primary education.

The Policy Idea

Fairfax County Public Schools should require boys to enter kindergarten at age six, while continuing to allow girls to start at age five. Immediate implementation means the starting kindergarten class in the fall of 2016 will be comprised exclusively of girls. Subsequently, the kindergarten class in the fall of 2017 would include six-year-old boys and five-year-old girls.

Policy Analysis

Delaying the age at which boys start school is the most effective approach to decrease the widening gender gap in college graduates, as it allows boys another year to gain the intellectual and social maturity needed to succeed in the classroom. Other proposed solutions, such as affirmative action for men and curriculum reform, are not as effective because they fail to address the biological reality that girls' brains are at a higher level of social and intellectual maturation than boys of the same age. In addition, those alternative reforms will ultimately hinder women who have the ability and aspiration to gain a higher education.¹² Redshirting boys does not give anyone the upper hand in gaining an education, but rather evens the playing field of primary education.

In Switzerland and Finland, most children do not begin primary school until age six or seven. The World Bank has shown both countries have a smaller

KEY FACTS

- ▶ In 2014, 70 percent of high school valedictorians were girls.¹⁵
- ▶ In 2012, there were 34 percent more women than men who graduated from college. By 2023, that gap is expected to reach 47 percent.¹⁶
- ▶ The intellectual and social maturity of a five-year-old girl is equivalent to that of a six-year-old boy.¹⁷

gender gap in higher education than the U.S., where children generally start school at age five.¹³ In Switzerland, the gender ratio in higher education is 50:50.¹⁴ If given an extra year to mature socially and intellectually, boys will perform at a higher level in the classroom and have the biological ability to keep up with girls.

NEXT STEPS

Redshirting boys for a year should begin in local Fairfax schools, where many parents have the time and income to allow boys to start their education at age six. Parents, community members, and the Fairfax County school board will be the most important actors to pursue. After the first generation of older boys completes the fifth grade, research will be begun at George Mason University, the largest public research university in Virginia. Students pursuing a degree in education will evaluate the test scores and social maturation of the “redshirted boys” throughout their education.

Teaching Inmates to Code: Using Technology Education to Reduce Recidivism in Massachusetts

By Olivia Pinney, Amherst College

Thesis

Massachusetts State Prisons should incorporate vocational training for the tech sector into the education programs at all low- and medium-security facilities by 2025. This would lower high recidivism rates and increase the technologically trained workforce, which are both national priorities.

Background & Context

Currently, more than half of inmates released in Massachusetts will return to prison within three years.¹ Prisons fail as correctional facilities if they cannot provide an opportunity for inmates to live a better life upon release.² Low-level offenders often resort to crime because of the lack of job opportunities that offer a living wage and prospects for advancement.³ There are even fewer opportunities for ex-offenders due to discriminatory hiring practices.

Receiving an education within prison dramatically lowers rates of recidivism. Unfortunately, educational budgets are increasingly tight.⁴ Beyond GED and ESL classes, vocational classes make up the majority of educational opportunities for inmates.⁵ Vocational courses increase self-esteem and employability. However, these courses are limited in their depth, do not utilize breakthroughs in online education, and do not target higher paying job sectors.^{6,7}

The tech sector is fast growing and lucrative. The ability to code, regardless of socioeconomic situation, has become so important that all public schools in Chicago, New York City, and San Francisco will be required to start teaching computer science within the next 10 years.⁸ The tech sector needs more trained employees. TechHire, a 2015 Obama initiative has devoted \$100 million in grants to train workers for jobs in technology.⁹ The initiative has identified short online courses as the optimal way of spurring job growth and higher wages for underserved communities.¹⁰

Talking Points

- Prisons should teach inmates marketable vocational skills to address unemployment or underemployment of the previously incarcerated.

- ▶ The tech sector has high demand for new employees, but many individuals in underserved communities lack the skills to apply.
- ▶ Computer coding is an increasingly important skill, and can be taught both quickly and cheaply in a manner accessible to those without a higher degree.
- ▶ Teaching inmates how to code will improve their confidence and employability, will lower their chance of returning to prison, and will give them an opportunity to build a brighter future before their release.

The Policy Idea

It is in the State of Massachusetts' best interest to train inmates for jobs in the technology sector. To this end, the state should 1) establish a pilot coding course in Massachusetts, 2) change regulations to better accommodate online classes within educational curricula, 3) research best methods to deliver tech skills, to increase inmates' self-confidence, employability and decrease their chances of returning to prison, and 4) expand this program to all state facilities by 2025 to meet the demand for jobs post-incarceration as well as the demand of the tech industry for trained employees.

Policy Analysis

The close correlation between unemployment and recidivism makes it clear that these issues cannot be solved separately. To reduce recidivism, prisons must do a better job addressing the situational conditions that lead to crimes being committed. Massachusetts' prisons could better serve inmates, as well as save money through less recidivism, if they prioritized computer science training. The tech sector offers higher paying jobs, hires people with lesser degrees and has fewer conflicts hiring people with minor criminal records, than

KEY FACTS

- ▶ A Massachusetts Department of Corrections study found a three-year recidivism rate of 50.7 percent for inmates released in 2011.¹⁶
- ▶ Participating in prison educational courses lowers an inmate's chances of returning to prison by 43 percent.¹⁷
- ▶ Prison educational programs currently cost between \$1,400 and \$1,744 per inmate. Re-incarceration costs for inmates who participated in correctional education are \$8,700 to \$9,700 less than inmates who did not.¹⁸
- ▶ The average salary of jobs requiring information technology skills is 50 percent higher than that of the average American private-sector job.¹⁹

customer facing services. The sector needs people of employable age who have been recently trained. Inmates are ideal candidates because they have time to complete training, will receive additional benefits from educational opportunities, and appreciate having a meaningful way to improve their future prospects while still in prison.

Prison education is indisputably cost effective, especially compared to the cost of recidivism.¹¹ Online courses are free, need not have instructors and require little money outside of purchasing additional computer modules. A pilot program can be run off pre-existing computers. Resources like the Carl D Perkins grants or one of the new TechHire grants could finance the expansion of computer coding programs.^{12 13} Online coding resources can be provided such that they comply with prisons' technology regulations.¹⁴ The Massachusetts Department of Corrections should review their rules to more effectively incorporate online classes into the available educational opportunities.

NEXT STEPS

The first goal is to demonstrate the feasibility and success of combating recidivism via tech education to the Massachusetts Department of Corrections. It will be two to three years before conclusive data on trial programs can be collected. Though outside facilitators will be valuable for running initial programs, due to the security implications of using computers in prisons and the far-reaching benefits of providing technology training, state facilities should eventually take over the teaching of these skills.

The pilot program will first target students who have completed high school or an equivalent, and have less than 2 years remaining in minimum-security facilities. It will use the facilities currently in place for basic computer literacy courses. Code 7370, a program in California is the ideal model¹⁵, and has already compiled an offline repository of coding educational materials. Such a program is easily scale-able.

Further goals include development of a curriculum focusing on rehabilitation goals such as confidence, critical thinking, and employability. Local employers should be recruited to sponsor the computer coding training through mentorships and projects.

Diversion Not Detention: Halting Juvenile Delinquency for American Indian/Alaskan Native Communities

By Joe Russell, George Mason University

Thesis

To reduce rates of juvenile detention in American Indian communities, the Department of Justice Office of Juvenile Justice and Delinquency Prevention's Tribal Youth Program should place one state-certified counselor in every Bureau of Indian Education (BIE) funded school to lead a diversion program for at-risk youth.

Background and Context

While the entire American Indian and Alaskan Native (AI/AN) community suffers from a fractured and underfunded criminal justice system, native youth are especially at risk.¹ Native youth are two to three times more likely to be arrested for minor offenses, and twice as likely to receive more punitive sanctions than white youth.² Because few federal or state juvenile detention facilities are located in AI/AN communities, native youth are either sent to juvenile facilities far away from their homes³ or sent to adult incarceration facilities.⁴ Additionally, most youth who have been detained in the juvenile justice system are re-arrested within a year of being released.⁵ Diverting native youth away from the criminal justice system is difficult because they face more risk factors than any other group. More than 25 percent of AI/AN families live below the poverty line⁶ and most live in communities with few social services.⁷ Only 51 percent of native youth complete high school.⁸ Native youth are 33 percent more likely to be abused⁹ and witness violence 2.5 times more often than white youth.¹⁰ With poverty, lack of education, history of abuse and exposure to violence listed among the top risk factors for juvenile delinquency,¹¹ native youth need targeted attention rather than the federally administered, top-down youth diversion programs currently in place.

Talking Points

- ▶ With \$100,000, each BIE-funded school could hire a certified counselor and develop a diversion program for AI/AN students.
- ▶ Community-based diversion is the most effective program to keep youth out of juvenile detention.
- ▶ Diversion programs improve educational outcomes and professional opportunities for AI/AN youth.

The Policy Idea

Congress should annually allocate \$100,000 to each of the 183 schools funded by the BIE.¹² Between \$60,000-\$70,000 will be dedicated to the salary of a full-time,¹³ state-certified counselor¹⁴ who is a member of the AI/AN community.¹⁵ The counselor will use the remaining funding to develop and administer a BIE sanctioned diversion program for, and serve as an advisor to, the school's AI/AN population. Programing, while at the counselor's discretion, should teach youth about their heritage, provide academic support, aid in professional development, and foster positive relationships with law enforcement.

Policy Analysis

Diversion programs run by members of the community and designed to serve the needs of the local population (e.g. the Boys & Girls Club in Indian Country) are more effective than previous one-size-fits-all AI/AN youth diversion programs.¹⁶ Across the country, tribes have had great success with programs such as after-school homework clubs, community recognition awards and dinners, scholarships for academic success,¹⁷ heritage lessons taught by tribal elders,¹⁸ professional development, leadership opportunities and much more.¹⁹ By guaranteeing that every BIE School is able to invest in programs similar to these, and ensuring that every AI/AN child has access to a certified counselor, nearly all risk factors faced by AI/AN youths can be addressed.²⁰ These programs have proven results. Tribal public housing communities that participate in the national SMART Moves initiative,²¹ a community-based youth diversion program, experience 13 percent fewer juvenile crimes and 22 percent less drug activity.²² Native youth who participate in diversion programs are 17 percent less likely to have a negative encounter with law enforcement.²³ In fact, 91 percent of youth who participate in privately run diversion programs have no negative encounters with law enforcement.²⁴ By diverting these youth away from the juvenile justice system, federal, state and tribal governments save money. On average, it costs approximately \$408 per day, or \$149,022 per year, to incarcerate one juvenile.²⁵ Therefore, if nationwide 123 tribal youth are diverted from the juvenile justice system each year, then the diversion program will pay for itself.

KEY FACTS

- ▶ AI/AN youths are 60 percent more likely to commit suicide than their non-native peers²⁸ and are more likely to have PTSD than military veterans.²⁹
- ▶ AI/AN youth are 3 times more likely to be arrested than white youth.³⁰
- ▶ Ninety-one percent of native youth participating in a Boys and Girls Club diversion program were never arrested.³¹

NEXT STEPS

Because the federal government provides BIE funding, Congress must pass legislation allocating \$18.3 million to the Tribal Youth Program for grants to be distributed to BIE schools. Due to the large population of American Indians and Alaskan Natives in their districts, Democratic Representatives Ann Kirkpatrick and Ben Ray Lujan—as well as Republican Representatives Don Young and Markwayne Mullin—will be approached and asked to co-sponsor legislation allocating the funding, as will Senate Indian Affairs Committee Chairman, Republican Senator John Barrasso.²⁷ Groups who work with similar diversion programs, such as the Boys and Girls Club and Diné Youth, will be asked to lobby in favor of the legislation and assist BIE schools to hire counselors.

Elementary Foreign Language Education: Increasing U.S. Students' Ability to Compete Globally

By Clare Shafer, University of Michigan

Thesis

To properly prepare students to compete in the increasingly competitive global marketplace, the state of Michigan should require foreign language instruction beginning in elementary school.

Background and Context

Currently, Michigan students are required to take two credits of foreign language by the end of twelfth grade.¹ In 21 out of 25 of the world's leading industrialized countries foreign language instruction begins in elementary school.² Early language acquisition is directly correlated with higher test scores.³ Students who study a foreign language consistently outperform students with more math instruction.⁴ The benefits of a second language are tremendous as SAT math and verbal scores increase with each year of study.⁵ When the Program for International Student Assessment (PISA) completed its last rating cycle in 2012, the U.S. education system lagged behind almost all other developed nations, ranking a disappointing 31st in math, 24th in science, and 21st in reading.⁶ Investing in foreign language will dramatically improve these statistics.

In today's global economy, knowing a foreign language can dramatically increase earning potential and set students apart from the competition. Studies have found that knowing German, Italian, Russian, or Chinese leads to increased pay of up to 4 percent.⁷

The Foreign Language in the Elementary Schools (FLES) model of learning language focuses on developing elementary students' communication skills while strengthening material in other subjects. This program consists of 20 to 30 minute lessons taught several times a week. These programs have proven to increase understanding for other cultures, while building a foundation for later language learning.⁸

Talking Points

- Foreign language improves higher-order thinking skills, as well as informs students that there are other cultures besides their own, which dramatically decreases levels of prejudice and racism.⁹

- ▶ Spatial and verbal abilities are improved through foreign language study.¹⁰
- ▶ Being bilingual actually increases the amount of grey matter in the brain's left parietal cortex, a structure that improves language processing skills.¹¹

Policy Idea

The state of Michigan should require elementary schools to include at least two hours of foreign language instruction spread out throughout the week as part of their curriculum. This instruction would be based on the FLES model and correspond with lessons already taught in student's other classes such as history and math. Since little instruction time is required, foreign language teachers could rotate between classrooms. This would dramatically decrease the cost of implementing foreign language programs, as each school would only need to hire one or two new teachers.

Policy Analysis

By failing to introduce foreign language in elementary school, educators are missing out on the critical acquisition period, after which language learning requires more time and is more difficult due to cerebral lateralization.¹²

Three years of research done on a Japanese FLES program for grades K through five found that students made considerable progress in proficiency while developing positive attitudes toward foreign language. When students' progress was measured at the end of three years 90 percent of children had made significant progress on one or more of the seven measures of proficiency. The students also began to speak the language in their daily lives; 72 percent of students began using Japanese outside of class.¹³

KEY FACTS

- ▶ Twenty-one of 31 countries in Europe required students to study another language for at least nine years.¹⁷
- ▶ In 2008, only 15 percent of public elementary schools taught foreign language compared to 24 percent in 1997.¹⁸
- ▶ Knowing a second language can help a person accumulate between \$50,000 and \$125,000 of extra earnings throughout the course of a career.¹⁹
- ▶ Only 18 percent of Americans report speaking a second language compared to 53 percent of Europeans.²⁰
- ▶ The National Committee for Economic Development released a report in 2006 expressing the need for increased foreign language skills for the U.S. to remain economically competitive.²¹

Fairfax Public Schools already has an afterschool FLES program in place. On a standardized math exam, students involved in the FLES program outscored students with no foreign language who were a year older.¹⁴ The biggest factor preventing the inclusion of foreign language in elementary school curriculum is cost. However, by sharing one or two foreign language teachers among classrooms at each school, the program becomes economically feasible. The average starting salary for a teacher in Michigan is \$35,901.¹⁵ When this cost is divided by 2,684—the average size of a Michigan public elementary school—it amounts to only \$13.37 per student.¹⁶

NEXT STEPS

A team composed of Michigan foreign language teachers, interested parents, representatives from school districts with FLES programs, and interested legislators should present to the Michigan Board of Education. Representatives from Fairfax Public Schools could discuss their experiences with FLES and testify before the Board of Education. Other key allies would include both local and international businesses with an interest in hiring bilingual workers. A pilot program should then be developed to introduce the program gradually to Michigan elementary schools. The program could be introduced starting in fall 2018 with the new kindergarten class. The program could then be introduced to each year's incoming kindergarten class, thereby slowly increasing the size of the program.

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Young people are incredibly important to the American political process. Millennials and Generation Z now make up the same portion of eligible voters as the Baby Boomer generation. This emerging generation is also the most diverse in our nation's history: Half of all eligible Latino voters in 2016 are between the ages of 18 and 35. We're told we can make the difference every election, and candidates and elected officials ask for our votes, time, and money—but they don't ask for our ideas.

***Young Americans continue to transform our economy and culture.
Now it's time for us to disrupt our political system.***

The *10 Ideas* journals, one of our oldest and most competitive publications, elevate the top student-generated policy ideas from across the country. In this year's journals, you will find solutions to problems in places ranging from South Dakota to North Carolina to Oregon to New York. Whether seeking to make Pittsburgh an immigrant-friendly city or to reduce recidivism in the state of Massachusetts, the following proposals take a creative and locally focused approach to building opportunity for all.

Rooseveltters are also committed to turning their ideas into action. Whether that means meeting with decision-makers, writing opinion pieces in their local papers, or organizing actions in their communities, we intend to see the solutions we propose become reality.

Why? As the generation that will inherit the world shaped by today's decisions, we have the most to lose or gain. Involving the emerging generation in the policy process will lead to outcomes that benefit everyone. We believe it matters who rewrites the rules, and we have ideas for how to change them.

I hope you enjoy reading the proposals in this journal as much as we did.

Onward,

A handwritten signature in black ink, appearing to read 'Joelle S', with a long, sweeping horizontal line extending to the right.

Joelle Gamble

National Director, Network, Roosevelt Institute

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Reducing Poverty in Athens-Clarke County, Georgia, Through Local Tax Policy

By Jordan Berne, *University of Georgia*

Thesis

To combat its alarmingly high poverty rate, the Athens-Clarke County Unified Government should establish a county-level earned income tax credit (EITC) modeled after the federal EITC.

Background and Context

The poverty rate in Athens-Clarke County (ACC), Georgia, is alarmingly high. Between 2009 and 2011, 26.9 percent of the ACC population lived below the federal poverty line after adjusting for college students.¹ Over that same time period, ACC's poverty rate was 10 percentage points higher than the Georgia rate and 12 percentage points higher than the national rate.²

Though the precise combination of reasons for ACC's high poverty rate is up for debate, possible explanations abound. Lack of good jobs, the exodus of the educated, and poor educational outcomes are likely major contributors.³

45

On the individual level, poverty can have detrimental effects on physical and mental health.⁶ On the macro level, poverty can contribute to social tension and have a slowing effect on economic growth.⁷ Thus, local poverty has an impact on every member of Athens-Clarke County.

Historical analysis reveals that the high incidence of poverty in ACC is not a new phenomenon. ACC's poverty rate was already higher than the state and national rates in 1980, and it has since trended upward.⁸ If deliberate policy action isn't taken, history suggests that the ACC poverty rate will continue to rise.

Talking Points

- Poverty in Athens-Clarke County leads to poor health, poor educational outcomes, weak labor force attachment, slow economic growth, and a self-perpetuating cycle of poverty.^{9 10 11 12}
- The EITC is one of the most effective tools for reducing poverty and encouraging work and may be financed by a modest increase in property taxes.¹³

- ▶ A county-level EITC would boost the incomes of more than 10,000 ACC residents annually.¹⁴

The Policy Idea

To boost the incomes of families living in poverty, the Athens-Clarke County Unified Government should establish a county-level EITC modeled after the federal EITC. Families that receive the federal EITC would receive an additional tax credit from the ACC government worth 10 percent of their federal EITC benefits. The ACC government should finance this new tax credit with a modest increase in county property taxes. Over time, the ACC government should expand or contract the county EITC as it deems fit.

Policy Analysis

As Montgomery County, Maryland, demonstrates, a county-level EITC can be an effective tool for reducing poverty.¹⁵

First implemented in 1998, the county has expanded its EITC five times because of the policy's effectiveness and low cost.¹⁶

An EITC in ACC would target around 10,983 taxpayers every year.¹⁷ The average credit would be worth approximately \$253.96.¹⁸ In addition to raising incomes, an EITC would encourage work amongst low-income families.¹⁹

At the individual level, lower poverty rates are associated with improved health and higher educational attainment.^{20 21} Better educational outcomes increase people's capacity to innovate and obtain better jobs.^{22 23} Thus, a county EITC would directly combat the root causes of poverty in ACC. Furthermore, increased human capital would spur economic growth, benefiting every resident of ACC regardless of class.²⁴

A modest increase in property taxes could finance an ACC EITC indefinitely. Raising the county and bond millage rate from .01395 to .019 would keep ACC's property tax burden on par with Georgia counties of similar size and

KEY FACTS

- ▶ In 2011, ACC was the poorest county in the U.S. with a population over 100,000.³⁰
- ▶ Raising the county and bond millage rate by .00505 would have raised ACC tax revenues by \$3.3 million in 2014 from residential properties alone.^{31 32}
- ▶ An Athens-Clarke County EITC set at 10 percent of the federal EITC could raise the annual incomes of 10,983 people by an average of \$253.96.³³

would raise revenues by around \$3.3 million every year from residential properties alone.^{25 26} While some low-income families might face higher property taxes, they would likely experience net financial gains after receiving the EITC. Other policy options, such as scholarships for post-secondary degrees, would likely be dependent on terminable grants.

When assessing the federal EITC in isolation from its budgetary effects, the policy enjoys broad bipartisan support.²⁷ Still, county commissioners might oppose an EITC because of the offsetting tax hike. However, ACC's urgent need to address local poverty makes the increase in property taxes more palatable.

NEXT STEPS

In April 2016, the Athens-Clarke County mayor will propose a budget for fiscal year 2017.²⁸ Two months later, the Board of County Commissioners will adopt a finalized budget, which will include tax policy.²⁹ Leading up to this deadline, a coalition of local residents, anti-poverty nonprofits, and University of Georgia students should appeal to the mayor and commissioners to include a county-level EITC in the 2017 budget. Specifically, the coalition should include nonprofits such as the Economic Justice Coalition (EJC) and Athens for Everyone and student groups such as Be Compassion and the Oxfam Club. Linda Lloyd, executive director of the EJC, will be a crucial advocate to engage with, as she has deep ties to the ACC social justice community. If a county EITC isn't adopted in the 2017 budget, the coalition should continue building momentum and aim for implementation in the 2018 budget.

Supporting Scholars: Rent Relief for Students in Fairfax City

By Lucas Bouck, Tim O'Shea, Sawyer Barksdale,
George Mason University

Thesis

Students who live off campus face higher risks of dropping out than their on-campus peers. A rent relief policy funded by Fairfax City would alleviate the burden of high rents on off-campus students at George Mason University.

Background and Context

George Mason University is largely a commuter school. In the 2014–2015 school year, 27,520 students out of 33,723 lived off campus.¹ The prevalence of off-campus students creates academic risks for the students.² Research demonstrates that across multiple levels of achievement, off-campus living reduces retention rates among students. Furthering this risk, research shows that once a student accumulates more than \$10,000 of debt, that student is more likely to drop out as their debt increases.³ Housing costs in the area surrounding George Mason University contribute to the problem, as the average rent in Fairfax City in 2007 was \$1,588 a month.⁴ If three students making the Virginia minimum wage of \$7.25 per hour shared an average Fairfax City apartment, they would have to work almost 20 hours a week each just to cover rent.⁵ More spending on rent means more student debt, which increases the risk of dropping out. Moreover, plans recently released by the university shown no commitment to long-term housing expansion, meaning that students must turn to off-campus housing more and more.⁶ Policies surrounding off-campus students need to contextualize this population as an at-risk body and thus focus on retention and increased outreach in order to compensate for this risk.

Policy Idea

In order to combat the negative effects of off-campus living, especially in a high-cost area, we recommend a policy of rent relief specifically for students funded by Fairfax City. Fairfax City already has a rent relief policy for senior citizens, and this policy should be extended in a similar way to students.⁷

Analysis

Rent relief removes one incentive for students to take on more debt. With average George Mason student debt at \$29,000, each additional cost imposed on students only entrenches debt, which produces pressure on students to abandon their education altogether.⁸ Once debt passes \$10,000 it provides students with a significant enough disincentive to continue their education

that their chance of graduation begins to fall.⁹ Considering the average student is far beyond that level of debt, each additional cost degrades educational development for countless students.

Based on the city's new affordable housing policy, housing developers who choose not to build any affordable units will pay the city a specified per-unit rate.¹⁰ Contributions so far total \$825,000.¹¹ If this money is used for funding rent relief for students, the city could contribute \$300 a month for rent to over 300 student households over the course of an academic year. Even if rent relief increases demand and causes rents to rise, the effect would not be any different than existing affordable housing programs in Fairfax City. Given the success of the program in accumulating revenue so far, the policy is showing promise. Although some would claim that student welfare is not the responsibility of Fairfax City, reducing dropouts would increase resident income and keep money flowing into the community, which is ultimately in the city's best interest.¹²

KEY FACTS

- ▶ At George Mason University, 27,520 students out of 33,723 live off campus.¹⁴
- ▶ Off-campus living can reduce student retention rates.¹⁵
- ▶ The average rent in Fairfax City in 2007 was \$1,588 a month.¹⁶

Talking Points

- ▶ Fairfax City currently has collected \$825,000 in monetary contributions from developers that could be used to provide rent relief for students.¹⁷
- ▶ Rent relief would reduce the financial burden on off-campus students.
- ▶ Reducing financial stress will enhance the educational outcomes of students.

NEXT STEPS

Going forward, we call on the City Council of Fairfax City to amend the most recent affordable housing resolution by extending rent relief to students. Some key allies will be students at George Mason University, who would be helped by this policy, and VOICE, a community organizing group in Fairfax City. Fairfax Mayor Scott Silverthorne will be a target because of his position and because of his support for the most recent affordable housing policy.¹³ Demonstrating the benefits of this policy to the city will convince the mayor and the city council to support this policy, which will lead to it becoming a reality.

Segregated Poverty in Syracuse: Addressing Income Discrimination Through Housing Choice Vouchers

By Joshua Carney, Brenton Michonet, and Baxter Hankin,
Syracuse University

Thesis

The city of Syracuse should pass an ordinance preventing discrimination by landlords against individuals with Section 8 Housing Choice Vouchers in order to stop racial injustices and diminish the scale of segregated poverty.

Background and Context

The city of Syracuse, New York, has the highest rates of concentrated poverty in the U.S. among African Americans (65.2 percent), and Hispanics (62.2 percent).¹ The origins of segregated poverty in Syracuse are rooted in the construction of the I-81 highway that runs through the city's center. I-81 displaced poor minorities to the southwest of the city and white flight to the suburbs followed. The impoverished community that remained in the 1960s could not get decent jobs or rent suburban residences due to discrimination.² The possibility of social mobility in such neighborhoods decreased, which impacted Syracuse as a whole, and this led to higher levels of crime as well as reduced economic productivity and desirability.

One of the major causes of segregation and poverty in urban areas is income discrimination. Income discrimination constricts economic development within the city by inhibiting growth. Section 8 Housing Choice Vouchers (HCVs) were sought by the city to give residents living in adverse conditions the opportunity to move into safer neighborhoods.³ Landlords are not legally prohibited from denying someone the ability to rent solely based on whether they are applying for housing with a HCV. An inequitable housing substructure has evolved, which in turn has led to a massive concentration of poverty in certain areas of the city. Central New York Fair Housing states that the Syracuse metropolitan area “is one of the worst scoring cities in the country when looking at equality of opportunity based on race and ethnicity.”⁴

Policy Idea

Syracuse must adopt an ordinance that prohibits landlords from refusing to rent to people solely because they have a HCV. Communities and resources throughout the city will become more diversified, and the scale of segregated

poverty will diminish.

Analysis

Adopting the proposed policy would be the most cost-effective way for Syracuse to target segregated poverty within the city. The prospective city ordinance would have a direct impact on high-poverty neighborhoods, defined as areas where 40 percent or more of residents live below the federal poverty threshold.⁵ The Section 8 housing program has exceeded capacity in the city, and the waitlist is stalled as over 6,800 applicants await housing assistance.⁶ An anti-discrimination process for finding housing alternatives would help to make the Syracuse Housing Authority (SHA) less overwhelmed. Syracuse would realize more economic productivity and desirability by implementing a fair and just policy, thus prohibiting discrimination.

KEY FACTS

- ▶ The National Fair Housing Alliance estimates that there are about 4 million housing discrimination violations each year. But in 2013, only one in every 7,000 of these cases were reported.¹⁰
- ▶ 51.8 percent of children in Syracuse live in poverty.¹¹
- ▶ There are more than 6,800 applicants for Section 8 HCVs in the city, and the waitlist for the program has been full since 2011.¹²

A case study in Austin, Texas, found that the true problem is that families do not have many choices about where to use their voucher, and this circumstance contributes to the concentration of poverty. The report, by the Austin Tenant's Council, found that 78,217 units in the Austin metro area—about 56 percent of those surveyed—had rents within the Fair Market Rent limits. However, only 11 percent of those units accepted vouchers and did not have minimum income requirements for tenants.⁷ By constituting a legal ordinance that would provide for more opportunity, the limitations of the program will be reduced.

The consequences of forgoing a policy change will allow mass inequality to persist. The city's future financial integrity is not secure, with 51.8 percent of Syracuse residents under the age of 18 living in poverty.⁸ Community diversification would drive a struggling jobs market, promote economic development, and diminish the impact of socioeconomic segregation.

Talking Points

- ▶ Areas of concentrated poverty lead to poorer performance in schools; therefore, Syracuse must invest in the social infrastructure of the city in order to ensure a more advantageous future for the city's youth.
- ▶ Similar policy has been implemented in 12 states, including major cities such as Austin, Philadelphia, Washington, D.C., and Los Angeles.¹³
- ▶ With little direct fiscal cost to the city, the policy proposal would instigate cyclical change in impoverished communities. In addition, it would provide more resources for the economy by diversifying communities and diminishing the scale of segregated neighborhoods.

NEXT STEPS

Members of the Syracuse Common Council must propose and pass a city ordinance that would prohibit discrimination against Section 8 HCV recipients. The initiative is politically feasible; a prospective Common Council coalition would consist of the president, councilor-at-large, school board members, and several major community leaders and local organizations that have shown support for finding ways to revitalize areas of concentrated poverty.⁹ As Syracuse's impoverished communities become more concentrated, it is imperative that areas suffering from such circumstances take progressive measures to diminish the impact of socioeconomic segregation.



Providing Affordable Homes: An Inclusionary Strategy for the City of Atlanta

By Mark Dyer, University of Georgia

Thesis

The city of Atlanta should implement a mandatory inclusionary zoning ordinance, ensuring that low-income families can afford housing in an increasingly unaffordable downtown.

Background and Context

As Atlanta's downtown gentrifies, lower-income residents are being excluded from the benefits of growth. Those residents who cannot afford to live in the city center are pushed outward, concentrating where there is more affordable housing but fewer economic opportunities. Between 2000 and 2010, Atlanta rents rose 13 percent.¹ By 2013, 44 percent of Atlanta households were spending over 30 percent of their income on housing (qualifying them as "cost-burdened"), jumping to 52.7 percent when only counting rental units.² Affordable housing is also segregated from economic opportunities: The majority of affordable rental units are concentrated in the city's economically stressed southwest, while job growth concentrates in the more prosperous north.³ Facing these economic pressures, more low-income families are migrating out to suburban counties, which unfortunately tend to have weaker social safety nets, leaving families more vulnerable.⁴

Currently, the city government's only major plan for increasing the affordable housing stock is the Atlanta BeltLine, a development initiative targeting neighborhoods in a 22-mile-long railroad corridor encircling the city center. The BeltLine has fallen significantly behind schedule in construction of affordable units.⁵ If the BeltLine continues at or above its current pace, anywhere from 2,830 to 5,600 units could be created by 2030. However, a majority of the funds dedicated to affordable housing construction have focused on areas in the southwest, which exacerbates, rather than alleviates, low-income families' spatial and economic segregation.⁶

Talking Points

- ▶ Atlanta demolished the last of its public housing in 2011 and is falling behind on providing new affordable housing through its BeltLine Affordable Housing Initiative.⁷
- ▶ The majority of new construction in Atlanta is in large residential buildings that are not mandated to provide affordable units.
- ▶ Housing prices in suburban counties are decreasing, but these counties also have weaker social safety nets, leaving new low-income residents economically vulnerable.⁸

The Policy Idea

The city of Atlanta should pass a mandatory inclusionary zoning (IZ) ordinance requiring developers of all new residential buildings with 20 or more units to make at least 10 percent of units affordable for households earning below 80 percent of the area median income (\$42,925.60 as of 2014). The city government should help offset costs to developers by offering incentives such as relaxed zoning requirements, tax credits, and capital assistance, and financing these incentives through the use of tax allocation districts.

Analysis

Every urban economy stands to benefit from providing affordable housing. It bolsters business growth by providing housing for low-income laborers, who satisfy the increased demand for auxiliary service jobs. It also saves families money, allowing them to spend more on goods and services whose benefits multiply throughout the local economy.⁹ However, as is the case with Atlanta, affordable housing is often segregated from economic opportunities, trapping poor households in cyclical poverty.

The BeltLine alone will not ensure equitably shared growth for Atlanta's roughly 88,351 households living below 80 percent of the area median

KEY FACTS

- ▶ 52.7 percent of renting households in Atlanta are “cost-burdened”—spending more than 30 percent of their income on housing costs.
- ▶ Atlanta rent prices rose 13 percent between 2000 and 2010, while rent prices in Atlanta's suburbs fell by 9 percent.
- ▶ Every dollar spent on affordable housing generates up to an additional \$1.28 in indirect and induced spending. Families living in affordable housing save roughly \$500 a month.¹²

income. Greater action is needed to construct affordable housing in neighborhoods benefiting from economic growth and revitalization efforts. Public housing once attempted to fulfill this function, but after being completely eliminated in Atlanta (with much political support) as of 2011, it is unlikely that any push for reinvigorated traditional public housing will be politically feasible.

Inclusionary zoning ordinances provide a strategic alternative. Counties across the country have implemented IZ ordinances with considerable success in places like Montgomery County, Alabama. The most successful IZ ordinances usually mandate developers to set aside 10–20 percent of units for affordable housing, and almost always incentivize private developers with relaxed density requirements and capital assistance.¹⁰ Passing an IZ ordinance in Atlanta would likely produce around 1,500 new affordable units by 2030, generating anywhere from 6,581 to 10,792 new jobs when paired with the BeltLine.¹¹

NEXT STEPS

The ordinance must be passed by the city council of Atlanta. With political support from Mayor Kasim Reed's office (which has already publicly endorsed an IZ ordinance), community organizations and foundations and organized low-income voters can present the ordinance and lobby for its passage. These groups must demonstrate community support for the ordinance and counterbalance the likely opposition from private developers. It must be demonstrated to these developers that the usage of incentives helps to offset potential costs from mandating affordable units. The Atlanta Housing Authority (AHA) could be a useful bridge between the two sides: Having since abandoned traditional public housing, the AHA now focuses on providing mixed-income developments through cooperative public–private partnerships. However, its support or opposition should not be assumed; though a potentially useful ally, the AHA should only be engaged once its sentiment on the issue is gauged.

Generating Food Security: Re-implementing a Strategic Grain Reserve

By Micah Musser, *Georgetown University*

Thesis

The United States should authorize the Commodity Credit Corporation (CCC) to create and maintain a strategic grain reserve in order to reduce fluctuations of grain prices and insulate United States citizens against a looming food crisis.

Background and Context

Between 1954 and 1985, the federal government authorized the CCC to maintain grain reserves in order to moderate agricultural prices, while from 1977 to 1996 the government also provided storage and management for farmer-owned grain reserves.¹ Since these measures expired, U.S. agricultural subsidies have resulted in a stagnant or declining U.S. share of international commodity markets while costing taxpayers billions of dollars.²

Today, rising variation in yields of major crops as a result of climate change will likely lead to fluctuating food prices, and food crises are becoming increasingly likely without global reforms in agriculture.³ Furthermore, current U.S. agricultural subsidies paradoxically encourage both conservation and overproduction.⁴ If the United States wants to be prepared to deal with the realities of climate change and increasing price variation, expansive reforms of agricultural policies are necessary.

The Policy Idea

In order to combat issues of price fluctuation among agricultural goods and establish a viable response to food shortages, the United States should reinstate a strategic grain reserve. The CCC should oversee the reserve, permitting farmers to store grain when prices are low and sell when prices have risen significantly. The CCC should also directly purchase enough grain to maintain a baseline at all times for liquidation in the event of a severe food shortage.

Policy Analysis

This policy directly benefits farmers because reserves more successfully assure a constant market price of grain as compared to current subsidies.

Moreover, because a grain reserve provides a public good, it reduces the red tape involved in farmers determining how best to use their land. This could allow farmers to more rapidly respond to market changes by switching crops or implementing new technologies. Additionally, grain reserves, which function as a counter-cyclical payment to farmers, have been shown to have fewer distortionary effects on the market than current subsidies, which primarily emphasize marketing loans (one-time payments that only function when prices are low with no corresponding mechanism to lower significantly inflated prices).⁵

Unlike most agricultural subsidies, this policy also benefits U.S. residents and the government. For the public, the increased safety guaranteed by a grain reserve can both prevent the effects of a food crisis and reduce concerns among consumers and investors regarding potential food shortages. Additionally, historical data and simulations demonstrate that replacing historical subsidies with a farmer-owned grain reserve could have reduced government spending by \$96 billion from 1998 to 2010 while maintaining stable prices, increasing the value of farm exports, and having virtually no impact on net farm income.⁶

Talking Points

- ▶ The effects of climate change are likely to increase grain price volatility and decrease global food security.^{7,8}
- ▶ From 1954 to 1996, the United States grain reserves lowered governmental costs, decreased price volatility, and increased food security.⁹
- ▶ Farmer-owned grain reserves minimize market distortions, reduce incentives for overproduction, and decrease farmer dependence on government subsidies.

KEY FACTS

- ▶ During the period of a farmer-owned grain reserve (1977–1996), grain prices trended downward in real dollars and price variability decreased.¹⁰
- ▶ A farmer-owned grain reserve can drastically cut government expenditures without resulting in more variable prices or a decrease in net farm income.¹¹
- ▶ The 2007–08 food crisis was exacerbated by climate change's impact on agriculture combined with a lack of preparation for food shortages.¹²

NEXT STEPS

Potential allies for a grain reserve include members of Congress serving on the House Subcommittee on Farm Commodities and Risk Management and the Senate Subcommittee on Commodities, Risk Management, and Trade, all of whom would benefit from a cheaper, more effective alternative to current agricultural subsidies. Furthermore, the ability of grain reserves to increase our national food security is attractive to politicians who emphasize national security. By demonstrating the ability of a counter-cyclical reserve program to provide greater freedom to farmers and discourage land overuse (by restraining rapidly rising prices), a coalition could be formed of agricultural and environmental interests in order to lobby Congress for the policy. If each group voiced support for the proposal in Congress, it could quickly become a popular bipartisan issue for incorporation in the next Farm Bill.

Protecting Michigan Cities and Universities Through Financial Reform

By Dominic Russel, Christopher Olson, Max Kontorovich, April Song, and Andrew Wallen, *University of Michigan*

Thesis

To minimize fees that Michigan's public institutions pay banks for interest rate swaps and other derivative instruments, the state should assist public entities with term renegotiation and create new regulations on derivatives.

Background and Context

Since 2008, cities, states, and localities in the U.S. have been forced to pay banks at least \$5 billion in penalties to terminate interest rate swaps—risky derivative bets that were sold by financial institutions as protections from changing interest rates.¹ In total, taxpayers lost an estimated \$20 billion in terminations and overcharges from 2006 to 2011 alone.² As agreements last 20 to 30 years and interest rates remain low, many taxpayers are continuing to pay for bad deals.³

In 2001, Michigan's Revised Municipal Finance Act opened the door for interest rate swaps and other derivative financial instruments for localities.⁴ In 2006, Detroit issued a series of interest rate swaps that cost taxpayers \$200 million from 2009 to 2014 and led banks to demand over \$250 million in termination penalties during bankruptcy proceedings.⁵ This problem is not limited to Detroit. While no comprehensive study has been done on the state, interest rate swaps have cut the budgets of multiple cities, public school districts, and seven of the eight largest public universities in the state.^{6,7} The University of Michigan, for example, has already lost \$64 million in swaps, an amount equivalent to 14 percent of the total income generated from 2015–2016 undergraduate tuition.⁸

The Policy Idea

Michigan's Treasury Department should assist in the renegotiation of current interest rate swaps and create new regulations to prevent unfair agreements. To support renegotiation, the Treasury should create a taskforce of lawyers and scholars that identifies deals to renegotiate and creates a coalition of municipalities, universities, and other local public issuers that together can bargain with financial institutions. Additionally, the Municipal Finance Act should be amended to protect Michigan's municipalities.

Policy Analysis

A “financial fairness” taskforce will lower both present and future public borrowing costs. Some public entities have already minimized losses or lowered termination fees through legal action: Detroit was able to save \$200 million when a bankruptcy judge determined banks failed to disclose risks.⁹ The taskforce would assist Michigan localities in similar lawsuits. These reforms would not raise localities’ borrowing costs, as financial fees often bear no resemblance to the actual cost of providing services.¹⁰ Using bargaining techniques that have proved successful in workplaces and for community organizations, Michigan localities can leverage the billions in business they do with Wall Street to demand lower fees.¹¹ Financial institutions will likely challenge the legality and efficacy of renegotiation, but similar efforts in Los Angeles, Chicago, and the University of California Berkeley demonstrate that public support can overcome this opposition.^{12 13 14}

As Michigan continues to recover from the recession, its cities, counties, school districts, and colleges need every possible dollar to fund their services. New rules should prevent banks from serving as both counterparty and underwriter on swaps, force banks to disclose fees to the public, and once again require Treasury approval for derivative financing.

Talking Points

- ▶ Public entities within the state of Michigan pay billions of dollars to Wall Street banks each year for misleading derivative instruments and arbitrarily high fees.
- ▶ As Michigan continues to recover from the recession, its cities, counties, school districts, and colleges need every possible dollar to fund their services.

KEY FACTS

- ▶ The University of Michigan has already lost \$64 million due to interest rate swaps, equivalent to 14 percent of every undergraduate student’s tuition this year.
- ▶ Detroit’s water and sewer department paid \$527 million to terminate swaps in 2011.¹⁵ Less than four years later the department shut off water to more than 35,000 households in an effort to cut costs.¹⁶
- ▶ Since 2011, 18 Michigan municipalities have been placed under emergency financial management and the state’s largest city, Detroit, has declared bankruptcy.

- ▶ Michigan's Treasury Department should create a task force to assist in the renegotiation of current interest rate swaps and create new regulations to prevent future unfair financial agreements.

NEXT STEPS

Support for this proposal must come from the state's Treasury Department, which could create the financial fairness taskforce to oversee and approve locality and municipal finances. To drive support for these issues and ensure that the Treasury receives a mandate from Michigan's residents, members of the community must be informed about current deals. A series of op-eds and statements revealing the magnitude of losses and the transfer of wealth from Michigan communities to Wall Street firms could raise the profile of this issue. A coalition of advocacy organizations, concerned residents, and local government officials should be fostered to support and produce these pieces.

Mileage-Based User Fees: Bringing Progressivity and Efficacy Back to Transportation Taxation

By Zachary Schmetterer, Cornell University

Thesis

The New York State Legislature should resolve to switch from a per-gallon fuel tax to a mileage-based user fee system to more adequately fund ground transportation infrastructure, improve the progressivity of current tax metrics, and effectively direct tax revenues.

Background and Context

The per-gallon fuel tax was first introduced in 1919 as a means to pay for road construction and maintenance; however, this form of tax on gasoline and diesel is now producing declining revenue streams, a regressive impact on the people taxed, and a disconnect between taxation and funding.¹ In New York, the ground transportation network is falling apart despite one of the highest per-gallon fuel taxes in the nation. In New York, only 10 percent of bridges in need of repair were given attention in the past two years, and by 2030 New York will need to spend about \$40 billion on roads to keep up with road conditions.²

The per-gallon fuel tax model raised adequate revenue during the 20th century, when the population was growing, more households could afford to buy cars and drive more, and Congress periodically increased the fuel tax rate to counteract inflation. Since then tax revenues have dried up as vehicles miles traveled peaked, Corporate Average Fuel Economy (CAFE) standards imposed stringent fuel economy requirements on new cars, and political opposition prevented the gas tax from keeping up with inflation (citation). Additionally, the per-gallon fuel tax disproportionately targets the poor by making them pay more to use the same distance of roadway because they cannot afford to purchase new, expensive cars with better fuel economy or rely on alternative fuel such as electric power. Finally, the revenue base that accrues from the per-gallon fuel tax has been gradually diverted from its original purpose of road construction and maintenance, as in the case of the federal fuel tax, where nearly 25 percent of federal highway user-tax money is used for purposes other than the construction, operation, and maintenance of highways.³

Talking Points

- ▶ Taxing users based on the distance they travel more effectively links use of roads with the cost of maintaining the associated ground transportation infrastructure network.
- ▶ Moving away from a per-gallon fuel tax ensures that every user of the road, regardless of vehicle type or fuel efficiency, pays their fair share of taxes.
- ▶ Using a per-mile fees increases transparency and allows for the creation of a dedicated source of sustainable infrastructure funding.⁴

Policy Idea

By passing a resolution, the New York State Legislature can begin to develop a formal mileage-based user fee (MBUF) system to replace the per-gallon fuel tax. The new mileage-based user fee would charge road users a flat fee per mile rather instead of the state gas/diesel tax.

Policy Analysis

Under the new MBUF system, the state of New York will be able to raise the revenues it needs to fund road construction and maintenance, the residents of New York will be directly taxed in a progressive manner for their use of the roads and tax revenues will be more effectively allocated. Switching to a “direct user fee” will effectively raise revenues to keep pace with transportation capital demand and inflation by setting the fee equal to the marginal or per-mile cost of using the infrastructure.⁵ The new MBUF system will improve tax progressivity by making drivers pay the same rate for using the roads, while at the same time preserving incentives for drivers to buy fuel-efficient/alternative fuel cars because those who buy them will

KEY FACTS

- ▶ With current New York fuel taxes yielding only about \$3 billion annually and predicted to decline to about \$2.4 billion by 2025, the New York State Department of Transportation and the Metropolitan Transportation Authority will not come close to having their capital needs of \$16 billion met by a per-gallon fuel tax.⁹
- ▶ Per-gallon fuel tax revenues have been on a steady decline as CAFE standards increase, requiring an average of 34.5 mpg for new cars by 2016; the actual new-car average was 24.7 mpg in 2013.¹⁰
- ▶ Due to the poor incentives of a per-gallon fuel tax, New York currently only spends 30 percent of its fuel tax revenues on highways compared to 100 percent and 98 percent in Nevada and Ohio, respectively.¹¹

still pay less for fuel even without the per-gallon fuel tax. MBUF will increase transparency and better allocate tax revenues because “customers [who] are far more aware of what they pay and why they pay it than with fuel taxes” will make it “politically more difficult for politicians to raid those funds for other purposes or shift their use to services that don’t benefit the highway customers.”⁶

Currently the state of Oregon has already begun phasing in a pilot program called OReGO. With the help of private partners, Oregon is able to fairly tax its motorists using technology-based systems.⁷ MBUFs can be collected through a three-tiered system designed to win public acceptance. Residents of New York could either pay a flat annual fee based on an assumed level of miles driven, a variable per-mile fee based on an annual odometer reading, or opt to have a third-party vendor install technology that would make the user accountable only for miles driven within New York.⁸

NEXT STEPS

In order to bring a comprehensive resolution before the Committee on Transportation and have it approved by the New York state legislature, a coalition of universities, tax foundations, government agencies, and grassroots organizations need to support this agenda and build support from policymakers. Starting dialogue between experts and organizing grassroots movements through petitions and town hall meetings could generate adequate political support to get MBUF legislation sponsored and supported in committee.

Expanding Pittsburgh's Small Business Association by Making it More Immigrant-Friendly

By Shivane Shah, Carnegie Mellon University

Thesis

Since immigrants are more likely to open up a small business, Pittsburgh's local government should expand the Small Business Administration (SBA) to include a department that focuses on immigrants.

Background and Context

Upon moving to the United States, immigrants often find it difficult to secure a job, and therefore may choose to open a small business.¹ To finance their business, immigrants often must rely on their social network.² These immigrants find it harder to get bank loans to fund their small businesses because they may not have a high enough credit score or the legal papers needed.³ The mayor of Pittsburgh recently announced that the city is trying to attract 20,000 new immigrants over the next decade.⁴ Since 10 percent of these new residents are expected to open up a small business, it would be beneficial if there were a government support structure to support these potential entrepreneurs.⁵ Currently, the Pittsburgh SBA offers counseling and education materials for women and minorities interested in starting their own small business or those who already have a business.⁶ However, immigrants face unique problems including cultural gaps, language gaps, and immigration issues on top of the many challenges of opening a small business.

Talking Points

- Expanding the SBA to include a department that focuses on immigrant needs will allow for greater government support for immigrant small business owners.
- 10 percent of the immigrants that move to Pittsburgh are expected to open their own business.⁷
- Immigrant entrepreneurs face many problems but have limited sources of support

Policy Idea

The Pittsburgh SBA should expand to include a department that focuses on the needs of immigrant small business owners. They would provide counseling and educational materials specific to the issues that immigrants face. Also, the Pittsburgh SBA would start offering loans or allow residents to start the loan process in their office. They would also provide specific loans for immigrants that would take into account the financial situation many

immigrants face when they have recently moved to the United States.

Policy Analysis

Expanding the scope of the SBA to include a department focusing on immigrants is cost-effective since the SBA can have some of its staff that focuses on minorities also work on the new immigrant department. This would require limited additional hiring and would allow for the SBA to test out this new project. If it is successful, the Pittsburgh SBA can continue to expand its immigrant department and allocate more resources to it. This would allow the SBA to maximize its resources and easily provide additional support to immigrants similar to what is currently offered to

other groups. This would include educational material and loans specifically targeting immigrants. A nonprofit could offer similar services, but since Pittsburgh is a small city, the nonprofit would have to serve the entire state of Pennsylvania in order for its work to be cost-effective. This would require a much longer set-up time and cost, making it inefficient. As record numbers of immigrants are moving to the Pittsburgh area, it is important that these new residents find support from the government in order to have successful businesses. The SBA could close this gap.

KEY FACTS

- ▶ Nationally, one in 10 immigrants open a small business.⁹
- ▶ Over the next decade, an expected 20,000 immigrants will move to Pittsburgh.¹⁰
- ▶ Pittsburgh is undergoing rapid urban development and looking for more small businesses to open.¹¹

NEXT STEPS

The SBA is a federal agency but has regional and district offices located across the country. There is a district office in Pittsburgh, which only provides counseling and training for small business owners. For loans, a business owner would need to deal with the regional office located near Philadelphia. Changes need to be made to this process as immigrants have limited funds and time. To make the first step in including educational material and trainings for immigrants in the Pittsburgh community, we would need to get approval from the regional office. The current mayor of Pittsburgh is a strong supporter of increasing the number of immigrants that come to the area, and these changes would go hand in hand with Welcoming Pittsburgh, a new initiative to increase the city's immigrant population.⁸ Next, the Pittsburgh office would start offering loans directly, or at least start the loan process, from its office.

Let the Students Decide: Bringing Participatory Budgeting to CUNY

By J.A. Strub, *Hunter College*

Thesis

Participatory budgeting (PB) is a process through which a community decides how to spend a portion of a budget.¹ The City University of New York (CUNY) should implement PB to give students greater decision-making power and to build community within its campuses.

Background and Context

PB is a direct-democratic process wherein everyday people choose how to spend public money. It was first implemented in the Brazilian city of Porto Alegre to give previously disenfranchised communities power over local economic planning.² It has since spread to more than 1,000 cities worldwide, including New York, where 27 districts dedicated over \$30 million to PBNYC in the 2015-2016 cycle.^{3,4}

Last year, CUNY's chancellor asserted that "any financial planning must start with an emphasis on ... CUNY's historic tradition of access and quality."⁵ PB, a financial program, would facilitate access by giving students economic power and improve the quality of the student experience by facilitating campus improvements. CUNY serves more than half a million students and presides over two-dozen campuses, most of which are in need of repair. PB would channel students' anger into a process of constructive policymaking. Students are keenly aware of the particular changes needed to improve the quality of their education, so they should be given a tool to act on their knowledge.

The Policy Idea

The suggested PB-CUNY process comprises four steps. Firstly, students would attend public pitching sessions where members of a pre-appointed steering committee would collect suggestions. Secondly, certain students would volunteer to be "budget delegates" and consolidate the suggestions into concrete proposal drafts. Thirdly, budget delegates would review draft proposals with student government representatives to ensure feasibility. Finally, completed proposals would be put up to a vote. Projects with the most votes would get successively passed until the earmarked amount was exhausted. All full-time undergraduates would be eligible to vote.

Policy Analysis

PB provides marginalized communities, especially low-income communities of color, a unique opportunity to exercise economic decision-making power. In Porto Alegre, community members used PB to promote development in the city's underserved outskirts.⁶ Through PB, the percentage of households with running water rose from 74 percent to 99 percent, 90 kilometers of dirt roads were paved, and the capacity of public schools tripled.⁷ In New York, any resident over age 16, regardless of citizenship status or criminal record, can participate.⁸ CUNY is one of the most diverse universities in the country and would benefit from an intersectional program that promotes inclusion.

Most CUNY students are commuters who have a limited sense of citizenship within their campus. PB has the potential to forge a sense of community in this disparate student body. As a representative institution of the city, PB-CUNY could serve as an incubator of democratic thinking and practice.

Several studies have noted a strong correlation between PB and civic trust.^{9 10 11} As such, administrators who seek to promote a positive campus image should support PB. The process itself also teaches participants many skills, such as argument-crafting, formal writing, and consensus-building, that are valued in the workplace. Any college concerned with professional development should consider PB an educational tool as well as a fiscal program.

KEY FACTS

- ▶ If CUNY earmarked 1.3 percent of its total budget as participatory, it would host the best-funded PB program in the United States, eclipsing PBNYC.¹² If one in five full-time undergraduates participated in PB at CUNY, it would have more participants than PBNYC.¹³
- ▶ In the 2014–2015 PBNYC cycle, a quarter of voters were born outside the U.S., one in 10 were younger than 18 years, more than half were women, 60 percent identified as people of color, and one-third reported a household income below \$25,000.¹⁴

Talking Points

- ▶ PB empowers communities by giving them a direct say in how to spend public money.
- ▶ CUNY should support PB if it truly seeks to promote access, engagement, and quality in higher education.
- ▶ CUNY is an enormous and often impersonal institution, but PB could rectify this by giving students a direct voice in its governance.
- ▶ PB promotes trust in the institutions that implement it.

NEXT STEPS

For now, student government associations at CUNY campuses should earmark 10 percent of their discretionary budgets for pilot PB programs as a component of student outreach. Eventually, PB should be institutionalized as an official program of the campus itself and should receive funding via the CUNY budget. To do this, the campus senates should revise their charters to include provisions ensuring continued financial and political support of PB. CUNY should contract with the Participatory Budgeting Project (PBP) to train student governments. Campus coalitions comprising various stakeholder organizations must be cultivated for PB to fully blossom.

Government Helping Businesses Helping Neighbors: A Revolving Loan Fund Contingent on Local Hiring in Washington, D.C.

By Noah Wexler, George Washington University

Thesis

To promote equitable and sustainable neighborhood development, the D.C. Department of Small and Local Business Development (DSLBD), under the purview of the D.C. Office of the Deputy Mayor for Greater Economic Opportunity (ODMGEO) should establish a loan package for local independent businesses, with recipient businesses required to provide apprenticeships to nearby residents.

Background and Context

Most D.C. economic development policy has tried to attract business at the expense of local, often minority-owned businesses in the district. The result is that small business development occurring in D.C. isn't closely associated with sustainable community growth, with 64 percent of development policies relocating outside business rather than fortifying local enterprise.¹ Because regional banks have taken on fewer risky investments since 2008, locally owned independent small businesses in Wards 7 and 8 lack access to capital, since they reside in the most economically insecure area of the city, east of the Anacostia River.^{2,3} Simultaneously, access to marketable education is lowest in these wards, with roughly 20 percent of each ward's population lacking a high school diploma.⁴ This illustrates the potential usefulness of earn-while-you-learn personal career development apprenticeships in eastern D.C., though levels of registered apprenticeship in D.C. remain low.⁵

Given recent trends, chain businesses or start-ups owned by and tailored to neighborhood outsiders will supplant locally owned businesses that have been operating in southeast D.C. for years, leading to the gentrification and destruction of majority-minority neighborhoods. Outside developers are already eyeing Ward 7 neighborhoods for new projects.⁶ Local development policies such as the Great Streets grant program have done little, with recipients of loans and grants often being high-end businesses that have just recently moved into a target neighborhood.⁷

Policy Idea

DSLBD should establish 50 loan packages of approximately \$150,000 each with a low but profit-generating interest rate of 0.25 percent over three years. To receive funding, a business owner must be living and operating small businesses within Wards 7 and 8 for at least two years or must be a new business owner and resident of the eligible area for at least five years. Each business receiving a loan must dedicate at least \$30,000 to provide paid apprenticeship positions to individuals residing within 0.75 miles of the establishment and within the establishment's ward for at least five years. The loan's interest will be used to cover underwriting and servicing costs and to gradually expand the number of loan recipients.

Talking Points

- ▶ Current programs in D.C., like Greet Streets and the use of Tax Increment Finance to develop blighted areas, are limited in scope and don't ensure equitable development.¹¹
- ▶ Retailers in much of D.C. have a difficult time hiring locals because of a lack of skills training in surrounding neighborhoods.¹²
- ▶ Small business development in low-income, majority-minority D.C. areas is typically associated with the displacement of long-time local businesses.

Policy Analysis

Because they are owned and operated by community residents, independent local businesses have close ties with their communities.¹³ The establishment of this apprenticeship-based loan program would provide small businesses in Wards 7 and 8 access to better funding at low interest and would allow them to increase community outreach by hiring neighbors as apprentices. Since the nationwide average starting salary for a former apprentice is over \$50,000, compared to the national average starting salary \$34,343, it is

KEY FACTS

- ▶ As of November 2015, Ward 7's unemployment rate was 11.8 percent. Ward 8's was 14.8 percent. D.C.'s overall unemployment rate, by comparison, was 6.7 percent.⁸
- ▶ American workers who complete apprenticeships earn an average starting salary of \$50,000 for any given job started over the course of their lifetime, indicating long-term benefits.⁹
- ▶ Washington, D.C.-based businesses categorized as small by national industry standards have difficulty securing loans of \$100,000 or more.¹⁰

clear that neighborhood residents would be provided with much-needed specific skills training without incurring any personal debt.^{14 15} Apprentices would be trained by employers and other workers in all aspects of running a business in their specific sectors and would earn money simultaneously. With gentrification rapidly approaching Wards 7 and 8, this loan package could fortify the financial resilience of local business and provide long-term community benefits. With D.C. enjoying multimillion-dollar budgetary surpluses, the program's fiscal burden would be relatively inconsequential, as making 50 loans would mean spending only \$7,500,000 while generating \$7,518,750.¹⁶ The excess interest could be used to gradually expand the number of loan recipients over time.

Two urban policies serve as examples. Programs providing financial incentives for local hiring in the Bay Area have been incredibly successful in driving sustainable economic growth and teaching marketable skills, and “mom and pop” loans targeted at locally owned, long-standing businesses in Cleveland have secured neighborhoods against gentrification.^{17 18} DSLBD needs to combine these approaches, recognize the usefulness of established small businesses to neighborhoods, utilize and provide incentives to willing partner institutions, and create a sustainable neighborhood-based loan package for Wards 7 and 8, all at a low cost. Doing so could simultaneously combat race-tied dispossession, poverty, and educational inequality.

NEXT STEPS

The D.C. City Council must pass legislation establishing the existence of the new loan package, meaning that Mayor Bowser and a majority of councilmembers must be brought on board. Advisory Neighborhood Committees and Councilmember offices in Wards 7 and 8 must provide awareness of the program in their district through publicity campaigns. By creating local support and enlisting business organizations in Southeast D.C., the policy would be more likely to pass through the city council. Student groups at George Washington University involved in community engagement can contribute to a social media campaign raising awareness of appropriate development issues in the city.

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- 14 See note 4.



Congratulations to
***Dominic Russel, Christopher Olson,
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and Andrew Wallen***

Author of
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Rooseveltters are also committed to turning their ideas into action. Whether that means meeting with decision-makers, writing opinion pieces in their local papers, or organizing actions in their communities, we intend to see the solutions we propose become reality.

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I hope you enjoy reading the proposals in this journal as much as we did.

Onward,

A handwritten signature in black ink, appearing to read 'Joelle', followed by a long, sweeping horizontal line that extends to the right.

Joelle Gamble

National Director, Network, Roosevelt Institute

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Addressing Somalia's Mental Health Challenge: Peacebuilding through a National Strategic Plan

By Asha Athman, *George Mason University*

Thesis

The Somali federal government should implement a strategic mental health plan to mitigate community and provisional limitations that perpetuate Somalia's mental health epidemic. This plan would scale up effective strategies practiced by the General Assistance and Volunteers Organization (GAVO), a Somali NGO.

Background and Context

The collapse of the Siad Barre regime ushered Somalia into civil conflict in 1991, and the nation's last two decades of weak governance have devastated health and welfare infrastructure.^{1,2} These contextual factors severely impact the psychological health of Somalis. The World Health Organization (WHO) estimates that "one [Somali] out of three," has suffered from some form of mental illness, and mental illness is a leading cause of disability in Somalia.³

⁴ The documentation of illnesses such as post-traumatic stress disorder, psychosis, drug abuse and addiction, and depression relate to mental stress induced by conflict and instability.⁵ Mental health issues affect a significant portion and diversity of individuals because war trauma is a widely shared experience among Somali communities. Those particularly at risk for mental illness include ex-combatants, women, children, drug abusers, the poor, and the displaced.⁶

Despite this major burden, the Somali government failed to prioritize the creation of mental health policies.⁷ Somalia reportedly has only eight facilities that offer mental health services, none of which are primary healthcare providers.⁸ These institutions are limited in their reach, inappropriately staffed, and remain underused due to stigma.⁹ The large scale of the mental health epidemic and the lack of action to address it both accentuate the importance of amending Somalia's public health policies to include a national mental health plan.

Talking Points

- ▶ Community mental health education can combat stigma and build cooperative support for the mentally ill at the local level in Somalia.
- ▶ Leveraging existing health infrastructure to deliver mental health care

is cost-effective and will create an opportunity for mental health to be incorporated into primary care.

- ▶ Home-based care is both sensitive to patient's privacy and rectifies the inaccessibility of health infrastructures for certain communities.
- ▶ Implementing a national mental health plan encourages greater universality and equality in standards and availability of mental care throughout Somalia.

The Policy Idea

A strategic mental health plan that introduces community-level education and expands access to mental healthcare services is required in Somalia. The execution strategy for this plan will draw on the best practices of GAVO. The three GAVO policies suitable for scale up are: community-based mental health education, in-home visits, and bolstering service delivery through existing health infrastructures. These investments are cost-effective, and address socio-structural barriers to mental health delivery by combatting stigma and the absence of accessible care.

Policy Analysis

GAVO created a sustainable health delivery framework in Somalia using community education and advocacy efforts, which was funded by local merchants, and inter- and non-governmental agencies. GAVO prompted organic community mental health self-help group initiatives. The NGO also improved facility sanitation, health administration, and personnel training. Through GAVO's program, ex-combatants treated at home experienced a 58 percent improvement in health outcomes.^{10 11} Funding the scale up of GAVO's initiative is possible through grant applications submitted by Somalia's Ministry of Health to private and public international organizations such as the Global Mental Health Program under Grand Challenges Canada.¹² This system can be sustainably supported by voluntary, township-based public

KEY FACTS

- ▶ One in three Somalis has suffered from some form of mental illness.¹⁵
- ▶ Mental illness is a leading cause of disability in Somalia and has long-term negative effects on quality of life.¹⁶
- ▶ There are only eight reported facilities in Somalia that offer mental health services, none of which are primary healthcare providers.¹⁷
- ▶ Introducing a national strategic mental health plan would rectify the absence of federal legislation that addresses mental healthcare in Somalia.¹⁸

fundraising monitored by a committee of local stakeholders and government officials. By introducing mental health education, capacity building, and in-home health delivery efforts nationwide, affected Somalis will achieve the community support and accessible services they need.

Political instability, competing policy priorities, and coordination challenges among Somalia's states represent hurdles to implementing a national mental health program. Many proponents of Somali health sector reform reject proposals for disease-specific health plans, namely because domestic capacity and political will to enact health system reform is lacking.¹³ GAVO has demonstrated that mental health care needs can be met, to some degree, through medical personnel training and primary care integration within a wider health reform framework.¹⁴ However, addressing Somalia's mental health epidemic cannot be achieved through investment in clinical resources alone. The epidemic is a biosocial phenomenon; it developed within the context of conflict, stigma, and poverty. To address the economic and social barriers to mental wellness, an effective policy must provide community-level mental health education to government officials, Islamic religious figures, health professionals, and citizens as well as bring health resources into the home.

NEXT STEPS

The institution capable of designing and implementing a national mental health plan in Somalia is the Somali Federal Government. It has a national focus, and a federally designed policy would support implementation throughout Somalia's regions, which will result in greater universality and equality in standards and availability of care. GAVO and other private Somali mental health institutions such as the Puntland region-focused Somali Mental Health Foundation are potential allies in advocating for a national mental health plan. These organizations are dedicated to improving mental healthcare access in Somalia, and are based domestically, which makes them capable of organizing health professionals and affected communities to lobby the regional and federal governments. Targets for the plan's implementation include: the Somali Ministry of Health, its regional counterparts, and United Nations satellites dispersed throughout Somalia. These organs can manage technical organization, coordinate with regional and local facilities, and identify appropriate personnel.

Togolese Prayer Camps: A Stepping Stone Toward Effective Mental Healthcare

By Ariel Avgi, *City College of New York*

Thesis

Togo's limited access to mental healthcare has led to the increasing reliance of mentally ill Togolese on abusive prayer camps. With the help of the Togolese Red Cross and the NGO BasicNeeds, an educational campaign should be initiated to transform camps into community-based healing centers.

Background and Context

West Africa has historically struggled with high-risk infectious diseases such as HIV/AIDS and malaria, sidelining the awareness and treatment of mental health illnesses.¹ However, patients' experiences with these highly infectious diseases often lead to post-traumatic stress associated with mental health disorders including depression and psychosis. With Togo's single mental health hospital and three practicing psychiatrists concentrated in the capital, Lomé, there are not nearly enough resources to address the nation's mental health needs, particularly in rural areas.²

With limited services and accessibility, central and northern Togolese families are forced to turn to traditional healers and prayer camps as a solution for relatives suffering from mental illness. These prayer camps are largely unequipped to handle patients suffering from mental health disorders. Documented practices of prayer camps include chaining patients against their will, forcing week-long fasts, and isolating them outdoors with nothing but a Bible.³ Human Rights Watch observed similar abuses in prayer camps in neighboring Ghana and suggested the government develop voluntary community-based mental health services as a part of its Mental Health Act of 2012.⁴ Because legislation dedicated to mental health does not exist in Togo, an alternate approach is needed. Implementing BasicNeeds' model of pairing medication with psychosocial support in partnership with local ministries of health on a nationwide scale would provide a more immediate solution to Togo's mental health crisis by transforming prayer camps into community-based healing centers. Evidence of BasicNeeds' past success in Ghana could potentially dictate mental health treatment reform across West Africa.

Talking Points

- ▶ Implementing an educational campaign to raise awareness for those suffering from mental illness will facilitate the gradual introduction, by NGOs, of psychiatric drugs to treat mental health disorders and soften the reaction of the Togolese people to new treatment options.
- ▶ Prayer camps across Togo provide makeshift psychiatric wards that lack evidence-based medical treatment, and instead resort to using prayer and the shackling of unmanageable patients as treatment.⁵
- ▶ Government regulation and transformation of Togolese prayer camps would create a decentralized delivery system for mental health services and overhaul abusive practices that affect nearly one million people.

KEY FACTS

- ▶ Only 0.2 percent of Togo's health budget is allotted to mental healthcare despite the hundreds of thousands of Togolese people suffering from mental illness.¹³
- ▶ For the 7.5 million inhabitants of Togo, there are only three practicing psychiatrists and one mental hospital. budget.¹³

Policy Idea

To expand the geographic reach of mental health services, BasicNeeds should treat Togo similarly to how it treated Ghana and work with the government to institute community-based healthcare, with transformed prayer camps providing mental healthcare.⁶ In addition, the Togolese Red Cross, which has worked previously with the Togolese Ministry of Health, should reduce the stigma around mental health disorders by initiating a public educational campaign to additionally facilitate the progress of BasicNeeds' prayer camp reform.⁷

Policy Analysis

Despite its status as a low-income country, Togo is among the top fifty countries in health expenditures as a percentage of GDP. However, as of 2012, only \$1.5 million out of a total \$780 million for healthcare was allotted to mental health.⁸ Malaria, HIV/AIDS, and poor maternal healthcare have heavily impacted much of West Africa and have been the focus of medical spending in Togo.

Mental illness receives less attention and resources because it is not viewed as a traditionally preventable disease. Lobbying for increased mental health expenditures to train psychiatric nurses and build additional,

centralized mental health facilities would be a slow and costly undertaking.⁹ Additionally, pervasive stigma surrounding mental disorders has increased reliance on traditional, often inhumane, practices.

An educational campaign to reduce stigma and increase public awareness of effective treatment for mental illness would create greater public demand for mental healthcare. BasicNeeds' effective, community-oriented mental health programs would help the government regulate prayer camps as a means of expanding mental healthcare inexpensively. Since BasicNeeds began working in Ghana in 2002, over 34 projects have been implemented, transforming the lives of more than 128,000 mental health patients.¹⁰

Mental health disorders not only impair the lives of those who suffer from them but also impact Togolese economic growth by negatively affecting labor supply and participation.¹¹ Sixty-five percent of the labor force works in agriculture and one million people suffering from mental illnesses are dismissed from unskilled work.¹²

NEXT STEPS

The President of the Togolese Ministry of Health, Mr. Komlan Kally, will be responsible for contacting BasicNeeds' leadership and both will be held accountable for working together to implement change and reorganize prayer camps. The Ministry of Health should provide medical resources and authority to administrate and regulate prayer camps to begin community-based service development by BasicNeeds. The Togolese Red Cross, which has previously worked with the Togolese Ministry of Health, should work with the ministry to begin an educational campaign to prepare the Togolese public for BasicNeeds' mental health reforms.

The highly infectious diseases plaguing West Africa, such as HIV/AIDS, cause neurological complications often "treated" in prayer camps—including anxiety disorders, depression, hallucinations, and mood swings.¹⁴

Allocating Defense Spending to Repair and Maintain the National Highway System

By Julia Christensen and Brigid Kennedy, *Michigan State University*

Thesis

The federal transportation budget falls \$32 billion short per year of the amount needed to fully maintain and repair the National Highway System (NHS).¹ Because the NHS has significant national defense implications, funding should be provided in the Defense Appropriations Bill.

Background and Context

The NHS includes the Interstate Highway System (IHS) and the Strategic Highway Network (STRAHNET). The IHS was originally conceived as national defense infrastructure to allow the efficient movement of troops across the U.S.,^{2,3} and STRAHNET is a system of roads necessary for emergency mobilization and peacetime movement of military materials.⁴ However, these highways are currently in disrepair due to lack of funding. The federal gas tax, the main source of highway funding, has not been raised or adjusted for inflation in more than 20 years due to Congressional gridlock.

Congress has not passed a transportation funding bill lasting longer than two years since 2005.⁵ In some cases, Congress has only provided funding a few weeks at a time, preventing repairs, maintenance, and improvements. The result is that one fifth of the nation's interstates and major roads are in need of repairs, and a quarter of its 600,000 bridges are in such poor repair that they are either structurally deficient or functionally obsolete.⁶

Talking Points

- ▶ The NHS is critical to national interests including defense, border control, and economic growth,⁷ but is dramatically underfunded and falling into disrepair.
- ▶ An amendment should be added to the Defense Appropriations Bill to fund the repair and maintenance of the NHS.

Policy Idea

The NHS is desperately in need of long-term funding, and the defense budget could easily cover the deficit in transportation spending as this deficit is equal to only 5 percent of that budget. Incorporating this crucial funding into the Defense Appropriations Bill would avoid the deadlock in Congress. It would

not introduce a new appropriations bill to be passed. Moreover,, there is precedent for Congress overfunding the defense budget; for example, in 2012, Congress funded tanks that the Pentagon said it did not need.⁸

Policy Analysis

The NHS needs to be maintained so it can serve its national defense purposes, including border security and troop mobility. Investment in the NHS would cause widespread positive economic impacts because federal highway grants have a multiplier effect of two, which is larger than most federal spending. Each dollar of federal highway spending leads to a two-dollar increase in the state's annual economic output—doubling the impact of these expenditures.⁹

In December 2015, for the first time since 2005, a bill was signed into law providing funding for longer than two years. This law, called “Fixing America’s Surface Transportation” or FAST, allocates \$300 billion over 5 years. However, this amount is only about one quarter of what government transportation researchers estimate is needed.¹⁰ Furthermore, it does not raise the gas tax, and thus does not address the root of the problem. Additional funding for the NHS is still vital.

KEY FACTS

- ▶ The transportation budget is short \$32 billion per year¹¹ because the federal gas tax has not been raised since 1993 and is not indexed to inflation.¹²
- ▶ The NHS is critical national defense infrastructure and is not being maintained sufficiently to serve that purpose.
- ▶ The \$32 billion needed for transportation is only 5 percent of the defense budget.¹³

NEXT STEPS

The first step is to meet with experts on transportation funding and legislative affairs, such as professors and state transportation officials, to begin building an effective coalition. The next step is work with national allies, such as the American Association of State Highway Officials (AASHTO), who can convey the policy to Members of Congress, including the ranking members of the Appropriations Subcommittees on Defense.

Enforcing Academic Principles: Proscribing Weapons Research for the Military

By **Julia Eddy**, *Carnegie Mellon University*

Thesis

Carnegie Mellon University should end all weapons research. It is contrary to our academic policies and the values of the university's founder, Andrew Carnegie, one of the foremost advocates for peace in his time.

Background and Context

Carnegie Mellon University prides itself on being a world-renowned research institution. Research funding at the university includes millions of dollars in government contracts, some of which is used to research weapons, or technology that can be weaponized for the U.S. military.¹ For example, in 2014, the Software Engineering Institute contributed to research on drones, which have been used by the U.S. military to destroy both military and civilian targets.² This is clearly contrary to the university's policy on Academic and Individual Freedom that states, "Intentional acts threatening personal safety... will not be tolerated."³ Weapons research includes research on technology and devices that threaten personal safety. The U.S. military has demonstrated the cost of the use of unmanned aerial vehicles (UAVs) on civilian lives⁴ and the impact of research advancing these technologies is in conflict with Carnegie Mellon's academic ethics.

Weapons research is also contrary to the values of the university's founder, Andrew Carnegie, one of the foremost advocates for peace in his time. At the dawn of World War I, he became the president of the New York Peace Society. He also met with world leaders and lobbied countries—including the U.S., Great Britain, Germany, Russia, and France—to promise not to go to war with one another.⁵ It seems likely that he would not support any of the university's contracts with the military, especially those that aid armed conflict.

Talking Points

- ▶ Weapons research violates Carnegie Mellon's policy on Academic and Individual Freedoms.
- ▶ Carnegie Mellon's founder, Andrew Carnegie, was an advocate for peace and diplomatic solutions to international conflicts.
- ▶ Carnegie Mellon has the power to end weapons research and set an example for other academic institutions.

Policy Idea

The university administration should proscribe all future weapons research on the grounds that it violates the policy on Academic and Individual Freedom, and specify in the policy that it applies to this type of research. Any current contracts would be allowed to continue, but no contracts may be renewed or created if they involve weapons research. Thus, no contracts would be violated and the administration would not impose undue financial hardship to the programs that are currently receiving funding for weapons research.

Policy Analysis

Carnegie Mellon University has an ethical obligation to end its weapons research. The primary concern with such a change would be the massive loss in funding dollars, given that the Department of Defense provides about a third of total sponsored projects at the university, valued at about \$128,117,417.⁶ This may seem daunting, but about half^{7,8} of this funding goes towards the Software Engineering Institute (SEI), a Federally Funded Research and Development Center (FFRDC). The SEI primarily focuses on cyber security and other software solutions for the military that do not involve weapons. Some research at SEI involves networking unmanned vehicles and unmanned aerial vehicles (UAVs), more commonly known as “drones,” but this is a very small portion of the organization’s work.⁹ By only preventing new weapons research contracts from being formed, no current funding streams will be affected.

The community would benefit from awareness of the weapons research at Carnegie Mellon. Many community members do not realize that organizations such as the SEI or the National Robotics Engineering Center exist or are primarily funded by the Department of Defense. The community will also benefit when Carnegie Mellon resources are not used for unethical research to which the university’s founder would have had moral objections. The university community should be critical of the work done in Carnegie’s name and hold the university to the highest ethical standards.

KEY FACTS

- ▶ Nearly 90 percent of the people killed in drone attacks in Afghanistan were civilians.¹⁰
- ▶ In 2014, Carnegie Mellon received \$128,117,417 from the Department of Defense, which is 33.3% of the university’s total sponsored projects funding.¹¹
- ▶ In 1910, Andrew Carnegie founded the Carnegie Endowment for International Peace, which is still in operation.¹²

NEXT STEPS

Carnegie Mellon University has the power to impose this policy as an institution. Rallying support from various faculty, staff, students, and community members will be key to pressuring the administration to make this change. Faculty and students who believe in the values of Andrew Carnegie and the necessity of Academic and Individual Freedom will support a move to enforce existing policies. In addition, there are many community groups, especially the Thomas Merton Center, which have missions that support peace and social justice.

Building Infrastructure: The Strategic and Economic Benefits of Paved Roads in Nigeria

By Jake Hall and Kieran Doyle, *University of Denver*

Thesis

Nigeria has struggled to effectively deal with the terror group Boko Haram, which has been a significant destabilizing force in the north of the country. U.S. voters concerned about terrorism and foreign development should pressure their government to assist Nigeria in developing paved roads in the north, providing services to civilians in the region and a strategic advantage to the Nigerian military.

Background and Context

Over the last six years, Boko Haram's insurgency has terrorized Nigeria and neighboring nations. The number of fatalities from terrorism in Nigeria to explode by 300 percent.¹ The military has been unable to neutralize the insurgency because of the lack of infrastructure in Nigeria. Only 15 percent of Nigeria's 193,200 km of roads are paved; this number includes nearly all rural roads, which are often impassable during the rainy season.² Helping develop much needed infrastructure to allow the military to have a greater combat presence is critical for effective counterterrorism.

The best way to prevent terror is to address the underlying conditions that lead to terrorism.³ In many cases, reducing the marginalization of certain groups can be more effective when fighting a terrorist or insurgent group than military action.⁴ Although Nigeria is an oil-rich country with great potential to use its resource wealth to the advantage of its citizens, the CIA estimates that 62 percent of Nigeria's 170 million people live in extreme poverty.⁵ This wealth disparity has led many frustrated Nigerians to turn to violence to provide for their families.⁶

Talking Points

- ▶ Marginalization of populations directly correlates to a willingness to use violence.⁷
- ▶ Addressing the underlying conditions that lead to marginalization is the most effective way to combat terrorism.⁸
- ▶ Paved roads provide services to local citizens, give a strategic advantage to national militaries, and weaken local support for the groups who destroy the roads.⁹

- ▶ Infrastructure development can aid counterterrorism efforts in a sustained way by helping to address underlying and systemic issues that lead to terrorist group recruitment.

The Policy Idea

The U.S. should work through international institutions such as the World Bank to help the Nigerian government to construct paved roads in Northern Nigeria in provinces—including Borno, Yobe, and Gombe—directly threatened by Boko Haram. Building paved roads helps develop physical and economic infrastructure and will strengthen the Nigerian military's capacity to combat armed violence.

The Nigerian government would receive financial help from international institutions that can provide oversight and help to avoid corruption. If terrorist groups destroy these roads to retain their strategic advantage, they will turn local communities against themselves, causing them to lose their power and recruitment base.

Policy Analysis

Paved roads would allow the Nigerian military to more easily address terrorist threats and respond more quickly in places experiencing violence. Paved roads would also address major infrastructural problems and allow for the expansion of commerce and ideas throughout the country, unifying the nation.¹⁰ Terrorists and insurgents thrive where there is no government presence because they can more easily convince locals to follow them and protect their interests.¹¹ Disconnected areas also act as excellent places to recruit marginalized groups who see hope in Boko Haram's mission.¹² If the country is more interconnected, communication and trade will proliferate and the countryside can assimilate and modernize. The Nigerian military would protect the roads during their construction in order to ensure that these benefits are realized.

Nigeria's population is 50.4 percent rural (2011 est.), and a handful of urban centers contain most of the nation's paved roads.¹³ It is nearly impossible for the Nigerian military to transport an armed force efficiently to the site of terrorist attacks on poor roads, leaving towns to deal with terrorists and insurgents on their own.

KEY FACTS

- ▶ Nigeria's population is 50.3 percent rural (2011 est.) and 62 percent live in extreme poverty.
- ▶ Nigeria has 56,451 villages, towns, and population centers, but only 6 major urban areas of 1 million+ populations.
- ▶ Nigeria contains 193,200 km of roads, but only 15 percent are paved.

NEXT STEPS

The Nigerian government is primarily responsible for implementing this policy, and has expressed political will to do so by offering tax breaks for infrastructure development and working to secure international support for its efforts.¹⁴ The United Nations Industrial Development Organization (UNIDO) has recognized the importance of sustainable industrial development, demonstrating the widespread support for infrastructure initiatives among UN-member countries.¹⁵ UNIDO, the Nigerian Government, and the World Bank must work together to implement this policy. In 2008, the World Bank proposed a \$365 million road building project (not yet fully funded), but this figure is insufficient to properly address counterterrorism and development in Northern Nigeria.¹⁶ International nonprofits such as BuildingAfrica must also join this international coalition to improve infrastructure in Nigeria.

Ensuring Gender Sensitivity in Climate Finance

By **Beverly Harp**, *George Mason University*

Thesis

Climate change disproportionately affects women in the developing world. To address this reality, the United States Agency for International Development (USAID) should revise its Climate Change Strategy to require the collection and use of sex-disaggregated data.

Background and Context

Climate change is one of the most important global challenges of our time, but its effects vary significantly across regions and cultures. In rural areas of the developing world, women bear the primary responsibility to secure access to food, water, and fuel for their families.¹ The effects of climate change will seriously inhibit access to these basic needs. Severe drought, changing temperatures, and natural disasters have already devastated the lives of rural women in many places.²

The United Nations reports that two-thirds of the female labor force in developing countries works in the climate-sensitive field of agriculture. In some rural areas, this figure soars up to 90 percent.³ Even though women do the majority of agricultural work, they have limited access to land rights and are consequently underrepresented in their political systems. Globally, only 17 percent of cabinet and 19 percent of parliament members are women.⁴ Yet, rural women have extensive knowledge of natural resource management and conservation.⁵ Climate finance structures have been slow to respond to these findings. The majority of existing climate finance mechanisms reference gender only as an afterthought.⁶ If women are considered, they are conceived as passive victims, and not as potential community leaders or sources of valuable information for local sustainability programs. Many climate mitigation and adaption programs fail to account for gender, since initial data was not sex-disaggregated.⁷ If these structures remain unchanged, climate change will reverse years of progress in gender equality.

Talking Points

- ▶ Climate change disproportionately and severely affects women in the developing world.
- ▶ USAID has the capacity to mitigate this effect through strategic climate finance. In failing to consider gender, current U.S. climate finance is

failing to channel funds in the most efficient way.⁸

- ▶ Women are crucial to climate change mitigation and adaptation in rural communities; they have extensive knowledge of natural resource management.

The Policy Idea

The United States Agency for International Development (USAID) should revise its Climate Change Strategy to require the collection and use of sex-disaggregated data on all projects reported as climate finance to the United Nations Framework Convention on Climate Change (UNFCCC).⁹ USAID should partner with Data2x, a United Nations gender data gap initiative, to better collect and use data.¹⁰ USAID can efficiently compile this data by refocusing on country-owned collection mechanisms that have proved effective.¹¹

Policy Analysis

Improving the climate work at USAID is the most direct and effective way the U.S. can integrate gender considerations into its climate finance. The U.S. mobilized nearly \$12.8 billion in climate finance from 2010 to 2014.¹² Congressional appropriations to USAID accounted for \$300-400 million of climate finance per year.¹³ Despite recognizing evidence that climate change will disproportionately affect women, USAID still lacks a comprehensive approach to integrate gender into its climate work. The brief mention of gender in USAID's climate change policy is factual rather than directive, and consequently very few of USAID's major climate initiatives focus on gender.¹⁴ The collection and purposeful use of sex-disaggregated data will lead to the creation of effective and equitable climate finance projects, as well as gender-equitable administrative decisions, like the inclusion of women in project design and implementation.¹⁵ The agency has partnered with 24 countries to finance low-carbon development, and 37 countries receive information from USAID's climate information program.¹⁶ If sex-disaggregated data is used, gender will move to the forefront of deliberation in these projects.

KEY FACTS

- ▶ The U.N. reports that two-thirds of the female labor force in developing countries works in the climate-sensitive field of agriculture.
- ▶ Severe drought, changing temperatures, and natural disasters have already begun to inhibit women's access to food, water, and fuel.
- ▶ The U.S. mobilized nearly \$12.8 billion in Climate Finance from 2010 to 2014.¹⁸

USAID's influence goes beyond its congressionally appropriated funds. With its connections to local governments, businesses, and civil society, USAID mobilized an additional \$1.3 billion in climate finance through the end of fiscal year 2014.¹⁷ The climate work of USAID is the model that local governments and nonprofits will follow. The U.S. has the chance to combat climate change in an effective and empowering way, but full impact is unlikely without comprehensive gender data collection and use.

NEXT STEPS

The primary target of this policy is the Global Climate Change Coordinator at USAID. The Climate Change Office at USAID works with the Policy, Planning and Learning Bureau to update the Climate Change Strategy. USAID's Office of Gender Equality and Women's Empowerment will be a key secondary target. Organizations such as the Heinrich Boell Foundation and Oxfam International address the intersection of climate change and gender in their programming and will be influential allies. Groups including Climate Action Now, 350.org and Earth Justice will support the policy's promise of effective climate change mitigation, while women's organizations such as the Center for Health and Gender Equity and Gender Action will identify with its goal of gender equality and inclusion.

CTF = Clean Technology Fund, FIP = Forestry Investment Program, IP = Investment Plan, PPCR = Pilot Program for Climate Resilience, SREP = Scaling Up Renewable Energy Program

Source: *Asian Development Bank*

Advancing U.S. Economic Interests and National Security through International Maritime Law

By Brian Hart, Wake Forest University

Thesis

For years, conservative Senators have blocked ratification of UNCLOS, an international treaty that promotes maritime cooperation and peace. The president should create a UNCLOS Task Force to inform the public about the issue and ensure ratification in the next post-election season.

Background and Context

In the second half of the 20th century, countries around the world began discussing how to equitably use the resources of the world's oceans. These discussions resulted in the United Nations Convention on the Laws of the Sea (UNCLOS), which finally came into force in 1994 with the purpose of establishing clear legal guidelines for resource extraction, defining territorial claims, and ensuring safe passage for vessels. Since its inception, 167 nations have signed onto the treaty, including the U.S.'s closest allies. Yet the U.S. has failed to ratify UNCLOS.¹

Ratification of UNCLOS has received wide bipartisan support from the Clinton, Bush, and Obama administrations.² It is also supported by the defense establishment and the business community, especially oil and energy industries. As well, the U.S. Chamber of Commerce notes that UNCLOS will provide large economic benefits for American companies. Despite this, 37 Republican senators have held up ratification during election seasons, claiming that it infringes on U.S. sovereignty and will put financial burdens on American companies to adhere to new international regulations.

Talking Points

- ▶ Ratifying UNCLOS would put the U.S. on firm legal ground in the case of a dispute in the South China Sea.
- ▶ Republican and Democratic administrations, military leaders, pro-business groups, and environmental protection groups support UNCLOS.
- ▶ Ratifying UNCLOS will allow the U.S. to play a more active leadership role within the international community and reaffirm its commitment to sustainable global governance.

Policy Idea

In order to overcome opposition in the Senate, the president should create a Task Force that brings together foreign policy experts, military leaders, and industry leaders to put pressure on oppositional senators and bring the issue into the public view. The task force should specifically include representation from the U.S. Chamber of Commerce to counter claims that UNCLOS is harmful to American businesses, and also representatives from the Environmental Defense Fund, the Natural Resources Defense Council, the Ocean Conservancy, and other environmental protection groups in favor of UNCLOS.³

KEY FACTS

- ▶ One hundred and sixty-seven countries, including all major U.S. allies, have ratified UNCLOS.¹⁰
- ▶ About 95 percent of all U.S. foreign trade travels by sea, totaling over 2 billion tons of freight.¹¹
- ▶ One-third of global maritime traffic travels through the South China Sea.¹²

Policy Analysis

UNCLOS would bring substantial economic benefits to American businesses by ensuring the legal right to manage mineral and other resources within America's 3.65 million square mile Exclusive Economic Zone, while also allowing for better environmental protection policies.⁴ It would also give the U.S. and other arctic countries the exclusive rights to extract resources from the arctic.⁵ Leaders in various industries including oil, minerals, natural gas, fisheries, and telecommunications say that under UNCLOS they would benefit from legal access to new exclusive zones.⁶

Even more importantly, ratifying UNCLOS is fundamentally important to the U.S. "rebalancing" toward Asia, where the South China Sea is a hotbed of territorial disputes and regional tension. Because one-third of global maritime traffic goes through the South China Sea, it is crucial that the U.S. is able to protect its interests in the region, especially against an increasingly assertive China.⁷ Given that China is a signatory of UNCLOS, the U.S. is at a disadvantage and on weak legal standing in the case of a maritime dispute in the South China Sea.⁸

NEXT STEPS

The president should create a UNCLOS Task Force that includes representatives from relevant industries, think tanks, and government agencies. Including groups like the U.S. Chamber of Commerce and American Petroleum Institute will be particularly helpful in encouraging conservative, pro-business senators to support ratification. The task force should also include representatives from the Environmental Defense Fund, the Natural Resources Defense Council, the Ocean Conservancy, and the World Wildlife Fund who support UNCLOS for its benefits for environmental protection.⁹ The Task Force should call for a new analysis of the convention's economic benefits from the Congressional Budget Office, as well as an updated military assessment of the convention's strategic benefits to U.S. naval operations, particularly in the South China Sea. Finally, the Task Force should push for a widely publicized hearing of the Senate Foreign Relations Committee in which these findings are presented by the aforementioned organizations and agencies.

Cosmic Risk Management: A Fiscally Solvent Proposal for Detecting and Eliminating Near Earth Asteroids

By Jack Robbins and Ridoy Majumdar, Cornell University

Thesis

The U.S. Federal Government should increase funding for NASA's Near Earth Object (NEO) program to identify 90 percent of NEOs. Unique funding will come from an auction of non-voting stock in a newly formed Asteroid Revenue Trust (ART).

Background and Context

Nearly 1,500 people were injured by a meteor soaring above Chelyabinsk, Russia, in 2013. A Serbian asteroid explosion in 1908 detonated with nuclear force.¹ Asteroids pose a real threat to global security and millions of NEOs currently in our solar system could be dangerous.² A large asteroid could pose an existential threat to millions, perhaps billions, of people. Yet, NASA's NEO program is insufficiently funded.³ Compared to the \$496 billion spent on the U.S. military in 2015, NASA received only \$4 million—or 0.0008 percent of the military budget—to research NEO security.⁴ In 2005, Congress instructed NASA to meet a benchmark of identifying 90 percent of all large NEOs, yet NASA estimates this goal won't be met until 2030, given current budgetary constraints. With sufficient resources, however, NASA can improve its NEO detection to meet Congress' benchmark.

Talking Points

- ▶ The federal government's lack of funding for NASA's NEO program significantly limits its ability to detect asteroids on a collision course with Earth.
- ▶ Asteroids pose a greater risk than the public perceives.
- ▶ Creating an ART creates an innovative funding structure that allows NASA to secure funding.
- ▶ Establishing an Earth-orbiting fleet of kinetic interceptors reduces the time needed between detecting an incoming asteroid and successfully eliminating it.

Policy Idea

The U.S. government should raise NASA's NEO detection funding to \$450 million. The priority should be to identify 90 percent of NEOs within five years, with a longer-term goal of creating Earth-orbiting kinetic interceptors to deflect any dangerous NEOs identified. Funding would come from DARPA grants (estimated \$100 million), at least \$50 million from non-voting stock

sales in ART, and Congress, who recently appropriated \$300 million in new discretionary NASA funding.

Policy Analysis

Asteroid defense is similar to counter-terrorism; both have a low probability of being necessary, but have potentially high costs if ignored. Recent statistical analysis suggests that the likelihood of any one person dying in a terror attack is almost equal to the likelihood of them being killed by an asteroid.⁵

Discretionary funding should be shifted to reflect the similar probability of danger. The new \$300 million in NASA funding⁶ should be transferred from proposed satellite technology that can be replaced by the private sector.⁷ DARPA has a classified budget, but, in years past, has allocated ~\$100 million for projects of similar scope to the NEO program.⁸ The rest of the funding will be collected, similarly to an IPO, from the creation of an ART. NASA would create a public-private partnership that will operate as a subsidiary of NASA. Revenue would come from asteroid excavation and debris collection. The Asteroid Belt has a potential value of \$600 quintillion in natural resources⁹ and NASA will procure its first asteroid by 2025.¹⁰ This partnership will be made up of a non-voting shareholder class and ART's profits will be returned to them via dividends.

KEY FACTS

- ▶ Currently, NASA is unable to detect 10 to 20 percent of asteroids that are larger than 1 km in diameter, a size that would vaporize its immediate surroundings and cause local environmental devastation.¹³
- ▶ Proximal motion analysis shows that kinetic interceptors are a feasible method for re-directing asteroids away from earth's orbit.¹⁴
- ▶ Achieving the goal of detecting 90 percent of NEO's would lower predicted annual asteroid fatality rates by 97.7 percent.¹⁵

NEXT STEPS

Once NASA finds NEOs, eliminating them is still a problem. It would currently take 10 to 20 years to prepare for and destroy an asteroid.¹¹ Establishing a fleet of Earth-orbiting kinetic interceptors in advance shortens preparation time and allows for a more targeted response. Kinetic interceptors are small devices that can quickly ram into incoming asteroids and shift their trajectory away from Earth. Cost-effective methodologies for constructing individual kinetic interceptors have already been proposed to NASA¹² but have no potential to be funded due to the current lack of resources. Once asteroids are detected, the NEO budget will be significantly less expensive—most of the cost is non-recurring—and funding can be shifted from detection to the production of kinetic interceptors.

Restructuring the Conduct of Private Military and Security Companies

By Jaclyn Williams, *City College of New York*

Thesis

In collaboration with UN bodies and NGOs, national governments should ensure that transnational Private Military and Security Companies (PMSCs) instill professional guidelines for properly registered and licensed personnel. Establishing articulate protocols will hold PMSCs accountable for their actions and reinforce international human rights standards.

Background and Context

Nation-states wary of putting their own armies in harm's way have found a cost-effective alternative in "shadow soldiers."¹ At the height of the counterinsurgency campaigns in Iraq and Afghanistan, the U.S. employed many PMSCs to augment a formal military presence. PMSCs are semi-autonomous entities operating within a paradoxical system: their personnel are not civilians because they fulfill essential military functions, nor are they soldiers because of affiliations with different nation-states. They are not mercenaries because they act in foreign countries under legally registered companies.² PMSCs are independent and act with impunity, often leading to human rights violations including torture and extrajudicial killings. The most notorious case of illicit conduct by a PMSC occurred in 2007 when Blackwater agents escorting a convoy of U.S. State Department vehicles opened lethal fire on citizens in Baghdad.³ The incident strained relations between the U.S. and Iraq and revealed systemic flaws in PMSC conduct in Iraq. Partially in response to the incident, the U.N. Human Rights Council (UNHRC) established The Working Group on the Use of Mercenaries to address the poor accountability of PMSCs and to bring any violators of human rights laws to justice by means of improved surveillance. The UNHRC proposed the creation of a system to track weapons transfers and the development of an intelligence-sharing network that collects records on PMSC employees to better apprehend offenders.⁴

Talking Points

- ▶ In Afghanistan and Iraq, the two countries with the largest PMSC presences, the public often can't distinguish employees of different PMSCs and local forces, which leads to unnecessary casualties.⁵
- ▶ PMSCs are "faster and cheaper" than local forces, but a greater reliance on PMSCs weakens state institutions in countries that already suffer from failing bureaucratic organization.⁶

- ▶ Countries such as Yemen, Libya, and Syria are now at risk of large PMSC presences given a need to stabilize these states and U.S. constraints on deploying ground forces.

The Policy Idea

An effective national system for selection of personnel via background checks and standardized training will guarantee that employees abide by international human rights laws. This system should exist under sovereign nations' legislation that maintains open records of all employees to keep track of violators when they cross borders.⁷ As a leading global power, the U.S. is best suited to usher in this policy. PMSCs should also implement training for employees that includes language/dialectal and human rights law to ensure that innocent people are not harmed.

Policy Analysis

There have been several attempts to control the use of mercenaries and regulate the functions of PMSCs in sovereign nations. Many international endeavors—such as the International Convention on the use of Mercenaries ratified under the Geneva Convention in 2001—were ineffective because they had an obscure definition of “mercenary.” Unlike previous resolutions, this policy proposal is reminiscent of The Montreux Document of 2008. This is the first significant document that defines how international law applies to the activities of PMSCs in conflict zones.⁸ According to the document, PMSCs have the freedom to operate so long as they “promote respect for international humanitarian law whenever their personnel are engaged in armed conflicts.”⁹

This policy proposal emphasizes professional standards to prevent human rights violations by encouraging PMSCs to certify their staff in proficient language and communications training so they can properly file tracking

KEY FACTS

- ▶ The U.S. Commission on Wartime Contracting estimated that between \$31 billion and \$60 billion was lost to contract waste and fraud in contingency operations in Iraq and Afghanistan in 2013.¹⁴
- ▶ G4S, a PMSC, has 618,000 employees, more than \$25 billion in annual revenues, and operates in at least 110 countries.¹⁵
- ▶ Between 2001 and June 2010, 5,531 troops and 2,008 civilian contract workers have died in Iraq and Afghanistan. While a majority of the contract workers contributed to the war effort, others were innocent victims of violence.¹⁶

documentation for their weapons and ammunition as well as safely interact with local citizens. Where armed groups are prevalent, weapons and ammunition logs could prevent violence by making it more difficult for these militant factions to buy arms. Overall, fewer weapons reduce the likelihood of instability and state failure.¹⁰ Additionally, this policy focuses on instituting better standards to eliminate miscommunication and faulty record-keeping that allow offenders to evade justice.¹¹ The U.S. employs similar guidelines when it trains foreign military and police, and these methods have been found to be effective in reducing the likelihood of human rights abuses. To be truly effective, this policy must be adopted by the international community at large, particularly post-conflict states. These areas are especially volatile and subject to exploitation by PMSCs, especially when foreign forces withdraw while the central government is still weak. These states will benefit the most from this policy because PMSCs can no longer claim negligence or impunity as an excuse for human rights violations.

NEXT STEPS

Professional standards should be mandated by individual PMSCs across the world in accordance with their respective nations. Additionally, these private companies should ensure that their personnel follow a code of conduct similar to that outlined in the Montreux Document. PMSCs should collaborate with organizations such as Amnesty International USA, which has attempted to improve oversight and accountability in this industry via corporate engagement and multi-stakeholder initiatives.¹² As the presence of untrained personnel could indirectly (or directly) undermine state sovereignty, it is imperative that states work in concert with the UNHRC's Working Group to present possible complementary and new proposals aimed at filling existing gaps in the policy.¹³

Building Security Relations through Multilateral Naval Exercises in the South China Sea

By Cedric Kenney and Noosha Uddin,
University of Massachusetts, Amherst

Thesis

The United States, Vietnam, and the Philippines should conduct multilateral naval drilling practices in concert with the prevalent bilateral exercises in the South China Sea to strengthen security relationships and develop a unified strategy towards Chinese territorial claims.

Background and Context¹

Overlapping territorial claims in the South China Sea

Tensions in the Asia-Pacific region are growing.¹ Much of the unease stems from overlapping territorial claims in the South China Sea, with Vietnam, Malaysia, China, the Philippines, Taiwan, and Brunei in competition with one another for dozens of islands.² The South China Sea is a vital transit route for the world economy, with 30 percent of maritime trade passing through the region, \$1.2 trillion of which is bound for America.³ The sea is also responsible for over 10 percent of global fisheries production⁴ and is known to have significant undersea oil and natural gas reserves.

China is by far the biggest and most aggressive of the claimants, asserting vague claims of sovereignty within its so-called nine-dash line over more than 90 percent of the South China Sea.⁵ To the alarm of observers, these claims have been reinforced by China's building of artificial islands in the region, some of which have been equipped with military-grade airstrips and listening posts.⁶ Under the United Nations Convention on the Law of the Sea, such artificial islands do not allow for the territorial claims afforded to natural islands, rendering China's claims illegal under international law.⁷ China's actions have angered Vietnam and the Philippines, both of which have large overlapping claims with China and have historically had antagonistic relations with China.⁸ In response to the disputes, Vietnam and the Philippines have been conducting naval exercises with one another other⁹, and on a bilateral basis with the United States, Japan,¹⁰ and Australia.¹¹ These naval exercises demonstrate solidarity, and build security relationships among the actors involved as tensions persist. Such exercises would be consistent with the U.S.'s broader policy of rebalancing toward the Pacific region, providing security integration in complement to the

economic integration to be brought by the upcoming Trans-Pacific Partnership.

Talking Points

- ▶ The South China Sea is a vital trade route for the world economy and is home to substantial natural resources.
- ▶ China has been expanding aggressively in the South China Sea region, constructing militarized artificial islands and claiming territory against the protests of Vietnam, the Philippines, and other Pacific Rim states.
- ▶ Multilateral drill exercises will strengthen relationships between Pacific Rim nations and the U.S. in a joint effort to uphold international law, enforce regional security, and press China on their territorial claims on the South China Sea.

The Policy Idea

To promote security cooperation and solidarity in the face of rising tensions, the U.S. should work to establish annual multilateral naval exercises involving the U.S., Vietnam, and the Philippines. As all three of these nations already conduct drills with one another in bilateral formats, introducing multilateral drills is a natural evolution which would bring the actors involved closer together and present a unified strategy towards the regional challenge posed by Chinese territorial claims.

Policy Analysis

Currently, there are bilateral exercises between Vietnam and the Philippines, the U.S and the Philippines, and the

KEY FACTS

- ▶ The Spratly Islands cover roughly 160,000 square miles in the waters of the coasts off the Philippines, Malaysia, Brunei, Taiwan and China—all of whom have claims on various regions of the islands.¹⁴
- ▶ Since the 1940s, Beijing has claimed sovereignty over almost the entirety of the South China Sea. The Paracel and Spratly island chains were regarded as territories of the Chinese nation, solely on the basis of a segmented line that appeared on Chinese maps at the time.¹⁵
- ▶ Roughly \$5.3 trillion in trade passes through the South China Sea annually, 23 percent of which consists of U.S. trade, which could increase substantially after the implementation of the Trans-Pacific Partnership.
- ▶ The South China Sea holds nearly 190 trillion cubic feet of natural gas of the 6.7 quadrillion cubic feet worldwide.¹⁶

U.S. and Vietnam. By doing away with these drills and instead uniting the U.S., Vietnam, and the Philippines into a shared naval exercise would strengthen the relationships among all three nations, especially with regards to the shared security challenges posed by China's actions. Bolstering security integration through naval drilling would effectively complement the economic integration spurred by the upcoming Trans-Pacific Partnership. Reducing the total number of drills should also reduce costs for all participants, trimming military budgets. The themes of such multilateral exercises could focus on objectives that are common to all three participating nations, such as humanitarian assistance and disaster relief, maritime security, or coastal patrol.¹²

Demonstrating unity through multilateral drills would force China to reconsider the costs of its actions. On December 21, 2015, China refused to recognize the authority of a U.N. tribunal on the South China Sea established at the request of the Philippines.¹³ Where bilateral negotiations fail, multilateral ones might succeed, aided by the multilateral military pressure generated by shared naval drills in the area. For the U.S., upholding international law and promoting peaceful and fair resolutions of territorial disputes is critical to maintaining order and preventing conflict, especially in a region with internationally vital sea lanes. Keeping these sea lanes open and neutral is crucial for the health and stability of the world economy, and multilateral exercises in the region would display the commitment of the U.S. to preserving local and global freedom of navigation.

NEXT STEPS

The U.S. Department of State, in conjunction with the Department of Defense, should signal its interest in conducting multilateral exercises with Vietnam and the Philippines. If all three nations express interest, the United States Pacific Command (PACOM) should begin coordination with the Vietnamese People's Navy along with the Philippine Navy to plan a multilateral drill to be held in late 2016. For maximum impact, the drill should be conducted in the South China Sea in waters held by either Vietnam or the Philippines, and involve a U.S. Navy carrier group.

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