

## **Board of Selectmen**

*Dennis P. Crowley, Chair*

*John A. Foresto, Vice-Chair*

*Richard A. D'Innocenzo, Clerk*

*in D. Trindade*

*Maryjane White*



Medway Town Hall  
155 Village Street  
Medway, MA 02053  
Phone (508) 533-3264  
Fax (508) 321-4988

# **TOWN OF MEDWAY**

## **COMMONWEALTH OF MASSACHUSETTS**

### **Board of Selectmen's Meeting**

**July 6, 2015, 7:00 PM**

**Sanford Hall, Town Hall**

**155 Village Street**

### **Agenda**

7:00 PM

- Call to order; Recitation of the Pledge of Allegiance
- Executive Session – Exemption 6: To consider the purchase, exchange, lease or value of real property if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body – 181 Main Street, 54R Adams Street
- Public Comments

### **Other Business**

1. Discussion – Medical Marijuana Cultivation – COMMCAN, Inc.
2. Approval – Appointment to Planning and Economic Development Board – Richard Di Iulio
3. Approval – DOER Energy Manager Grant – Year 2
4. Approval – Millstone Village Affordable Unit Price Adjustment
5. Approval – GATRA Contract Extension – July 1, 2015 to August 31, 2015
6. Approval of Donation Acceptance – From the Friends of the Medway Public Library to the Medway Public Library - \$17,000
7. Approval – Contract for Technical Consulting Services for Proposed Exelon Project – Power Advisory
8. Approval – One-Day Liquor License Applications
  - a. Elena Karpova – Thayer Homestead – August 15, 2015
  - b. Jaime Hodges and Susan Parlee – Thayer Homestead – July 12, 2015\*\* Reissue
  - c. Katie Bercury – Thayer Homestead – July 31, 2015
9. Vote – Designation of Medway as Purple Heart Town – Department of Massachusetts Military Order of the Purple Heart
10. Action Items from Previous Meeting
11. Approval of Warrants
12. Approval of Minutes
13. Town Administrator's Report

## 14. Selectmen's Reports

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### Upcoming Meetings, Agenda and Reminders

August 3, 2015 ---- Regular Meeting

# **AGENDA**

## **ITEM #1**

**Discussion –  
Medical Marijuana Cultivation –  
COMMCan, Inc.**

*Associated back up materials in  
separate binder.*

- CommCan, Inc. proposal

**CommCan, Inc.**

**A Chapter 180 Non-profit  
Organized to Assist Patients with  
Medical Marijuana, Education and Wellness**

CommCan, Inc. is a Massachusetts non-profit incorporated with the intent of securing a medical marijuana dispensary license through the Massachusetts Department of Public Health pursuant to 105 CMR 725: Implementation of an Act for the Humanitarian Medical Use of Marijuana. It is CommCan, Inc.'s intent to be the preferred medical marijuana dispensary applicant in the communities in which they locate.

CommCan, Inc. 730 Main Street, Millis, MA 02054  
Tel: 508 376 4600  
Fax: 508 376 8563  
Email: [marc@rosenfeld-law.com](mailto:marc@rosenfeld-law.com)

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1A/B "A"

## **The Act**

In November 2012 Massachusetts voters passed *An Act for the Humanitarian Medical Use of Marijuana* (the Act), authorizing a medical marijuana program in the Commonwealth. Sixty-three (63%) percent of Massachusetts voters voted in favor of the Act, the same percentage as the residents of the Town of Medway (the "Town"). This led to the creation of 105 CMR 725, (the "Statute") the statute governing the implementation of the Act, which provides, in part, that "a cultivation location of a Registered Marijuana Dispensary (RMD) may cultivate marijuana for only that RMD, and up to two additional RMDs under a common non-profit corporation." CommCan Inc. seeks to locate such a cultivation facility at 2 Marc Road and 0 Jayar Road, Medway, Massachusetts.

The Massachusetts Department of Public Health (DPH), the state agency overseeing the program, is responsible for ensuring that only qualified patients with debilitating medical conditions are able to obtain medical marijuana cards. CommCan, Inc. a non-profit, organized under M.G.L. Chapter 180, will be dedicated to helping the citizens of the Commonwealth of Massachusetts with their debilitating medical conditions while conducting its business as responsible corporate citizens. Such responsible conduct means working with the Town to ensure that a cultivation facility located in Medway gives back to the community in numerous ways. Additionally, CommCan, Inc. will work closely with the Town to make sure the cultivation facility is implemented in accordance with the wishes of the Town. This includes operating in a location specifically zoned for such a use. While CommCan, Inc. is proposing to locate its cultivation facility within the Town, it is important to note that said cultivation facility will be subject to the same rules and regulations and oversight as pertains to all RMDs. Accordingly, we will refer to the cultivation facility as a RMD for the purposes of this document.

The Town of Medway will benefit from the operation of CommCan, Inc.'s RMD in the following ways:

### **I. Medical Marijuana Helps Patients**

A 2015 medical journal article<sup>1</sup> summarized the scientific evidence regarding the following conditions for which cannabis has been found effective.

- Chronic, non-cancer pain and cancer pain
- Headaches and migraines
- Seizures associated with epilepsy
- Depression and anxiety
- Glaucoma
- Cancer chemotherapy-related nausea and vomiting

1. Baron EP. Headache. 2015 May 25. doi: 10.1111/head.12570.

Scientists are investigating the capacity of cannabinoids (the active ingredient in marijuana) to moderate autoimmune disorders such as multiple sclerosis, rheumatoid arthritis, and inflammatory bowel disease, as well as their role in the treatment of neurological disorders such as Alzheimer's disease and amyotrophic lateral sclerosis (a.k.a. Lou Gehrig's disease.) In 2009, the American Medical Association (AMA) resolved for the first time in the organization's history that "marijuana's status as a federal Schedule I controlled substance be reviewed with the goal of facilitating the conduct of clinical research and development of cannabinoid-based medicines." Investigators are also studying the anti-cancer activities of cannabis, as a growing body of preclinical and clinical data concludes that cannabinoids can reduce the spread of specific cancer cells via apoptosis (programmed cell death) and by the inhibition of angiogenesis (the formation of new blood vessels).

**II. The RMD Will Prevent Unregulated Cultivation In The Town, Eliminating Significant Public Safety And Health Risks Associated With Such Cultivation**

Under the Regulations for the medical marijuana program an individual may apply for a Hardship Cultivation Registration if they are unable to access a dispensary or are unable to afford medical marijuana. Such a registration will allow the individual to grow marijuana with virtually no oversight or regulation, in their own home or a location of their choosing. This creates a substantial fire and public safety risk. Such unregulated cultivation and processing of marijuana will also increase its availability to children and the diversion of marijuana for non-medical purposes.

If the Town has its own RMD, the argument that there are no dispensaries within close proximity becomes untenable. Moreover, CommCan, Inc. will provide medical marijuana to those with a financial hardship at free or reduced cost, as well as provide delivery as required by the Statute, eliminating the remaining method by which an individual may grow for themselves. Thus, a RMD cultivation facility in the Town will effectively preclude individuals growing within the Town.

**III. A RMD Will Create Significant Revenue For The Town As CommCan, Inc. Proposes To Donate/Contribute Financially To Support Programs Of The Town's Choosing**

As per the DPH's Guidelines "[t]he sharing of revenue is not consistent with the non-profit objective of using revenue solely in furtherance of RMD's non-profit purpose as required by 105 CMR 725.100(A)(1)." As the DPH has prohibited revenue sharing between applicants and host communities, CommCan, Inc. shall work with the Town of Medway to develop acceptable methods by which the Town can be compensated for any financial burdens, real or perceived. For example, although evidence suggests that medical marijuana detracts from substance abuse, the public perception may be otherwise. To combat this,



CommCan, Inc. will help fund local substance abuse programs supported by the Town.

**IV. The Town May Work With The Massachusetts Legislature On Authorizing An Excise Tax On Every Gram Of Marijuana Sold, Further Increasing Revenue To The Town**

CommCan, Inc. is committed to offering assistance to the Town in applying to the legislature for an Excise Tax. This will result in a significant increase in revenue. The additional revenue may be used to fund programs or other identified needs of the Town, including hiring police personnel.

**V. CommCan, Inc. Will Create At Least 30 Jobs By The End Of Year 3**

A review of successful dispensaries around the country of similar size and patient demographics indicate that CommCan, Inc. will need at least 30 employees when operating at full capacity. CommCan, Inc. expects to hire approximately 20 people during its first year of business and will make every effort to hire local residents. Those employed by CommCan, Inc. will be eligible for health care benefits. For every 9 staff level jobs there will be at least 1 managerial position.

**VI. CommCan, Inc. Will Undergo Site Plan Approval Under Section 5.BB Of The Zoning By-Laws Of The Town Of Medway**

CommCan, Inc. intends to apply for a special permit under Section 5.BB of the Town of Medway's Zoning By-laws. The property, zoned as Industrial 1, allows a RMD as a permitted use, subject to a special permit and site plan review. CommCan, Inc. will not pursue its rights under MGL Ch. 40A, Section 3, the so-called "agricultural exemption." Pursuing its rights under the agricultural exemption would exempt it from certain zoning requirements, including but not limited to, exemption from the special permitting process, size of building and location of building on the site. The Attorney General has recognized that commercial cultivation of marijuana for medical use may be protected as commercial agriculture under MGL Ch. 40A Section 3. CommCan, Inc. understands the concerns of the community and wants to work with officials at the outset of this endeavor to ensure that said officials have input into the permitting/design of the facility and will suspend its rights under the agricultural exemption and voluntarily proceed through the special permit process.

**VII. CommCan, Inc. Will Obtain Building Permits And Hire Local Builders For The Build-Out Of The RMD**

In addition to the hiring of personnel, CommCan, Inc. will employ local contractors and builders, who will work with CommCan, Inc. to obtain the requisite building permits for the build-out of the RMD.

**VIII. CommCan, Inc.'s Board Of Directors And Executive Management Team Has Been Assembled With The Purpose Of Addressing The Full Spectrum Of Patient Care.**

CommCan, Inc.'s Board of Trustees and Executive Management Team, entrusted with the oversight of the corporation, contain distinguished professionals who are committed to bringing their expertise to making CommCan, Inc. the premier RMD in Massachusetts. It's primary focus on the full spectrum of patient care is evidenced through the involvement of Drs. Donna Berry, RN, PhD, Joel Frost, Ed.D., and Phuli Cohan, MD. Dr. Berry brings an expertise in patient care relative to cancer-related issues. Dr. Frost will provide guidance as to the psychological impacts of the underlying medical conditions. Dr. Cohan, a breast cancer survivor, will provide education and care to patients as well as work directly with CommCan, Inc.'s growers to establish strains of marijuana targeted to specific conditions/needs.

**Highlights Of The Regulations (105 CMR 725.000 et seq.):**

The Massachusetts Department of Public Health's regulations governing the medical marijuana program ensure that medical marijuana dispensaries operate in a responsible manner and that marijuana is only available to qualified patients.

Bona fide physician-patient relationship means. (725.004):

- 1) Physician-patient must have conducted a clinical visit;
- 2) Physician must have completed and documented a full assessment of the patient's medical history and medical condition;
- 3) Physician must have discussed the potential benefits and risks of medical marijuana with the patient; and
- 4) Physician must have an ongoing role in the patient's treatment.

In order to certify patients for the use of medical marijuana, physicians must study marijuana and substance abuse as part of their continuing medical education. (725.010)

A statewide database is being created to make sure that patients cannot obtain more than a 60 day supply. (725.105)

Dispensaries must track every gram of marijuana they produce as part of compliance with the regulations, making it impossible for the dispensary to divert the marijuana for non-medical purposes. (725.105)

The statute passed by the voters, An Act for the Humanitarian Medical Use of Marijuana, creates a 5 year felony for knowingly diverting marijuana for non-medical purposes.

All Applicants for a RMD license must undergo thorough screening by the DPH in a merit-based application process, where the applicant will spend \$31,500 for a non-refundable application fee, and must show \$500,000 in cash reserves as operating capital. (725.100)

### **Medical Marijuana Serves An Important Public Health Need**

There are decades of studies from around the world showing that marijuana does more than just ease pain, but may also reduce the progression of serious illnesses like Multiple Sclerosis.

*Dr. Sanjay Gupta*, a neurosurgeon and CNN's chief medical correspondent has been in the press recently in support of medical marijuana. Some highlights of his recent statements are as follows:

"[Marijuana] doesn't have a high potential for abuse, and there are very legitimate medical applications. In fact, sometimes marijuana is the only thing that works."

The misperception about medical marijuana has to do with the purposes of the studies. "In my quick running of the numbers, I calculated about 6% of the current U.S. marijuana studies investigate the benefits of medical marijuana. The rest are designed to investigate harm. That imbalance paints a highly distorted picture."

"76% of physicians recently surveyed said they would approve the use of marijuana to help ease a woman's pain from breast cancer."

### **Medical Marijuana Does Not Contribute to Adolescent Marijuana Use**

"Passage of state medical marijuana laws does not increase adolescent use of marijuana." US National Institute on Drug Abuse, Columbia University Mailman School of Public Health, New York State Psychiatric Institute, THE LANCET Psychiatry, June 16, 2015.

"We found no evidence of intermediate-term effects of passage of state MMLs (medical marijuana laws) on the prevalence or frequency of adolescent non-medical marijuana use." American Journal of Public Health, June 13, 2013.

"The overwhelming downward trend strongly suggests that the effect of state medical marijuana laws on teen marijuana use has been either neutral or positive, discouraging youthful experimentation with the drug." *Mitch Earlywine, PhD*, State University of New York at Albany (2005).

There is an excellent documentary on the history and benefits of marijuana entitled: "Medicinal Cannabis and its impact on Human Health" at <http://topdocumentaryfilms.com/medicinal-cannabis>

1A+B "B"

Ellen Rosenfeld  
President

### **Professional Experience**

**Rosenfeld Law Offices**  
Owner

Law firm specializing in real estate issues including zoning, land use, leasing, conveyancing, condominium law and any litigation arising therefrom.

**Ellen Realty Trust**  
Trustee

Real estate trust which owns and operates 119,000 square feet of retail space, 65,000 square feet of office space and 36,000 square feet of self-storage space.

**Rosenfeld Realty, Inc.**  
Director/Treasurer

Construction and development company which has built homes and subdivisions throughout Massachusetts.

### **Honors**

American Jurisprudence Award  
Denis Maguire Pro Bono Award

### **Certifications**

Licensed to practice law in all courts of the Commonwealth of Massachusetts  
Licensed to practice law in the Federal District Court of Massachusetts  
Licensed Unrestricted Construction Supervisor  
Licensed Real Estate Broker  
Notary Public

### **Education**

Bentley College – Master of Science in Financial Planning  
New England School of Law – Juris Doctor  
Thunderbird School of Global Management – Master of Business Administration  
Brandeis University – Bachelor of Arts

Donna Berry, RN, PhD, AOCN® FAAN  
Clerk

### **Professional Experience**

#### **Dana-Farber Cancer Institute of the Dana-Farber/Harvard Cancer Center in Boston**

Director of Phyllis F. Cantor Center for Research in Nursing and Patient Care Services

Nurse Scientist

#### **UWMC/Seattle Cancer Care Alliance**

Clinical Nurse Researcher

### **Honors and Prizes**

1993	Excellence in Cancer Nursing Research	Oncology Nursing Society (national)	Highly scored abstract followed by manuscript competition (1 <sup>st</sup> author)
1993, 1998	Quality of Life Award	Oncology Nursing Society (national)	Highly scored abstract followed by manuscript competition
2006	Excellence in Nursing Informatics	Oncology Nursing Society (national)	Impact related to research and practice
2011	Distinguished Researcher Award	Oncology Nursing Society (national)	Career achievement in research and impact on practice
2012	Clinical Researcher Award	Association of Community Cancer Centers (national)	Career excellence in clinical cancer research
2013	Mara M Flaherty Annual Lecture	Oncology Nursing Society Foundation (national)	Excellence in psychosocial cancer nursing care
2014	President's Award	Friends of the National Institute of Nursing Research	Career achievement in research and dissemination

### **Professional Societies**

1982-	Oncology Nursing Society (ONS)	Member
1985-1986	Galveston-Bay Area ONS (chapter)	Charter President
1990-	American Nurses' Association	Member
1996-2009	Western Institute of Nursing	Member
2005-	American Society of Clinical Oncology	Member
2005-	American Academy of Nursing	Member
2007-	American Urological Association	Member
2007-	Council Advancement of Nursing Science	Member
2009-	Boston Oncology Nursing Society	Member
2014-	Oncology Nursing Society Foundation	Director

### **Education**

University of Washington at Seattle – PhD Nursing Science

University of Texas at Houston – MSN Oncology Nursing

Baylor University – BSN Nursing

Annette Cazenave  
Treasurer

**Professional Experience**

**A Cazenave LLC**  
Principal

Consultant to Mutual Funds and Hedge Funds

**R.J. O'Brien Fund Management, LLC**  
Chairman/Executive Vice President

Responsible for all Fund operations. Instituted and managed procedures and processes for Sarbanes-Oxley compliance.

**RJO Investment Management, LLC**  
Chief Executive Officer/Chief Investment Officer

SEC registered Investment Adviser with \$3.8 billion proprietary and client assets including two (2) Managed Futures Mutual Funds

**Cargill Investor Services**  
Vice President/Head of Investor Products Group

**Board Service** – past and present

**Thunderbird Alumni Association**  
Former President

**Stoneleigh Burnham School**  
Chair of audit and finance committee

**St. Edward School**  
Former President

**Certifications**

NFA Series 3  
FINRA Series 7, 24 and 63 registered

**Education**

Thunderbird School of Global Management – Master of Business Administration  
Drew University – Bachelor of Arts

Joel C. Frost Ed.D.

**Professional Experience**

**Private Practice**

Psychologist

**Beth Israel Hospital**

Psychologist – Consultant

**Boston City Hospital**

Psychologist – Consultant

**Boston Institute for Psychotherapy**

Faculty

**Hospital Appointments (past)**

**Beth Israel Deaconess Medical Center**

Allied Health with Clinical Privileges, Department of Psychiatry

**Massachusetts General Hospital**

Clinical Fellow

**Academic Appointments (past)**

**Harvard Medical School**

Clinical Fellow, Assistant Clinical Professor of Psychology, Instructor of Psychology

**Certifications**

National Registry of Certified Group Psychotherapists

American Board of Professional Psychology – Board Certified in Group Psychology

National Register of Health Service Providers in Psychology

Massachusetts Board of Registration of Psychologists

**Board Service**

American Board of Professional Psychology - Trustee

American Board of Group Psychology - President

American Group Psychotherapy Association - Director

**Honors**

American Group Psychotherapy Association – Life Fellow

American Academy of Group Psychology – Fellow

Massachusetts Psychology Association – Fellow

**Education**

Boston University – Doctor of Education

Western Michigan University – Master of Arts

Miami University – Bachelor of Science



Mark Ferzoco

**Professional Experience**

**Safety Signal**

Principal/General Manager

Responsible for marketing and sales and client relations for customer base consisting of residential, commercial, industrial and municipal accounts. System design and integration of security, fire, medical and environmental alarms.

**Safety Signal**

Central Station Manager

Provided staffing and training for 24 hour monitoring station. Implemented standardized procedures and computerized account base.

**Safety Signal**

Account Manager

Managed relationships with area police departments concerning high security alarm signal transmissions directly to local police departments. Customer base consisted of jewelry stores, pharmacies, banks, commercial establishments and high value residences.

**Professional Involvement**

Massachusetts Systems Contractors Association  
New England Alarm & Controls

**Certifications and Licenses**

Massachusetts Board of Electricians – Contractor  
Massachusetts Board of Electricians – Technician  
Massachusetts Department of Public Safety  
Rhode Island Data, Telephone, Video, Sound TSC  
Honeywell Certified Contractor

**Education**

Babson College - Bachelor of Science

TAB "C"

Marc Rosenfeld  
Chief Executive Officer / Chief Financial Officer

### **Professional Experience**

#### **Rosenfeld Law Offices**

Attorney

Law firm specializing in real estate issues including zoning, land use, leasing, conveyancing, condominium law and any litigation arising therefrom.

#### **Rosenfeld Realty, Inc.**

General Manager

Real estate development and construction company with primary focus on residential subdivisions. Manage process from zoning approvals through sales.

#### **Ellen Realty Trust**

Manage day to day operations of 119,000 square feet of retail space, 65,000 square feet of office space and 36,000 square feet of self-storage space.

### **Board Service**

#### **Friends of Holliston Trails, Inc.**

President/Founder

501(c)(3) non-profit public charity

### **Associations**

Massachusetts Bar Association

Phi Delta Phi – International Legal Honor Society

### **Certifications**

Licensed to practice law in all courts of the Commonwealth of Massachusetts

Licensed to practice law in the Federal District Court of Massachusetts

Licensed Unrestricted Construction Supervisor

Hoisting Engineer (continuing education instructor)

Licensed Real Estate Broker

Notary Public

Emergency Medical Technician (Former)

### **Education**

Suffolk University Law School -- Juris Doctor

Bentley College – Master of Business Administration

Brandeis University – Bachelor of Arts

Barbara Lawrence  
Chief Operations Officer

**Professional Experience**

**Independent Gemstone Dealer / Lecturer**

Purchase and sell gemstones to private clients.  
Lecture to schools and jewelry organizations on gemstone identification and pricing.

**Boston Gems & Findings, Inc.  
President**

Importer and exporter of gemstones for retailers, designers and repair people in the jewelry industry. Hired, managed and trained employees in the identification, quality control, security and sale of gemstones. Controlled and secured approximately \$500,000.00 of revolving inventory.

**Board Service – Past**

**American Gem Trade Association  
President**

**Boston Jewelers Club**

**Advisory Service**

North Bennet Street School – Jewelry Making and Repair Program

**Education**

University of Vermont – Bachelor of Arts

Phuli Cohan, M.D.  
Director of Medical Operations

**Professional Experience**

**Private Practice**  
Medical Doctor / Author / Lecturer

**American Whole Health**  
Medical Doctor

Focus on women's health issues utilizing acupuncture, herbs and natural hormone therapies.

**Lawrence General Hospital**  
Emergency Medicine Physician

**University of Massachusetts Medical Center**  
Disaster Medicine Fellowship  
Emergency Medicine Physician with active involvement with New England Life Flight  
Clinical Instructor

**Associations**

Brown University Medical Association  
Australian Medical Acupuncture Society  
American Academy Acupuncturing Physicians  
Anti-Aging Medical Association

**Certifications**

National Boards I, II, III  
Australian Medical Certification (AMC)  
Emergency Medicine Boards – Australian College  
Anti-Aging Medical Boards  
Diplomate Board of Medical Examiners

**Education**

Brown University Medical School – Medical Degree  
Simmons College – Bachelor of Science

1413 "D"

Statement from the Director of Medical Operations  
Dr. Phuli Cohan

The present-day medical marijuana movement began with the discovery of the Endocannabinoid receptors in 1993. This elaborate pathway of receptors, located in our brains, liver, fat, gastrointestinal tract, pancreas, muscle and nerves, affects our mood, energy, focus, appetite, inflammation, and immune function. Unfortunately there is much confusion and misinformation about Cannabis. Most attention has focused on its abuse; few realize its vast medical potential.

Marijuana is a slang term developed in the 1930's for the cannabis plant, used medicinally for centuries. There are many species, but the two used medically are Cannabis Sativa, which is stimulating to the mind, and Cannabis Indica, that is relaxing and works more peripherally in the body.

As an integrative physician who lectures and consults patients suffering from chronic illness I have worked with patients using Dronabinol (Marinol), synthetic medical marijuana currently FDA approved for nausea. This drug is effective but of limited value due to its excessive psychoactive effects.

The active ingredients in Cannabis, Cannabinoids, have been studied in over 20,000 research articles. Most people are familiar with THC, the psychoactive constituent, but CBD is not psychoactive, and breeders are creating high CBD, low THC strains that have potential for anticancer, anti-inflammation and anti stress effects ideal for many medical conditions without unpleasant side effects.

As medical director for CommCan, Inc., I will educate professionals and patients about the proper use of Cannabinoid therapies. I will work directly with growers to establish strains of Marijuana that can best target symptoms with minimal psychoactive effects. Smoking marijuana is the least effective way to benefit from its medicinal properties; liquid extracts and oils are often best for medical use.

Although Cannabis is best known for its role in chemotherapy induced nausea and glaucoma, its immune and anti-inflammatory properties are useful to treat medical conditions such as fibromyalgia, osteoporosis, rheumatoid arthritis, diabetes, hepatitis C, HIV, hypertension, seizure, depression, insomnia, PTSD, ADHD, addiction, MS, sleep apnea, ALS, Tourette's, dystonias, and other movement disorders.

There was fear that marijuana could be harmful to the brain, but its neuroprotective effects have been shown to slow the progression of Alzheimer's and Parkinson's Disease.

Medical professionals should become the leaders in this new and growing field. Clinics with medical directors should become the standard. I look forward to bringing about change in its use and development to help patients in all fields of medicine.

TAB "E"





VGR Law Firm, PC  
Valeria Romano, Attorney | Lesley "Scottie" Gordon, Attorney  
10 Milk St., Suite 720  
Boston, MA 02108  
Phone: (617) 307-4728/Fax: (617) 307-4729  
contact@vgrlawfirm.com/www.vgrlawfirm.com

March 26, 2015

### THE BENEFITS OF MEDICAL MARIJUANA: STUDIES AND MEDIA ATTENTION

With the recent legalization of medical marijuana in many states, the medical, academic and scientific communities have begun publishing studies demonstrating the medicinal benefits of marijuana. The enclosed package contains three studies on medical marijuana conducted by leading institutions as well as an example of the media attention that has resulted from such studies. Please note, this package is not meant to serve as an exhaustive compilation of all of the studies that have been conducted regarding the benefits of medicinal marijuana.

The first study (Attached as Exhibit #1) focuses on the growing body of research supporting the proposition that the use of marijuana is associated with less use of harder drugs, including opiates. This study, conducted by Wayne State University Medical School in 2013, found that medical marijuana patients consistently reported using marijuana to substitute or wean off prescription narcotic drugs. In the study, all of the interviewed patients reported having reduced their overall drug use, especially the use of opiates, by using medical marijuana.<sup>1</sup>

The second study (Attached as Exhibit #2) which was conducted by the American Medical Association looked at the association between state medical cannabis laws (i.e. the legalization of medicinal marijuana) and opioid mortality rates. In this study, which analyzed data from all 50 states, concluded that the states that enacted medical cannabis laws had a 24.8% lower mean annual opioid overdose mortality rate compared with the states without medical cannabis laws.<sup>2</sup>

The final study (Attached as Exhibit #3) is a widely cited 2012 joint study published by the University of Colorado and the Institute for the Study of Labor that analyzed large national data sets of self-reported marijuana use by high school students in the years leading up to and following the enactment of medical marijuana laws. The researching economists concluded that their results were not consistent with the hypothesis that the legalization of medical marijuana caused an increase in the use of marijuana and other substances among high school students.<sup>3</sup>

The results of these - and many other studies - are not being ignored by the mainstream media. In fact, Dr. Sanjay Gupta, CNN's Chief Medical Correspondent, published an article in 2013 titled "Why I Changed My Mind on Weed." (Attached as Exhibit #4) In his article, Dr. Gupta apologized for his previous article from 2009 titled "Why I Would Vote No on Pot" stating that he jumped to conclusions before doing adequate research and was "too dismissive of the loud chorus of legitimate patients whose symptoms improved on cannabis." Dr. Gupta went on to produce a documentary showing the benefits of medicinal marijuana that won the 2015 Alfred I duPont Award for Journalism from Columbia University.<sup>4</sup>

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<sup>1</sup> Peters II, David C., Patients and Caregivers Report Using Medical Marijuana to Decrease Prescription Narcotics Use, HUMBOLDT J. OF SOC. REL., WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE (2013).

<sup>2</sup> Bachhuber MD, Marcus A., Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999 – 2010, J. AMER. MED. ASSOC. INTERNAL MEDICINE (2014).

<sup>3</sup> Anderson, D. Mark, Medical Marijuana Laws and Teen Marijuana Use, UNIVERSITY OF COLORADO AND THE INSTITUTE FOR THE STUDY OF LABOR (2012).

<sup>4</sup> Weed: A CNN Special Report by Dr. Sanjay Gupta (CNN television broadcast 2013), available at [https://www.youtube.com/watch?v=hrVXRZY1\\_x0](https://www.youtube.com/watch?v=hrVXRZY1_x0).

THE BENEFITS OF MEDICAL MARIJUANA: STUDIES AND MEDIA  
ATTENTION

**EXHIBIT #1**

# Patients and Caregivers Report Using Medical Marijuana to Decrease Prescription Narcotics Use

*David C. Peters II*

Wayne State University School of Medicine

dpeters@med.wayne.edu

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## Abstract

In depth qualitative interview data were collected from medical marijuana patients and knowledgeable producers in Michigan about their perceptions and observations on the medical use of marijuana. Patients consistently reported using marijuana to substitute or wean off prescription drugs. All patients and producers who were taking opiate pain killers claimed they reduced overall drug use, especially opiates, by using medical marijuana. Patients and caregivers also claimed medical marijuana was preferred over opiates, eased withdrawal from opiates, and in some cases was perceived as more effective at relieving pain.

Keywords: drugs, marijuana, marihuana, medical marijuana, addiction, opiates, gateway effect

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## Introduction

Using a convenience and snowball sample of 28 medical marijuana patients and producers in Michigan, qualitative interview data were collected about lifetime drug use patterns, perceptions about the long and short term effects of marijuana, how marijuana has impacted lives, and the use of marijuana as medicine. A consistent theme was the claim that marijuana reduced or eliminated the use of prescription painkillers, in particular orally administered opiates. This claim by patients is at odds with many previous studies on marijuana use and abuse (Golub & Johnson, 1994). There are numerous studies on the “Gateway Hypothesis” that the use of marijuana leads to use of “hard” drugs like heroin and cocaine but very limited research on the potentially beneficial effects of marijuana. The “Gateway Hypothesis” is the centerpiece of the campaign against marijuana (DEA, 2011).

However, proving the gateway hypothesis has been problematic. There is no question that the use of marijuana is associated with later use of more dangerous drugs for some individuals, but it is also possible that those predisposed to use marijuana are already predisposed to use other drugs. Some studies find support for a general causal model that marijuana use leads to use of “hard” drugs (Fergusson, 1997; Fergusson, 2006; Chase and Donovan, 1980) while others dispute the methodology and interpretation of these findings (Kandel et al, 2006). One of the more convincing recent studies used a meta-analysis of longitudinal, animal, epidemiological and twin studies to determine causality of the gateway effect claims (Hall & Degenhardt, 2009). Hall and Degenhardt (2009) showed that pre-existing traits, along with social and peer influences from early and/or heavy entry into the drug culture are the primary influences in later abuse of other illicit drugs. They concluded that regular cannabis use may have pharmacological effects on brain function that increase the likelihood of using other drugs. However, this “minor” effect is a “secondary concern” in human subjects.

The claim that marijuana use decreases the use of other drugs was called the “Reverse-Gateway Hypothesis” in a telephone conference with this author, several Michigan medical marijuana certifying physicians, and several lawyers specializing in the new area of medical marijuana law and was later affirmed in a personal communication. Dr. Townsend, an activist and medical marijuana certifying physician in Michigan claimed the “overwhelming majority” of his patients seek marijuana in order to decrease their prescription use, especially opiates (R. Townsend, M.D., personal communication, August 10, 2011).

The aim of this paper is to present the patient perspective and perceptions about the effect of medical marijuana use on prescription drugs use. A nonrandom sample of patients and producers was used and all patients who had experience with opiates expressed the view that medical marijuana is not a “Gateway Drug” but a “Reverse-Gateway Drug” that permits a decrease in opiate utilization.

### **Review of the Literature**

Almost all marijuana research in humans has used synthetic THC delivered orally, in pill form. There is one study on the use of smoked marijuana to improve Multiple Sclerosis (MS) symptoms. Using an ex-post-facto survey methodology, 97% of MS patients reported that smoked marijuana improved their condition (Consrue, 1997). Despite the growing evidence, no blinded, randomized clinical study using smoked marijuana has ever been approved in the United States for problems associated with Multiple Sclerosis. Grant, Atkinson, & Gouaux (2012) provide a recent review on the accumulating anecdotal reports on the potential medical benefits of marijuana which includes claims of relief from chronic pain, nausea, muscle spasms, neuropathy, relief from glaucoma, and stimulation of appetite, among others.

Lenza (2007) focused on the issue of using marijuana to decrease alcohol intake, suggesting that chronic alcoholics may use marijuana to substitute for alcohol. Another very early study used synthetic THC with a group of psychiatric patients that happened to include some alcoholics in the acute phase of recovery and found improvement in alcohol withdrawal symptoms in 85% of the cases (Thompson and Proctor, 1953). One writer to the

American Journal of Psychiatry claimed he had clinical experience suggesting marijuana is a viable treatment for alcoholism (Scher, 1971). He also claimed that marijuana and alcohol are “mutually exclusive agents” arguing that greater use of marijuana is associated with less alcohol use. No other studies on whether marijuana may be associated with *decreased* alcohol intake have been identified.

There is a growing body of research showing marijuana may reduce the negative side effects of various symptoms and signs associated with narcotics use and withdrawal, especially nausea (Todaro, 2012) and headaches (Robbins et al., 2009). Support for the proposition that greater use of marijuana is associated with less use of drugs, such as alcohol, may be important because it opens the possibility that marijuana use may also decrease utilization of other drugs.

The central claim of this paper is that medical marijuana patients consistently report that greater consumption of marijuana is associated with less consumption of opiates. The claim that marijuana is used to substitute for narcotics and other drugs has been recently supported by a survey of over 400 dispensary patients in California which found 41% of patients report substituting marijuana for alcohol and 68% report substituting marijuana for prescription drugs (Lucas et al., 2012). The present study is the first report of interview data in support of these findings.

#### **Rationale and gaps in the literature.**

There is little research about the medical marijuana population nationwide and no published research about the Michigan population. Since marijuana remains a Schedule 1 drug under United States federal law, there has been no clinical research approved in the United States using the potent marijuana available to medical marijuana patients, and very few randomized controlled studies in the entire world on the effects of marijuana. In fact, more than 95% of the studies purporting to investigate marijuana are not studies of natural smoked marijuana but of synthetic, oral pharmaceuticals such as Nabilone, Dronabinol, or Levonantradol (Armentano, 2011; Earleywine, 2002). There is almost no research on the impact of marijuana use on prescription medications or the hypothesis that marijuana might reduce prescription opiate intake. More research is warranted on the population of medical marijuana patients and on the perceived positive and negative effects of medical marijuana.

This study was only made possible by passage of the Michigan Medical Marijuana Act by the people of Michigan in open defiance of federal law. The Proposal 1 ballot initiative was passed in November 2008 by 63% of the electorate. Proposal 1 lets patients use medical marijuana when a doctor certifies the patient has a “serious and debilitating medical condition...[such as]... Cancer, glaucoma, positive status for human immunodeficiency virus, acquired immune deficiency syndrome, hepatitis C, amyotrophic lateral sclerosis, Crohn's disease, agitation of Alzheimer's disease, nail patella, or the treatment of these conditions... [and which]...produces 1 or more of the following: cathexia or wasting syndrome; severe and chronic pain; severe nausea; seizures...epilepsy; or severe and persistent muscle spasms, including but not limited to those characteristic of multiple sclerosis” (Mich. Compiled Laws §333.26423, 2008).

**Methods**

The Wayne State University Human Investigations Committee (HIC) approved the study design that included in-depth, recorded interviews of medical marijuana patients. A total of 28 medical marijuana patients were interviewed for this study; 19 were “regular” patients and 9 were also producers or “Caregivers” under Michigan law. All Caregivers were also card-holding patients. A total of 7 participants were obtained by posting flyers at medical marijuana dispensaries, compassion clubs and other areas where medical marijuana patients were known to gather. Additional contacts were requested at the conclusion of each interview and the remaining 21 participants were recruited using a partially purposive snowball methodology.

**Sample characteristics and partial purposive sampling.**

Although the interview population was a convenience sample, partial purposive sampling was used because the goal was to find the views and perspective of the “regular” medical marijuana patient. The intent of this study was not to provide evidence for the efficacy and utility of medical marijuana by interviewing the sickest cancer and Multiple Sclerosis patients. This category would be expected to be most supportive of the use of medical marijuana but they also represent a small minority (<5%) of the medical marijuana patient population (LAR, 2012).

There was a very strong tendency for medical marijuana patients, particularly activists with a financial incentive in the medical marijuana industry, to provide leads initially to the most serious patient cases. This was strongly resisted with sources and participants were repeatedly told we were looking for “the common and regular” medical marijuana patient. Therefore, only two cancer patients and one Multiple Sclerosis (MS) patient were interviewed. Many potential leads were deliberately passed up in order to have a sample that was roughly representative of the patient population on qualifying condition and on gender.

**Table 1: Interview Recruitment Sources**

<u>Number</u>	<u>Interviews</u>	<u>Method of Recruitment</u>
n=7	1-3, 7, 8, 20-21	Flyers (not purposive)
n=7	6, 11, 16, 17, 19, 23, 24	Personal contact with the PI during the course of the research (purposive)
n=14	4, 5, 9, 10, 12-15, 18 22, 25, 26, 27, 28	Snowball (purposive)

The sample interviewed was certainly not probabilistic but was approximately proportional and balanced by known medical conditions and by gender.

**Table 2: Interviewees by Medical Condition**

<u>Medical Condition</u>	<u>Number Interviewed</u>
-Severe Pain/Post-Surgical Trauma	6 (21%)
-Cancer	2 (7%)
-Multiple Sclerosis	1 (3%)
-Minor Back, neck or muscle pain	2 (7%)
-Arthritis	6 (21%)
-Minor Headaches	1 (3%)
-Severe Headaches (Cluster/Migraine)	2 (7%)
-Minor Knee pain	3 (11%)
-Severe Knee or Hip Pain	3 (11%)
-Other	2 (7%)

Similarly, the actual population of patients is approximately 30% female (LAR, 2012) and the sample consisted of 36% females (10 of 28). Significantly more females volunteered to be interviewed than males and over half of the female interviews were passed up in an attempt to interview a population that was more representative of the actual patient population.

**Interview types.**

There were two categories of interviewees:

1. Producers and Activists (“Caregivers”): (n=9).
2. Regular Patients: (n=19).

Some interviews (n=9) were with patients who were also individuals classified as “Caregivers” under Michigan law. The Caregiver interviewees were producers and activists in the medical marijuana community. Proposal 1 under Michigan law lets each patient designate a “Caregiver” who may grow, purchase, or otherwise obtain marijuana for his or her patient and legally receive remuneration from the patient. A caregiver may assist up to five patients under section 8 of the Act (Mich Compiled Laws §333.26428, 2008). However, section 4 of the Act states that “A (i.e. “any”) registered primary caregiver may receive compensation for assisting a (i.e. “any”) registered qualifying patient” (Mich. Compiled Laws §333.26424, 2008). Thus many of the “Caregivers” helped more than the five patients to whom they were connected through the Michigan medical marijuana caregiver registry. Furthermore, many of the “Caregivers” were leaders in the community as political lobbyists, owners and employees of medical marijuana dispensaries, and other financially invested activists and producers. These

interviews took approximately two hours and included the personal observations about the categories and types of patients they had observed.

Most of the interviews (n=19) were with “regular patients.” A “regular” patient was an individual with his or her certification card from the State of Michigan but did not have any significant contacts with the medical marijuana industry as growers, sellers, employees, owners, or activists. They were only patients and consumers of medical marijuana. These interviews took approximately one hour.

**Table 3: Caregiver Interviewees by Medical Marijuana Experience**

*“How many patients have you personally observed or advised about the use of medical marijuana?”*

<u>Number of Caregivers</u>	<u>Number of patients claimed to have advised about medical marijuana</u>
Total n=9	
1	A few dozen
4	Lots...too many to count
2	Hundreds
2	Thousands

The Caregivers interviewed were not representative of the population of medical marijuana patients as they were mostly highly educated producers, leaders, and activists in the medical marijuana community. Only two Caregiver interviewees did not have a college degree and both of these were young females recently graduated from high school who intended to go to college.

**Table 4: Interviewees by Education**

<u>Interviewee Characteristics</u>	<u>High School</u>	<u>College</u>	<u>M a s t e r s</u>
Patient Interviews (n=19)	10 (53%)	7 (37%)	2 (10%)
Caregiver Interviews (n=9)	2 (22%)	4 (44%)	3 (33%)

**Interviewees previous experience with marijuana.**

Twenty-six of 28 respondents (both Patient interviewees and Caregiver interviewees) reported using marijuana since long before they developed their qualifying condition. Two others were born with their qualifying medical condition and began using marijuana before age



15.

This convenience sample is too small to provide a meaningful average (mean) age of entry into the use of marijuana and this was certainly not the purpose of this study. However, other measures of central tendency were interesting: Both the median and mode of entry into the use of marijuana was age 15, suggesting a larger sample of interviewee patients might demonstrate a normal distribution around this age. Four respondents reported first using marijuana at age 9, two at age 10, and one, who grew up in a “hippy” commune reported age 6. All but two claimed they had been smoking regularly on a daily or weekly basis since their initiation. Over half claimed they started smoking marijuana at age 18. Only one first tried marijuana at age 25 and one claimed she was in her 60’s the first time she used marijuana. Seven were unclear on the age they began, did not wish to divulge this information, or were not directly asked the question after revealing they had been smoking since long before they developed their qualifying condition.

#### **Interview locations.**

Interviews took place at locations of the patient’s choosing. Approximately 1/4 of the interviews were in a public location such as the library (n=2) or a restaurant (n=4). The majority of the interviews took place in the participants home (n=16) while the rest (n=6) took place at a medical marijuana center. Six of the interviews were tandem or dual interviews with two married couples and a long-time intimate couple. In these interviews, both members of the dyad were medical marijuana patients and both were interviewed at the same time.

#### **Results**

Interview results are reported in two sections. Results from “Patients” are reported in section one while results from “Caregivers” (Producers and Activists) are reported in section two. Eleven of 19 patients and 8 of 9 caregiver interviewees had experience with opiates. All of the patients and caregivers who had experience with prescription opiates made sweeping claims that they personally reduced opiate consumption and/or had personally observed patients reducing opiate consumption as a result of using medical marijuana. Many provided personal, specific and detailed examples of patients using medical marijuana to substitute for other drugs, particularly prescription opiates. The only patients who did not claim they substituted marijuana for opiates were patients who were not taking opiates.

#### **Patient results.**

Some patients reported completely eliminating prescription opiates by substituting medical marijuana. Several patients claimed they had been able to completely stop taking narcotics by substituting marijuana. A male in his 40’s with dual hip-replacements and severe arthritis described months of his life taking Darvon, Oxycodone, and sublingual Codeine. He mentioned several times that he was only able to completely stop these drugs because of marijuana. Many patients were almost unable to contain their glee when they reflected on their drug use before and after they had access to medical marijuana. One was post-surgery after he “broke” his back at work. The interviewees verbal medical history was consistent with low

back herniated discs and lower right side peripheral neuropathy:

Interviewer: Are there other drugs that you are not on now that you might be if you didn't have marijuana?

Respondent: Yes I no longer take, the... frankly I want to jump up and dance because of that you know I took those pain pills and all those other pills for so long but no more Tramadol [a prescription opiate pill] for me! I don't have to see the doctor at the prescription mill for any pills so no...no antidepressants no pain medications, no Tramadol, just marijuana (Male, 50's, College Graduate, post-surgical lumbar pain).

Four of 11 patients who claimed experience taking opiates stated they were able to completely eliminate “the pills” by using medical marijuana. Seven of 11 patients reported they were able to reduce the number of pills they took by substituting marijuana but did not completely eliminate the use of opiates. These were usually patients whose condition was more serious and life altering.

Respondent: I used to be on probably about 20 different pills, and I am down to I think 7 or 8. I have reduced them by 2/3 (Female, 30's, High School Graduate, Multiple Sclerosis).

Patients frequently provided specific and detailed quantitative information about their reduction in opiate use when they used medical marijuana. One described significant low back pain that included a post-surgical back injury with a morphine pump and a history of taking “handfuls” of narcotic pain medications: “I was taking 20 pills a day, almost 20 pills a day and now I am down to 12.” (Male, 40's, College Graduate, severe post-surgical lumbar trauma).

Both cancer patients interviewed were Stage IV, with severe pain and mental distress, and spent some time describing their experiences with prescription narcotics. Both were terminal and both viewed medical marijuana as their last option for pain management. Both talked extensively about the importance of being able to reduce their narcotics intake in the final months and years of life and complained about the amount of narcotics they were prescribed. Both cancer patients claimed they were able to significantly reduce their narcotics use by substituting marijuana:

Respondent: When I use the oil and smoke I... realize...it is two hours past the time when I would've normally taken my Fentanyl. I have two 100 mg patches Fentanyl that I use at a time. As well as 40 or 50 mg of Oxycodone immediate release on top of that.

Interviewer: Were you able to decrease any of your treatments since you started using medical marijuana?

Respondent: Well that I have been able to do, yes absolutely. Like I said before, (I am) less dependent on those pills...which makes me happy. But as far as changing any protocol like at the cancer center then no. (Female, 50's, College Degree, Cancer).

Results were consistent across several medical conditions. Whether the medical condition was trauma, cancer, Multiple Sclerosis, arthritis, or some other condition, whenever the patient had a history of prescription narcotics utilization (n=11 of 19 patients) they all made nearly the same claim they had been able to reduce or eliminate narcotic pills by using medical marijuana. Caregivers reported that medical marijuana is routinely substituted for prescription narcotics.

In addition to nineteen patients, nine caregivers (producers and activists) were also interviewed. This group was also asked about their observations on the use of marijuana in order to reduce opiates.

One of the nine caregiver interviewees (Interview 19) disagreed with all the other patients and caregivers interviewed that medical marijuana regularly was used to decrease opiate use.

Interviewer: (of the “thousands” of people you have talked with about medical marijuana) How many people have you personally witnessed able to reduce or discontinue medications, pharmaceuticals, because they started using medical marijuana?

Respondent: Personally about 10 (Male, 20’s, High School Degree, Medical Marijuana Dispensary Operator, Chronic Pain).

He thought this percentage of patients was very low because the narcotics addiction was so powerful that “once they are hooked it is really hard to stop.” The other eight caregiver interviewees all claimed that medical marijuana was used to decrease opiate use.

Interview 1 worked in a medical marijuana dispensary in Northeastern Michigan. She and her parents were both caregivers who worked at the facility. The woman in her early 20’s suffered from severe fibromyalgia and Scheuermann’s disease (mid-back kyphotic or “hunchback” changes that are often very painful). She described an extensive medical history and extreme and disabling pain that caused her to miss a significant amount of high school. She talked for some time about her medications that included “huge amounts” of Vicodin, and several other narcotics, anti-depressants, Flexeril, and non-steroidal anti-inflammatory medications. Both her personal experience and her experiences working with the patient population were broader than the limited hypothesis that marijuana might be useful to “decrease” narcotics intake:

Interviewer: Have you been able to decrease other treatments since you started using medical marijuana?

Respondent: I use nothing but medical marijuana.

Interviewer: You don’t use any narcotics?

Respondent: Nope. Nothing. (Female, early 20’s, high school graduate, fibromyalgia, medical marijuana dispensary employee).

The young woman’s observations about the patient population matched her personal medical history:

Respondent: People will...are coming to us mostly because they don’t want to be on any more pills or so many, you know. I mean I started (using medical marijuana) because I didn’t want to be on those pills. (Female, early 20’s, High School

Graduate, fibromyalgia, medical marijuana dispensary employee).

“Wanting to get off those pills” became one of the most common themes in the interviews which stood out prominently with the phrase repeated verbatim in nearly half of the interviews.

The second caregiver interview had the least experience in the medical marijuana industry of all the interviews classified as “Caregiver” interviews. She only worked in a dispensary for six months but her limited experience set the tone for later interviews:

Interviewer: Can you be more specific what did you see. What have you heard?

Respondent: I saw everybody coming in there for it (medical marijuana), and just like especially the old people it really touched me because they come in complaining mostly about Vicodin, and how they put me on this and that, and it was killing me. Lots of older people would come in and tell me about how medical marijuana saved their life by letting them get off that stuff (Female, late teens, High School Graduate, knee pain, medical marijuana dispensary employee).

Both groups of interviewees, Patients and Caregivers, used very similar language such as “saving their life” or “lets me live my life” or “lets me function in my life” in describing how medical marijuana is used to substitute for narcotic pills. Interview 11 was a Master’s level college instructor who reported:

Respondent: I may have personally processed 400 doctor certifications. I am the one the person talks to the longest...doing their case prep (for the doctor’s office)...And through these hundreds of patient encounters I would say about 90%...of them have already been taking doctor prescribed narcotic and opiate pharmaceuticals and they, the side effects of these are so onerous and debilitating themselves they are not able to function in their normal capacity and they are seeking to get off the zombie effect of the pharmaceuticals. That is where medical marijuana really works well (Male, 50’s, Master’s Degree, back pain, medical marijuana delivery service provider and medical office consultant).

Interviewee 16 agreed almost verbatim with Interviewee 11 and he had accessed a much larger group that included “several thousand” sit-down interviews and discussions with patients specifically about their medical condition. Interviewee 16 is a prominent political activist, the president of a statewide medical marijuana advocacy group, a caregiver, and a “budtender” with the largest medical marijuana facility in Michigan. All the interviewees (except 19 described at the beginning of this section) were budtenders, meaning they hand the cannabis samples to patients and advise them about the properties and expected effects of the available types of medical marijuana in light of the patient’s qualifying medical condition.

A tandem interview with two managers of a Michigan medical marijuana center contained similar and even broader claims. Each had talked with and advised “hundreds” to “thousands” of patients and were so eager to tell the story the interviewer could barely complete the questions:

Interviewer: Have either of you ever heard mentioned in your presence that maybe somebody was able to reduce pain killers and or narcotic drugs...

Female: (interrupting) all the time..

Interviewer: as a result of their marijuana use.

Female: All the time.

Male: yes, all the time.

....Crosstalk....

Female: Yes, yes, more people than I could list. We have people come in here – well, all the time - everyday - and talk about that... yes, of course.

Interviewer: Do you think that the majority of people who come in here and you talk with here claim they are able to reduce the meds, the narcotics they're taking....

Male: Yes

Interviewer: because it is probably really only a few people who....

Male: No!

Female: No!

....Crosstalk....

Female: So many people, so many people, you know text us, they thank us, this is something we hear all the time. It is not a small thing....

....Crosstalk....

Interviewer: go ahead.

Male: I see, I mean yah, I see people myself firsthand come in and more times than not they're not happy when they come in....and every single one of them will tell you hey, I went from taking 10 pills a day to taking 2 pills a day. With fewer pills it's still a better quality life because of the medical marijuana (Male and Female, 30's-40's, College Graduates, chronic radiating pain and headaches, medical marijuana dispensary owners and operators).

Every single Caregiver interview transcript includes consistent and numerous claims that at least some patients were using marijuana to decrease prescription opiate utilization.

### **Caregiver interviews.**

Every Caregiver that was interviewed gave specific examples and articulated personal observations about patients using medical marijuana to decrease prescription drugs use, particularly opiates. Every patient that was interviewed (including the eight Caregiver interviewees) with experience taking narcotics claimed they reduced or eliminated their prescription opiates because they substituted medical marijuana.

### ***Why did patients prefer marijuana to opiates?***

Opiates caused very unpleasant side effects. Most patients described unpleasant side effects from taking opiates.

Female: He simply can't take [Vicodin] without getting sick.

Interviewer: Now when you say you get sick, do you throw up?

Male: Yeah, what happens is I get a severe headache, and I start feeling... I don't know, like fuzzy in my head, like there's cotton all over inside my head and then it starts making me feel like... motion sickness is the best way I can describe it, and then I just started getting sick and trying to throw up and throw up and throw up (Male and Female, 40's-50's, married couple, College Graduates, chronic pain).

All of the interviewees claimed that medical marijuana did not have any of the negative side effects associated with narcotics. Another very unpleasant side effect that was reported in up to 1/3 of the interviews was that high doses of opiates caused them to be in a haze and not be present in their own lives. Several referred to feeling like they were "going crazy":

Respondent: Marijuana doesn't put me off in some world where I don't know where my kids are and I don't know what's going on with the world.

Interviewer: And Oxycodone does?

Respondent: Yeah it does that. I don't like [to] take it. They gave it to me and I gave it back to them because... you take this, I don't want this. I can't even remember having a conversation with my own husband or my own child. This is bad stuff, you take this I don't want it. I gave it back to them, because I refuse to take it. Give me a joint, give me a bowl, do whatever, because I can smoke a bowl and then have a conversation with my husband, or my kid, and I can still remember that conversation. Because, I'm sorry, I would rather do that than to take one of those pills. They make you go crazy! It just puts you off in a world that you don't even know that you're in, and that's scary (Female, 40's, High School Graduate, torn rotator cuff).

Several of the patients with experience taking high doses of opiates reported detailed, graphic, and apparently valid fears about their mental health if they could not find an alternative to "the pills":

Respondent: They sent me home with bottles and bottles of the pills, OxyContin and I was taking them the OxyContin was making me well I don't want to say miserable because I was not miserable by any means I was off in lala land but I wasn't living. I wanted a solution where I could have the release... When it came to my final decision when I decided to try medical marijuana was when I asked my dog to make me lunch one day (Female, 60's, Master's Degree, Cancer).

Patients also complained about several other side effects of opiates, including the fear that opiate drug use was putting their children in danger, causing them to sleep all the time, or causing them to miss out on life. Medical marijuana was perceived to be more effective at relieving pain than some opiates but not the more powerful narcotics. All patients and caregivers who had experience taking narcotics (n= 19 of 28) in this small sample thought medical marijuana was more effective at relieving pain than codeine. This is consistent with earlier work (Campbell et al., 2001). Two patients and three caregivers appeared to claim that marijuana relieved pain better than Vicodin which has not been previously reported. All agreed that marijuana was not as effective at relieving pain as stronger narcotics such as Morphine or Oxycotin. However, marijuana was still preferred over the opiate.

There was some difficulty separating out the two issues of the adverse side effects of opiates and the pain relieving effects of opiates during the course of the interviews. Although it was clear that patients preferred marijuana over Vicodin, it was not always clear whether marijuana was preferred because it was more effective at relieving pain than Vicodin or whether marijuana was preferred because it was not associated with the adverse side effects of Vicodin.

One patient attempted to explain this issue by describing the difference between narcotics and marijuana, concluding that Oxycontin was more effective at relieving pain, but the side effects of opiates made them less desirable:

- Interviewee: [Smoking marijuana]... makes my life better than when using narcotics. Narcotics keep my back from hurting, sure, but the pot, you know with the medical marijuana my health and...you know it helps me forget about the fact that I'm in pain. Narcotics... you know I don't have the nausea like that and I physically feel better.
- Interviewer: I want to get very specific about what it does for your pain. It doesn't work as well as Percodan, am I right?
- Interviewee: well yeah, you know that, that is that medications job. It is the thing that they do... is to kill the pain...and mess your head up a little bit. You know, obviously their main purpose of life is essentially to dull pain and they do a very good job [of] that, however, it is a Catch-22. You can be pain free but you'll feel like garbage with the nausea and the side effects from the narcotics that come with it (Male, 20's, College Student and Marine, Back Pain).

Almost every patient interviewed complained about “that sick nausea feeling” caused by taking opiates.

Several participants refused to take opiate pills because they believed marijuana was a “natural” remedy different than synthetic pills. Of the eight patients and one caregiver (out of a total of 28) who had no experience taking opiates, seven claimed they never started taking opiates because they used medical marijuana.

- Interviewer: What about other treatments, have you been given drugs?
- Respondent: I choose not to take them...I personally... I have personal beliefs... I don't like to take chemicalized pills, you know what I mean?
- Interviewer: OK, you don't have a problem taking medical marijuana though.
- Respondent: No.
- Interviewer: How is medical marijuana different than the...
- Respondent: Well it is grown. It is an actual plant, so for me it is just a natural way to treat this (Female, 30's, High School Graduate, Chronic Pain).

Most patients had been smoking marijuana from the early teenage years and most expressed a strong dislike for opiates. Most of the patients who had never started taking opiates explained this by using some version of the “natural remedy” claim:

Respondent: I was against smoking marijuana for a long time for recreational use, and then the whole medical marijuana thing started to come around and so I gave it a try and I was like wow it really does help. And now I have a whole other different lifestyle now, I don't do any chemicals, nothing like that, it's all natural, every thing natural, and I feel a lot better just as a person.

Interviewer: Can you go into that a little bit more? What do you mean you live a whole different life style?

Respondent: I don't... I mean anything unnatural I don't do to my body. I don't take any prescription pills (Female, 20's, High School graduate, knee pain, worked in medical marijuana center).

## **Conclusion**

### **Marijuana vs. opiates.**

Medical marijuana patients and caregivers who volunteered to be interviewed for this study did not like opiates. They complained about the nausea caused by opiates, the "sick feeling" caused by opiates, fear of putting their loved ones in danger due to opiate intoxication, and fear of "going crazy." Consistent with previous work, medical marijuana was thought by patients to be more effective than codeine but less effective than stronger narcotics like Oxycodone or Morphine. Some patients reported they preferred medical marijuana over Vicodin but it was not clear if this was due to the lack of side effects from medical marijuana or from superior analgesia. Medical marijuana patients who did not have experience taking opiates often actively avoided taking them even when prescribed because they preferred the "all natural" remedy of medical marijuana.

### **Limitations.**

This study uses in-depth interviews of a small, nonrandom sample of twenty-eight Michigan medical marijuana patients and caregivers. The sample was not probabilistic and participants were obviously over-represented by volunteers with strong, often very articulate beliefs in the efficacy of medical marijuana. No African Americans and only one Hispanic were interviewed. Four African American interviews were scheduled but unfortunately none were completed. The medical marijuana law was strongly opposed by the State Attorney General and several local prosecutors and a number of prominent patient prosecutions occurred during the time this research was ongoing which may explain the high rate of last minute cancellations among prospective interviews, particularly minority candidate interviews. However, the rate of last-minute cancellations was very high among all groups. This sample included approximately 80 interviews scheduled over a two year period with only 28 completed and recorded. After the first few interviews there were so many volunteers that cancellations were generally not followed up. This sample does roughly approximate both the gender ratios found in the medical marijuana population and the types of qualifying conditions in the population (LAR, 2012) but this was certainly not a random sample of patients in Michigan. Appropriate caution should be exercised in interpreting these results and generalizing them to the population of medical marijuana patients and caregivers in Michigan.



Based on the tone of the interviews, and conditions reported by the State of Michigan (LAR, 2012) it is believed the sample included those with more defensible medical conditions than the general population of patients. If patients had a question about whether their medical condition rose to the level of “serious or debilitating” (Mich. Compiled Laws §333.26424, 2008) required under Michigan law it is assumed they did not volunteer to be interviewed for this convenience sample.

The results from the caregiver interviews contain excerpts from highly educated professionals and individuals with considerable specialized knowledge of the patient population. However, they also had a pecuniary interest in the medical marijuana industry. Obviously they were not an unbiased group and were in a position where they would be more likely to support the idea of beneficial effects from the use of marijuana. Therefore, their results deserve particular and skeptical scrutiny. Many were tireless advocates for the cause of medical marijuana and could only be described as “true believers.”

### **Recommendations.**

This study presents a very unique set of data: The actual words, beliefs, and thoughts of a sample of medical marijuana patients and caregivers in the State of Michigan. This is the first reported study on the medical marijuana population in Michigan. Qualitative results allow the formation of testable hypotheses. Based on the data provided by this research we hypothesize and recommend that:

1. Some medical marijuana users may be using marijuana as a substitute or replacement for opiates. Therefore, medical marijuana may be useful for some individuals undergoing treatment for opiate addiction. Clinical research using medical marijuana to treat opiate addicted patients is warranted.
2. Medical marijuana may be more effective than some types of narcotics by providing analgesia without the side effects associated with opiates. Randomized clinical trials need to be performed to provide evidence or falsification of these hypotheses.

The results from this qualitative study do not provide evidence or proof for these hypotheses but they do raise the question and provide ample justification for further research. Research is needed on the possibility that medical marijuana might aid the treatment of persistent opiate addiction. Comparative clinical trials with opiates and medical marijuana are needed although considerable cultural biases within the drug treatment community and federal regulations will need to be overcome to pursue such research. One specific recommendation given the well-established dangers of the respective substances would be comparing methadone maintenance therapy with medical marijuana in heroin addicted patients. Future work should also compare narcotics addiction recidivism rate among those in traditional drug treatment programs and those in traditional drug treatment programs who are also using medical marijuana. Surveys and interviews of larger and more statistically representative patient samples that focus on medical marijuana patients who are current or former opiate addicts should also be pursued.

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THE BENEFITS OF MEDICAL MARIJUANA: STUDIES AND MEDIA  
ATTENTION

**EXHIBIT #2**

## Original Investigation

# Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010

Marcus A. Bachhuber, MD; Brendan Saloner, PhD; Chinazo O. Cunningham, MD, MS; Colleen L. Barry, PhD, MPP

 Invited Commentary  
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**IMPORTANCE** Opioid analgesic overdose mortality continues to rise in the United States, driven by increases in prescribing for chronic pain. Because chronic pain is a major indication for medical cannabis, laws that establish access to medical cannabis may change overdose mortality related to opioid analgesics in states that have enacted them.

**OBJECTIVE** To determine the association between the presence of state medical cannabis laws and opioid analgesic overdose mortality.

**DESIGN, SETTING, AND PARTICIPANTS** A time-series analysis was conducted of medical cannabis laws and state-level death certificate data in the United States from 1999 to 2010; all 50 states were included.

**EXPOSURES** Presence of a law establishing a medical cannabis program in the state.

**MAIN OUTCOMES AND MEASURES** Age-adjusted opioid analgesic overdose death rate per 100 000 population in each state. Regression models were developed including state and year fixed effects, the presence of 3 different policies regarding opioid analgesics, and the state-specific unemployment rate.

**RESULTS** Three states (California, Oregon, and Washington) had medical cannabis laws effective prior to 1999. Ten states (Alaska, Colorado, Hawaii, Maine, Michigan, Montana, Nevada, New Mexico, Rhode Island, and Vermont) enacted medical cannabis laws between 1999 and 2010. States with medical cannabis laws had a 24.8% lower mean annual opioid overdose mortality rate (95% CI, -37.5% to -9.5%;  $P = .003$ ) compared with states without medical cannabis laws. Examination of the association between medical cannabis laws and opioid analgesic overdose mortality in each year after implementation of the law showed that such laws were associated with a lower rate of overdose mortality that generally strengthened over time: year 1 (-19.9%; 95% CI, -30.6% to -7.7%;  $P = .002$ ), year 2 (-25.2%; 95% CI, -40.6% to -5.9%;  $P = .01$ ), year 3 (-23.6%; 95% CI, -41.1% to -1.0%;  $P = .04$ ), year 4 (-20.2%; 95% CI, -33.6% to -4.0%;  $P = .02$ ), year 5 (-33.7%; 95% CI, -50.9% to -10.4%;  $P = .008$ ), and year 6 (-33.3%; 95% CI, -44.7% to -19.6%;  $P < .001$ ). In secondary analyses, the findings remained similar.

**CONCLUSIONS AND RELEVANCE** Medical cannabis laws are associated with significantly lower state-level opioid overdose mortality rates. Further investigation is required to determine how medical cannabis laws may interact with policies aimed at preventing opioid analgesic overdose.

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Chronic noncancer pain is common in the United States,<sup>1</sup> and the proportion of patients with noncancer pain who receive prescriptions for opioids has almost doubled over the past decade.<sup>2</sup> In parallel to this increase in prescriptions, rates of opioid use disorders and overdose deaths have risen dramatically.<sup>3,4</sup> Policies such as prescription drug monitoring programs, increased scrutiny of patients and providers, and enhanced access to substance abuse treatment have been advocated to reduce the risk of opioid analgesics<sup>5</sup>; however, relatively less attention has focused on how the availability of alternative nonopioid treatments may affect overdose rates.

As of July 2014, a total of 23 states have enacted laws establishing medical cannabis programs<sup>6</sup> and chronic or severe pain is the primary indication in most states.<sup>7-10</sup> Medical cannabis laws are associated with increased cannabis use among adults.<sup>11</sup> This increased access to medical cannabis may reduce opioid analgesic use by patients with chronic pain, and therefore reduce opioid analgesic overdoses. Alternatively, if cannabis adversely alters the pharmacokinetics of opioids or serves as a “gateway” or “stepping stone” leading to further substance use,<sup>12-14</sup> medical cannabis laws may increase opioid analgesic overdoses. Given these potential effects, we examined the relationship between implementation of state medical cannabis laws and opioid analgesic overdose deaths in the United States between 1999 and 2010.

## Methods

The opioid analgesic overdose mortality rate in each state from 1999 to 2010 was abstracted using the Wide-ranging Online Data for Epidemiologic Research interface to multiple cause-of-death data from the Centers for Disease Control and Prevention.<sup>15</sup> We defined opioid analgesic overdose deaths as fatal drug overdoses of any intent (*International Statistical Classification of Diseases, 10th revision [ICD-10]*, codes X40-X44, X60-X64, and Y10-Y14) where an opioid analgesic was also coded (T40.2-T40.4). This captures all overdose deaths where an opioid analgesic was involved including those involving polypharmacy or illicit drug use (eg, heroin). Analysis of publicly available secondary data is considered exempt by the University of Pennsylvania Institutional Review Board.

Three states (California, Oregon, and Washington) had medical cannabis laws effective prior to 1999.<sup>6</sup> Ten states (Alaska, Colorado, Hawaii, Maine, Michigan, Montana, Nevada, New Mexico, Rhode Island, and Vermont) implemented medical cannabis laws between 1999 and 2010. Nine states (Arizona, Connecticut, Delaware, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, and New York) had medical cannabis laws effective after 2010, which is beyond the study period. New Jersey’s medical cannabis law went into effect in the last quarter of 2010 and was counted as effective after the study period. In each year, we first plotted the mean age-adjusted opioid analgesic overdose mortality rate in states that had a medical cannabis law vs states that did not.

Next, we determined the association between medical cannabis laws and opioid analgesic-related deaths using linear time-series regression models. For the dependent variable, we

used the logarithm of the year- and state-specific age-adjusted opioid analgesic overdose mortality rate. Our main independent variable of interest was the presence of medical cannabis laws, which we modeled in 2 ways.

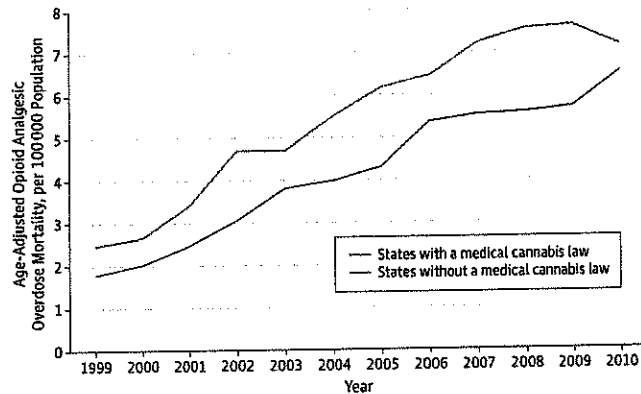
In our first regression model, we included an indicator for the presence of a medical cannabis law in the state and year. All years prior to a medical cannabis law were coded as 0 and all years after the year of passage were coded as 1. Because laws could be implemented at various points in the year, we coded the law as a fraction for years of implementation (eg, 0.5 for a law that was implemented on July 1). The coefficient on this variable therefore represents the mean difference, expressed as a percentage, in the annual opioid analgesic overdose mortality rate associated with the implementation of medical cannabis laws. To estimate the absolute difference in mortality associated with medical cannabis laws in 2010, we calculated the expected number of opioid analgesic overdose deaths in medical cannabis states had laws not been present and subtracted the actual number of overdose deaths recorded.

In our second model, we allowed the effect of medical cannabis laws to vary depending on the time elapsed since enactment, because states may have experienced delays in patient registration, distribution of identification cards, and establishment of dispensaries, if applicable. Accordingly, we coded years with no law present as 0, but included separate coefficients to measure each year since implementation of the medical cannabis law for states that adopted such laws. States that implemented medical cannabis laws before the study period were coded similarly (eg, in 1999, California was coded as 3 because the law was implemented in 1996). This model provides separate estimates for 1 year after implementation, 2 years after implementation, and so forth.

Each model adjusted for state and year (fixed effects). We also included 4 time-varying state-level factors: (1) the presence of a state-level prescription drug monitoring program (a state-level registry containing information on controlled substances prescribed in a state),<sup>16</sup> (2) the presence of a law requiring or allowing a pharmacist to request patient identification before dispensing medications,<sup>17</sup> (3) the presence of regulations establishing increased state oversight of pain management clinics,<sup>18</sup> and (4) state- and year-specific unemployment rates to adjust for the economic climate.<sup>19</sup> Colinearity among independent variables was assessed by examining variance inflation factors; no evidence of colinearity was found. For all models, robust standard errors were calculated using procedures to account for correlation within states over time.

To assess the robustness of our results, we performed several further analyses. First, we excluded intentional opioid analgesic overdose deaths from the age-adjusted overdose mortality rate to focus exclusively on nonsuicide deaths. Second, because heroin and prescription opioid use are interrelated for some individuals,<sup>20-23</sup> we included overdose deaths related to heroin, even if no opioid analgesic was coded. Third, we assessed the robustness of our findings to the inclusion of state-specific linear time trends that can be used to adjust for differential factors that changed linearly over the study period (eg, hard-to-measure attitudes or cultural changes). Fourth, we tested whether trends in opioid analgesic overdose mortality

Figure 1. Mean Age-Adjusted Opioid Analgesic Overdose Death Rate



States with medical cannabis laws compared with states without such laws in the United States, 1999-2010.

Table. Association Between Medical Cannabis Laws and State-Level Opioid Analgesic Overdose Mortality Rates in the United States, 1999-2010

Independent Variable <sup>a</sup>	Percentage Difference in Age-Adjusted Opioid Analgesic Overdose Mortality in States With vs Without a Law		
	Primary Analysis	Secondary Analyses	
	Estimate (95% CI) <sup>b</sup>	Estimate (95% CI) <sup>c</sup>	Estimate (95% CI) <sup>d</sup>
Medical cannabis law	-24.8 (-37.5 to -9.5) <sup>e</sup>	-31.0 (-42.2 to -17.6) <sup>f</sup>	-23.1 (-37.1 to -5.9) <sup>e</sup>
Prescription drug monitoring program	3.7 (-12.7 to 23.3)	3.5 (-13.4 to 23.7)	7.7 (-11.0 to 30.3)
Law requiring or allowing pharmacists to request patient identification	5.0 (-10.4 to 23.1)	4.1 (-11.4 to 22.5)	2.3 (-15.4 to 23.7)
Increased state oversight of pain management clinics	-7.6 (-19.1 to 5.6)	-11.7 (-20.7 to -1.7) <sup>e</sup>	-3.9 (-21.7 to 18.0)
Annual state unemployment rate <sup>g</sup>	4.4 (-0.3 to 9.3)	5.2 (0.1 to 10.6) <sup>h</sup>	2.5 (-2.3 to 7.5)

<sup>a</sup> All models adjusted for state and year (fixed effects).

<sup>b</sup> R<sup>2</sup> = 0.876.

<sup>c</sup> All intentional (suicide) overdose deaths were excluded from the dependent variable; opioid analgesic overdose mortality is therefore deaths that are unintentional or of undetermined intent. All covariates were the same as in the primary analysis; R<sup>2</sup> = 0.873.

<sup>d</sup> Findings include all heroin overdose deaths, even if no opioid analgesic was

involved. All covariates were the same as in the primary analysis. R<sup>2</sup> = 0.842.

<sup>e</sup> P ≤ .05.

<sup>f</sup> P ≤ .001.

<sup>g</sup> An association was calculated for a 1-percentage-point increase in the state unemployment rate.

predated the implementation of medical cannabis laws by including indicator variables in a separate regression model for the 2 years before the passage of the law.<sup>24</sup> Finally, to test the specificity of any association found between medical cannabis laws and opioid analgesic overdose mortality, we examined the association between state medical cannabis laws and age-adjusted death rates of other medical conditions without strong links to cannabis use: heart disease (ICD-10 codes I00-I09, I11, I13, and I20-I51)<sup>25</sup> and septicemia (A40-A41). All analyses were performed using SAS, version 9.3 (SAS Institute Inc).

## Results

The mean age-adjusted opioid analgesic overdose mortality rate increased in states with and without medical cannabis laws during the study period (Figure 1). Throughout the study period, states with medical cannabis laws had a higher opioid analgesic overdose mortality rate and the rates rose for both groups; however, between 2009 and 2010 the rate in states with medical cannabis laws appeared to plateau.

In the adjusted model, medical cannabis laws were associated with a mean 24.8% lower annual rate of opioid analgesic overdose deaths (95% CI, -37.5% to -9.5%; P = .003) (Table), compared with states without laws. In 2010, this translated to an estimated 1729 (95% CI, 549 to 3151) fewer deaths than expected. Medical cannabis laws were associated with lower rates of opioid analgesic overdose mortality, which generally strengthened in the years after passage (Figure 2): year 1 (-19.9%; 95% CI, -30.6% to -7.7%; P = .002), year 2 (-25.2%; 95% CI, -40.6% to -5.9%; P = .01), year 3 (-23.6%; 95% CI, -41.1% to -1.0%; P = .04), year 4 (-20.2%; 95% CI, -33.6% to -4.0%; P = .02), year 5 (-33.7%; 95% CI, -50.9% to -10.4%; P = .008), and year 6 (-33.3%; 95% CI, -44.7% to -19.6%; P < .001). The other opioid analgesic policies, as well as state unemployment rates, were not significantly associated with opioid analgesic mortality rates.

In additional analyses, the association between medical cannabis laws and opioid analgesic mortality rates was similar after excluding intentional deaths (ie, suicide) and when including all heroin overdose deaths, even if an opioid analgesic was not involved (Table). Including state-specific linear time trends

in the model resulted in a borderline significant association between laws and opioid analgesic overdose mortality ( $-17.9\%$ ; 95% CI,  $-32.7\%$  to  $0.3\%$ ;  $P = .054$ ). When examining the years prior to law implementation, we did not find an association between medical cannabis laws and opioid analgesic overdose mortality 2 years prior to law implementation ( $-13.1\%$ ; 95% CI,  $-45.5\%$  to  $38.6\%$ ;  $P = .56$ ) or 1 year prior ( $1.2\%$ ; 95% CI,  $-41.2\%$  to  $74.0\%$ ;  $P = .97$ ). Finally, we did not find significant associations between medical cannabis laws and mortality associated with heart disease ( $1.4\%$ ; 95% CI,  $-0.2\%$  to  $2.9\%$ ;  $P = .09$ ) or septicemia ( $-1.8\%$ ; 95% CI,  $-7.6\%$  to  $4.3\%$ ;  $P = .55$ ).

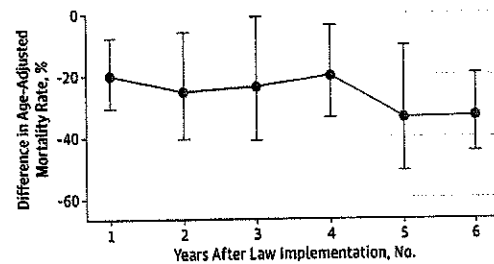
## Discussion

In an analysis of death certificate data from 1999 to 2010, we found that states with medical cannabis laws had lower mean opioid analgesic overdose mortality rates compared with states without such laws. This finding persisted when excluding intentional overdose deaths (ie, suicide), suggesting that medical cannabis laws are associated with lower opioid analgesic overdose mortality among individuals using opioid analgesics for medical indications. Similarly, the association between medical cannabis laws and lower opioid analgesic overdose mortality rates persisted when including all deaths related to heroin, even if no opioid analgesic was present, indicating that lower rates of opioid analgesic overdose mortality were not offset by higher rates of heroin overdose mortality. Although the exact mechanism is unclear, our results suggest a link between medical cannabis laws and lower opioid analgesic overdose mortality.

Approximately 60% of all opioid analgesic overdoses occur among patients who have legitimate prescriptions from a single provider.<sup>26</sup> This group may be sensitive to medical cannabis laws; patients with chronic noncancer pain who would have otherwise initiated opioid analgesics may choose medical cannabis instead. Although evidence for the analgesic properties of cannabis is limited, it may provide analgesia for some individuals.<sup>27,28</sup> In addition, patients already receiving opioid analgesics who start medical cannabis treatment may experience improved analgesia and decrease their opioid dose,<sup>29,30</sup> thus potentially decreasing their dose-dependent risk of overdose.<sup>31,32</sup> Finally, if medical cannabis laws lead to decreases in polypharmacy—particularly with benzodiazepines—in people taking opioid analgesics, overdose risk would be decreased. Further analyses examining the association between medical cannabis laws and patterns of opioid analgesic use and polypharmacy in the population as a whole and across different groups are needed.

A connection between medical cannabis laws and opioid analgesic overdose mortality among individuals who misuse or abuse opioids is less clear. Previous laboratory work has shown that cannabinoids act at least in part through an opioid receptor mechanism<sup>33,34</sup> and that they increase dopamine concentrations in the nucleus accumbens in a fashion similar to that of heroin and several other drugs with abuse potential.<sup>33,35</sup> Clinically, cannabis use is associated with modest reductions in opioid withdrawal symptoms for some people,<sup>36,37</sup> and therefore may reduce opioid use. In contrast, cannabis use has been linked with increased use of other drugs, including opioids<sup>14,38-40</sup>; however,

**Figure 2. Association Between Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in Each Year After Implementation of Laws in the United States, 1999-2010**



Point estimate of the mean difference in the opioid analgesic overdose mortality rate in states with medical cannabis laws compared with states without such laws; whiskers indicate 95% CIs.

a causal relationship has not been established.<sup>14,41</sup> Increased access to cannabis through medical cannabis laws could influence opioid misuse in either direction, and further study is required.

Although the mean annual opioid analgesic overdose mortality rate was lower in states with medical cannabis laws compared with states without such laws, the findings of our secondary analyses deserve further consideration. State-specific characteristics, such as trends in attitudes or health behaviors, may explain variation in medical cannabis laws and opioid analgesic overdose mortality, and we found some evidence that differences in these characteristics contributed to our findings. When including state-specific linear time trends in regression models, which are used to adjust for hard-to-measure confounders that change over time, the association between laws and opioid analgesic overdose mortality weakened. In contrast, we did not find evidence that states that passed medical cannabis laws had different overdose mortality rates in years prior to law passage, providing a temporal link between laws and changes in opioid analgesic overdose mortality. In addition, we did not find evidence that laws were associated with differences in mortality rates for unrelated conditions (heart disease and septicemia), suggesting that differences in opioid analgesic overdose mortality cannot be explained by broader changes in health. In summary, although we found a lower mean annual rate of opioid analgesic mortality in states with medical cannabis laws, a direct causal link cannot be established.

This study has several limitations. First, this analysis is ecologic and cannot adjust for characteristics of individuals within the states, such as socioeconomic status, race/ethnicity, or medical and psychiatric diagnoses. Although we found that the association between medical cannabis laws and lower opioid overdose mortality strengthened in the years after implementation, this could represent heterogeneity between states that passed laws earlier in the study period vs those that passed the laws later. Second, death certificate data may not correctly classify cases of opioid analgesic overdose deaths, and reporting of opioid analgesics on death certificates may differ among states; misclassification could bias our results in either direction. Third, although fixed-effects models can adjust for time-invariant characteristics of each state and state-invariant time



effects, there may be important time- and state-varying confounders not included in our models. Finally, our findings apply to states that passed medical cannabis laws during the study period and the association between future laws and opioid analgesic overdose mortality may differ.

## Conclusions

Although the present study provides evidence that medical cannabis laws are associated with reductions in opioid anal-

gesic overdose mortality on a population level, proposed mechanisms for this association are speculative and rely on indirect evidence. Further rigorous evaluation of medical cannabis policies, including provisions that vary among states,<sup>14,42</sup> is required before their wide adoption can be recommended. If the relationship between medical cannabis laws and opioid analgesic overdose mortality is substantiated in further work, enactment of laws to allow for use of medical cannabis may be advocated as part of a comprehensive package of policies to reduce the population risk of opioid analgesics.

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**Author Contributions:** Dr Bachhuber had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.  
**Study concept and design:** Bachhuber, Saloner, Barry.  
**Acquisition, analysis, or interpretation of data:** Bachhuber, Cunningham, Barry.  
**Drafting of the manuscript:** Bachhuber, Saloner.  
**Critical revision of the manuscript for important intellectual content:** All authors.  
**Statistical analysis:** Bachhuber, Saloner, Barry.  
**Study supervision:** Cunningham, Barry.

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**Correction:** This article was corrected on August 27, 2014, to fix a typographical error in Figure 1 and on September 10, 2014, to fix an incorrect term in the Discussion.

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Invited Commentary

## Legalization of Medical Marijuana and Incidence of Opioid Mortality

Marie J. Hayes, PhD; Mark S. Brown, MD

The rapid acceleration of prescription opioid-related overdose deaths in the United States is correlated with the availability of stronger opioid medications, as well as a change in



Related article page 1668

medical practice from withholding opioid medication because of dependence risk<sup>2</sup> to treating patients with chronic pain with opioids. Subsequently, the pendulum of concern has swung again, driven by the public health crisis of rising opioid analgesic addiction, overdose, and death. Opioid medications are problematic as a treatment for chronic pain. Opioid pharmaceuticals cause other adverse effects when used for long periods, such as tolerance, hyperalgesia, and gastrointestinal complications, making this class of drugs a poor choice for long-term use. As is well known, prescription opioids also have great abuse potential due to their influence on stress and reward circuits in the brain, promoting nonmedical use and abuse and diversion of prescription medications.

In this issue, Bachhuber et al<sup>2</sup> examine the link between medical marijuana laws and unintentional overdose mortality in which an opioid analgesic was identified. Using Centers for Disease Control and Prevention data, states with and without medical marijuana laws were contrasted for age-adjusted, opioid-related mortality. Overall, the incidence of opioid analgesic-associated mortality rose dramatically across the study period (1999-2010). States with medical marijuana laws had higher overdose rates than did those without such laws when population-adjusted mortality was analyzed across years,

although the rise in deaths over the study period was similar for both groups. In contrast, a convincing protective effect of medical marijuana laws was found in a covariate-adjusted, time-series model in which opioid analgesic mortality declined steadily based on years since medical marijuana laws were enacted, termed *implementation*. The model included an analysis of the impact of critical policies for prescription opioid regulatory efforts: prescription monitoring programs, pharmacist collection of patient information, state and oversight of pain management clinics, as well as state unemployment rates. In states with medical marijuana laws, age-adjusted overdose deaths in which opioids were present declined in yearly estimates since medical marijuana law implementation. Indeed, across the 13 states that approved medical marijuana laws in the study period, the decline in opioid overdose mortality strengthened over time, achieving a mean decline of 24.8%. Worthy of note, a weak contribution was found for state oversight policies such as prescription monitoring and pain management clinics; this finding has been reported previously.<sup>3</sup> The striking implication is that medical marijuana laws, when implemented, may represent a promising approach for stemming runaway rates of nonintentional opioid analgesic-related deaths. If true, this finding upsets the applecart of conventional wisdom regarding the public health implications of marijuana legalization and medicinal usefulness.

The difficulty in endorsing the medical marijuana protective hypothesis is that medical marijuana laws are heterogeneous across states, engender controversy in state legisla-

THE BENEFITS OF MEDICAL MARIJUANA: STUDIES AND MEDIA  
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## Medical Marijuana Laws and Teen Marijuana Use

D. Mark Anderson  
Benjamin Hansen  
Daniel I. Rees

May 2012

Forschungsinstitut  
zur Zukunft der Arbeit  
Institute for the Study  
of Labor

# Medical Marijuana Laws and Teen Marijuana Use

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## **ABSTRACT**

### **Medical Marijuana Laws and Teen Marijuana Use**

While at least a dozen state legislatures are considering bills to allow the consumption of marijuana for medicinal purposes, the federal government has recently intensified its efforts to close medical marijuana dispensaries. Federal officials contend that the legalization of medical marijuana encourages teenagers to use marijuana and have targeted dispensaries operating within 1,000 feet of schools, parks and playgrounds. Using data from the national and state Youth Risk Behavior Surveys, the National Longitudinal Survey of Youth 1997 and the Treatment Episode Data Set, we estimate the relationship between medical marijuana laws and marijuana use. Our results are not consistent with the hypothesis that legalization leads to increased use of marijuana by teenagers.

JEL Classification: K4, I1, D8

Keywords: marijuana, youth risky behavior, medical marijuana laws

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These last couple years, the amount of attention that's been given to medical marijuana has been huge. And when I've done focus groups with high school students in states where medical marijuana is legal, they say "Well, if it's called medicine and it's given to patients by caregivers, then that's really the wrong message for us as high school students."

--R. Gil Kerlikowske, Director of the Office of National Drug Control Policy

## 1. INTRODUCTION

Tobacco and alcohol use by American high school students has been declining since the mid-1990s. Marijuana use followed a similar trend until the mid-2000s, when, according to data from Monitoring the Future, there was an increase in the percentage of high school students who reported having smoked marijuana in the past 30 days accompanied by a sharp decrease in the percentage of 10<sup>th</sup> and 12<sup>th</sup> graders who view regular marijuana use as risky (Johnston et al. 2011). Federal officials, including the Director of the Office of National Drug Control Policy (also known as the "Drug Czar"), have attributed these developments to the legalization of medical marijuana, noting that the medical marijuana industry has grown dramatically since the mid-2000s.

In an effort to combat youth marijuana use, John Walsh, the U.S. Attorney for Colorado, recently sent letters to medical marijuana dispensaries located within 1,000 feet of schools asking them to relocate or close. Walsh cited figures from the Colorado Department of Education showing that drug-related school suspensions, expulsions and law enforcement referrals increased dramatically from 2008 through 2011 (Ingold 2012), and he was quoted as saying that many school districts in Colorado "have seen a dramatic increase in student abuse of marijuana, with resulting student suspensions and discipline" (McCrimmon and Jones 2012). Melinda Haag, the U.S. Attorney for the Northern California district, has targeted dispensaries located within 1,000 feet of schools, parks and playgrounds, arguing that marijuana serves as a gateway

drug and that, because “brains are not fully developed until your mid 20s”, youth are particularly susceptible to its effects (Brooks 2012). Local law enforcement authorities have also argued that there is a connection between the legalization of medical marijuana and the use of marijuana by teenagers. For instance, Tim O’Connell, the Deputy Police Chief in Billings, Montana, was quoted by Uken (2012) as saying, “We are definitely seeing an increase in the schools, and it’s definitely related to bad legislation... We can thank the passage of legalizing marijuana.”

There is, in fact, evidence that adolescents and young adults who use marijuana are more likely to use other substances such as alcohol and cocaine (Saffer and Chaloupka 1999; DeSimone and Farrelly 2003; Williams et al. 2004; Yörük and Yörük 2011), as well as evidence that they are more likely to suffer from mental health problems (Fergusson et al. 2003; Van Ours and Williams 2011), partake in risky sexual behaviors (Rashad and Kaestner 2004), and do poorly in school (Yamada et al. 1996; Roebuck et al. 2003; Van Ours and Williams 2009). However, only two previous studies have examined the relationship between medical marijuana laws (hereafter MMLs) and marijuana use among minors.<sup>1</sup> Drawing on data from the National Survey on Drug Use and Health (NSDUH) for the years 2002 through 2007, Wall et al. (2011) found that rates of marijuana use among 12- through 17-year-olds were higher in states that had legalized medical marijuana than in states that had not, but noted that “in the years prior to MML passage, there was already a higher prevalence of use and lower perceptions of risk” in states that had legalized medical marijuana (p. 714). Drawing on NSDUH data for the years 2002 through

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<sup>1</sup> Several studies have examined the relationship between MMLs and marijuana consumption without focusing on minors. Khatapoush and Hallfors (2004) used data on 16- through 25-year-olds living in California and 10 other states. They found no evidence that marijuana consumption went up after California legalized medical marijuana in 1996. Using data for the period 1995–2002 from Denver, Los Angeles, Portland, San Diego and San Jose, Gorman and Huber Jr. (2007) found little evidence that marijuana consumption increased among adult arrestees as a result of the legalization of medical marijuana. Cerdá et al. (2012) examined the cross-sectional relationship between MMLs and marijuana use among adults 18 years of age and above.



2009, Harper et al. (2012) found that legalization was associated with a small *reduction* in the rate of marijuana use among 12- through 17-year-olds.

The current study examines the relationship between MMLs and marijuana consumption among high school students using data from the national and state Youth Risky Behavior Surveys (YRBS) for the years 1993 through 2011. These data cover a period when 16 states, including Alaska, California, Maine, Oregon and Washington, legalized medical marijuana.<sup>2</sup> The NSDUH did not provide information on substance use at the state level prior to 1999. As a consequence, neither Wall et al. (2011) nor Harper et al. (2012) had information on substance use among 12- through 17-year-olds in these states before legalization occurred.

Another advantage to using the YRBS data is that they contain information on the behavior and characteristics of individuals, allowing us to examine the relationship between MMLs and marijuana use by age and gender. With two exceptions (Khatapoush and Hallfors 2004; Cerdá et al. 2012), previous studies in this area have relied on aggregate data, despite the fact that the choice to smoke marijuana is made at the individual level. Finally, the YRBS data contain information on marijuana use and drug availability at school, and the use of other substances such as alcohol and cocaine. These outcomes are of special interest given the current efforts in California and Colorado to close dispensaries operating near schools and because Melinda Haag, the U.S. Attorney for the Northern California district, has explicitly argued that marijuana is a gateway drug. Our results suggest that the legalization of medical marijuana was not accompanied by increases in the use of marijuana or other substances such as alcohol and

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<sup>2</sup> Appendix Table 1 provides a list of states that have legalized medical marijuana during the period 1993 through 2011. A number of states legalized medical marijuana prior to 1999, including California, Oregon and Washington. The District of Columbia legalized medical marijuana on July 27, 2010. Although the New Jersey medical marijuana law came into effect on October 1, 2010, implementation has been delayed (Brittain 2012). Coding New Jersey as a non-medical marijuana state in 2011 has no appreciable impact on the results presented below.

cocaine among high school students. Interestingly, several of our estimates suggest that marijuana use actually declined with the passage of MMLs.

In addition to analyzing data from the YRBS, we conduct two complementary analyses. The first uses data from the National Longitudinal Survey of Youth 1997 (NLSY97). The behavior of NLSY97 respondents can be observed over time, allowing for the estimation of models that control for unobserved heterogeneity at the individual level. The second uses data from the Treatment Episode Data Set (TEDS), which contains information from drug treatment providers on patients who reported using marijuana before being admitted. These analyses provide further evidence that youth marijuana consumption did not increase with the legalization of medical marijuana.

## 2. BACKGROUND

In 1996, California became the first state to legalize medical marijuana. Since then, 16 additional states and the District of Columbia have legalized medical marijuana, and more than a dozen state legislatures are currently considering medical marijuana bills (Klofas and Letteney 2012). In addition to removing criminal penalties for using, possessing and cultivating medical marijuana, medical marijuana laws provide immunity from prosecution to physicians who recommend medical marijuana to their patients.

While the therapeutic properties of marijuana are the subject of debate (Gilman 2005; Cohen 2009), the client base of doctors who recommend medical marijuana has expanded to include adolescents with conditions such as autism, insomnia, obsessive compulsive disorder, and attention deficit hyperactivity disorder (Browstein 2009; Ellison 2009; Joseph et al. 2010).<sup>3</sup>

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<sup>3</sup> Medical marijuana has also been used to treat adolescents suffering from chronic pain. Belkin (2009) described the case of a 9-year-old autistic boy who used medical marijuana to treat constant pain.

Advocates of recommending medical marijuana for these conditions maintain that it is safer than alternative medicines such as methylphenidate (also known as “Ritalin”), the stimulant most often prescribed to treat attention deficit hyperactivity disorder (Lucido 2004; Ellison 2009), and zolpidem tartrate (also known as “Ambien”), a medication prescribed to treat insomnia (Chaboya-Hembree 2012).

Patients under the age of 18 must have the permission of a parent or legal caregiver in order to use medical marijuana, and must be accompanied by a parent or legal caregiver when visiting a dispensary (Ellison 2009). Moreover, there is evidence from registry data that only a small percentage of medical marijuana patients are minors. For instance, only 0.08 percent of medical marijuana patients are under the age of 18 in Arizona; in Montana, 0.13 percent of patients are under the age of 18.<sup>4</sup> However, because it is prohibitively expensive for the government to ensure that all marijuana ostensibly grown for the medicinal market ends up in the hands of registered patients, diversion to the recreational market almost certainly occurs, and ambiguity surrounding the source of supply creates legitimacy for illegal suppliers and decreases the risk of selling marijuana to recreational users (Pacula et al. 2010).<sup>5</sup> These supply-side factors could, in theory, lead to lower prices in the illegal market and increase youth consumption.

On the demand side, researchers, policymakers and law enforcement officials contend that legalization reduces the stigma associated with the use of marijuana (Roan 2011; Suthers 2012; Uken 2012) and encourages young people to underestimate the health risks associated with

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<sup>4</sup> Arizona and Montana are the only MML states that publicly record the age distribution of registered patients.

<sup>5</sup> It has been estimated that thousands of pounds of surplus medical marijuana are diverted to the illegal market in Colorado (Wirfs-Brock et al. 2010). Thurstone et al. (2011) interviewed 80 adolescents (15 through 19 years of age) undergoing outpatient substance abuse treatment in Denver. Thirty-nine of the 80 reported having obtained marijuana from someone with a medical marijuana license. Florio (2011) described the story of four eighth-graders in Montana who received marijuana-laced cookies from a medical marijuana cardholder.

marijuana use (O'Connor 2011; Roan 2011). In addition, legalization could increase demand by providing more opportunities for young people to interact with legitimate users (Pacula et al. 2010). Not surprisingly, past research has shown that attitudes and perceptions with regard to the harmfulness of marijuana are strongly correlated with use (Bachman et al. 1998; Pacula et al. 2001).

Our empirical analysis is reduced-form, based on the approach taken by previous researchers interested in the determinants of marijuana use. For instance, Farrelly et al. (1999) examined the reduced-form relationship between more stringent anti-marijuana policies and marijuana use, while Thies and Register (1993), Saffer and Chaloupka (1999) and Williams (2004) examined the impact of decriminalization. In a similar vein, Pacula (1998), Farrelly et al. (2001), and Williams et al. (2004) examined the impact of alcohol and cigarette policies on marijuana use.

These studies provide some evidence that marijuana use is sensitive to changes in policy. For example, Farrelly et al. (1999) found that stricter enforcement of marijuana laws by police and higher fines for marijuana possession decreased use among adults. However, Farrelly et al. (1999) found that these policies had little impact on marijuana use among those under the age of 21. Using data from the United States, Thies and Register (1993) found that decriminalization did not lead to increased use of marijuana, while Saffer and Chaloupka (1999) found that decriminalization increased the probability of having smoked marijuana in the past 30 days. Using Australian data, Williams (2004) found that decriminalization increased marijuana use among males over the age of 25, but had no effect on marijuana use by females or by younger males. Finally, Farrelly et al. (2001) found that cigarette taxes were negatively related to

marijuana use, while Williams et al. (2004) found that cigarette prices were essentially unrelated to marijuana use.

### 3. THE DATA

The primary data for this study come from the national and state YRBS. They are at the individual (micro) level and cover the period 1993 through 2011.<sup>6</sup> The national YRBS is conducted biennially by the Centers for Disease Control and Prevention (CDC) and is a nationally representative sample of U.S. high school students. Federal agencies rely upon the national YRBS to track trends in adolescent behavior including eating and exercise habits, violence, sexuality, and substance use. Previous studies such as Merrill et al. (1999) and Abdel-Ghany and Wang (2003) have used these data to examine determinants of youth marijuana use. The state surveys are coordinated by the CDC and are administered by state education and health agencies. Like the national YRBS, the state YRBS is school-based and contains multiple items designed to elicit information on risky behaviors. To our knowledge, no previous study has used state YRBS data to examine the determinants of youth marijuana use.

Our analysis draws on both of these data sources in order to ensure that identification is based on as many MML changes as possible. Although intended to be nationally representative, not all 50 states are represented in any given wave of the national YRBS. In fact, between 1993 and 2011, only 6 states contributed data to the national YRBS every year (California, Florida, Georgia, Michigan, New York, and Texas), and 11 states contributed data to the national YRBS before and after the legalization of medical marijuana (Arizona, California, Colorado, Delaware, Hawaii, Maine, Michigan, New Jersey, New Mexico, Oregon, and Washington). Appendix

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<sup>6</sup>The national YRBS was first conducted in 1991. However, because the 1991 wave is based on only a handful of schools, we chose to omit it from the analysis.

Table 2 shows the number of observations by year and state in the national YRBS. States that legalized medical marijuana are denoted with a star superscript and post-legalization observations are italicized.<sup>7</sup>

With a few exceptions, most states conducted their own version of the YRBS sometime between 1993 and 2011, and at least 15 administered the YRBS in any given year during this period.<sup>8</sup> However, only 24 states have given the CDC permission to release their data, while 20 states require that requests to use their data be made directly. We have obtained data from 11 of these 20 states, bringing our total to 35, 11 of which conducted surveys before and after the legalization of medical marijuana (Alaska, Arizona, Delaware, Maine, Michigan, Montana, Nevada, New Jersey, New Mexico, Rhode Island, and Vermont). Appendix Table 3 shows the number of observations each state contributed to the state YRBS analysis. Again, states that legalized medical marijuana are denoted with a star superscript and post-legalization observations are italicized.

When combined, the national and state YRBS data cover the District of Columbia and 49 states; sixteen of these states contributed data before and after the legalization of medical marijuana.<sup>9</sup> Table 1 provides descriptive statistics for the national and state YRBS samples by whether medical marijuana was legal at the time of the interview. According to the national YRBS data, 22 percent of high school students used marijuana at least once in the past 30 days,

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<sup>7</sup> In the regression analyses, the fraction of the year that the law was in effect was used when a state legalized medical marijuana during a survey year. We experimented with assigning 0 to these years; we also experimented with assigning 1 to these years. The results, which are available upon request, were similar to those reported below.

<sup>8</sup> The following CDC webpage provides a detailed history of the state YRBS:  
<http://www.cdc.gov/healthyyouth/yrbs/history-states.htm>.

<sup>9</sup> Wyoming is the only state for which we do not have national YRBS or state YRBS data. Medical marijuana was illegal in Wyoming during the period under study. Although the District of Columbia legalized medical marijuana in 2010, it has never conducted a state YRBS and contributed observations to the national YRBS in only two years, 1995 and 2011.

and 9 percent used marijuana at least 10 times during the past 30 days (our definition of frequent use). In the state YRBS data, 21 percent of respondents used marijuana in the past 30 days and 8 percent were frequent users.

Figure 1 presents trends in marijuana use based on weighted national YRBS data. It shows a steady decline in marijuana use among high school students from the late 1990s through 2007. From 2007 to 2011, the percentage of high school students who used marijuana in the past 30 days increased from 19.7 percent to 23.1 percent. Figure 2 presents trends in marijuana use based on unweighted state YRBS data. Despite the fact that they are designed to be representative at the state level, these data show the same steady decline in marijuana use from the late-1990s through the mid-2000s and a comparable increase after 2007, suggesting that the national and the state YRBS are capturing the same broad changes in tastes and policies.

Figures 3 and 4 present pre- and post-legalization trends in marijuana use based on national and state YRBS data, respectively. We report marijuana use for the three years prior to legalization, the year in which the law changed (year 0), and the three years following legalization. These figures provide simple and direct tests for whether youth marijuana consumption changed with the legalization of medical marijuana. In Figure 3, there appears to be a small decrease in marijuana use immediately after legalization, followed by an increase of comparable magnitude. A similar pattern is evident in Figure 4: marijuana use decreases immediately after legalization, increases after one year, and then decreases again by a comparable amount after two years. Although neither figure provides strong evidence of an increase in marijuana use after legalization, other factors related to, for instance, economic conditions could be masking the impact of legalization.

## 4. STATISTICAL METHODS

In an effort to control for economic conditions and other policies (as well as any changes in the composition of the YRBS), we turn to a standard regression framework that exploits both temporal and spatial variation in MMLs. Specifically, we estimate the following equation:

$$(1) \quad \text{Marijuana Use}_{ist} = \beta_0 + \beta_1 \text{MML}_{st} + \text{XI}_{ist} \beta_2 + \text{X2}_{st} \beta_3 + v_s + w_t + \Theta_s \cdot t + \varepsilon_{ist},$$

where  $i$  indexes individuals,  $s$  indexes states, and  $t$  indexes years. The vectors  $v_s$  and  $w_t$  represent state and year fixed effects, respectively, and state-specific linear time trends are represented by  $\Theta_s \cdot t$ . The state-specific linear time trends are included to control for unobserved factors at the state level that evolve smoothly over time such as preferences and tastes. The variable  $\text{MML}_{st}$  is an indicator for whether medical marijuana was legal in state  $s$  and year  $t$ . The coefficient of interest,  $\beta_1$ , represents the effect of medical marijuana legislation.

The dependent variable,  $\text{Marijuana Use}_{ist}$ , is equal to 1 if respondent  $i$  reported using marijuana in the past 30 days, and equal to 0 otherwise. The vector  $\text{XI}_{ist}$  includes individual-level controls for age, sex, race and grade, while the vector  $\text{X2}_{st}$  includes state-level controls for whether marijuana use and possession was decriminalized, the presence of a BAC 0.08 law, the state beer tax, income per capita, and the unemployment rate. Previous research has shown that marijuana use is sensitive to decriminalization (Saffer and Chaloupka 1999), alcohol policies (Pacula 1998; DiNardo and Lemieux 2001) and economic conditions (Hammer 1992). All regressions are estimated as linear probability models and standard errors are corrected for clustering at the state level (Bertrand et al. 2004). In addition to examining marijuana use in the past 30 days, we examine frequent marijuana use, marijuana use at school, whether the



respondent was offered or bought marijuana on school property, and the use of other substances including alcohol and cocaine. Descriptive statistics for these outcomes are presented in Table 1.

#### 4. RESULTS

Tables 2 through 5 present unweighted OLS estimates of the relationship between MMLs and the outcomes discussed above. Separate estimates for the national and state YRBS are presented along with estimates based on the combined data.

Using the national YRBS and a “bare bones” specification without covariates or state-specific linear time trends, legalization of medical marijuana is associated with a 5.6 percentage point decrease in the probability of marijuana use within the past 30 days, and a 3.5 percentage point decrease in the probability of frequent use (Table 2). We can reject the hypothesis that the relationship between MMLs and these outcomes is positive at conventional levels. The same specification yields smaller, but still negative, estimates of  $\beta_1$  using the state YRBS data. When the national and state YRBS data are combined, we find that the legalization of medical marijuana is associated with a 2.1 percentage point decrease in the probability of marijuana use within the past 30 days, and a 1.1 percentage point decrease in the probability of frequent use. We can reject the hypothesis that the relationship between legalization and these outcomes is positive at conventional levels.

A similar pattern of results emerges when the covariates and state-specific linear time trends are included on the right-hand side of the estimating equation. In these specifications, the estimates of  $\beta_1$  are uniformly negative, although they are not statistically distinguishable from

zero.<sup>10</sup> Ninety-five percent confidence intervals around the point estimates produced when using the combined YRBS data and controlling for state-specific linear time trends suggest that the impact of legalization on the probability of marijuana use in the past 30 days is no larger than 0.8 percentage points and the impact of legalization on the probability of frequent marijuana use in the past 30 days is no larger than 0.7 percentage points. In comparison, based on nationally representative data from Monitoring the Future, marijuana use among 12<sup>th</sup> graders increased by 4.3 percentage points from 2006 to 2011; marijuana use among 10<sup>th</sup> graders increased by 3.4 percentage points over this same period.<sup>11</sup> Based on national YRBS data, marijuana use among high school students increased by 3.4 percentage points from 2007 to 2011.

In Table 3, we explore whether the relationship between MMLs and marijuana use depends on gender. These estimates are from our preferred specification that includes the full set of covariates and state-specific linear time trends. With one exception, they are negative and statistically indistinguishable from zero. The hypothesis that  $\beta_l$  for male respondents is equal to  $\beta_l$  for female respondents is never rejected.

Table 4 compares estimates of  $\beta_l$  for YRBS respondents who were under the age of 17 when they were interviewed with estimates for respondents who were 17 years of age or older.<sup>12</sup> In the national YRBS data, the relationship between legalization and marijuana use is negative and significant among respondents under the age of 17, but insignificant among respondents 17

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<sup>10</sup> Appendix Table 4 presents estimates that incorporate the sample weights provided by the national YRBS. Again, there is little evidence that legalization of medical marijuana led to increased marijuana use among high school students.

<sup>11</sup> Estimates of marijuana use in the past 30 days for 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders are available from Johnston et al. (2011) and are based on data from Monitoring the Future. Monitoring the Future has interviewed nationally representative samples of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders since 1991. However, state identifiers are generally not made available to researchers. Our efforts to obtain these data were politely rebuffed.

<sup>12</sup> The YRBS data include information on all high school students, some of whom are as old as 19.

years of age and older. The relationship between legalization and frequent use is negative (but statistically insignificant) among both younger and older respondents. The remaining estimates of  $\beta_l$  in Table 4 are small and statistically insignificant.<sup>13</sup>

Table 5 reports estimates of the effect of legalization on the use of marijuana on school property in the past 30 days and estimates of the effect of legalization on the probability a student reported having been offered, sold, or given an illegal drug at school in the past year. These estimates are of particular interest given the recent attempts to close dispensaries operating near schools (Brooks 2012; McCrimmon and Jones 2012). The estimated relationship between MMLs and the use of marijuana on school property is consistently negative, but never statistically significant. In the combined sample, legalization is associated with a 2.7 percentage point decrease in the probability of having been offered, sold, or given an illegal drug at school in the past year

Finally, we examine the relationship between the legalization of medical marijuana and the use of other substances in Table 6. Using a regression discontinuity design, Crost and Guerrero (2012) found that marijuana use decreased sharply at the age of 21, suggesting that marijuana and alcohol are substitutes. Other studies suggest that marijuana and substances such as alcohol and cocaine are complements (Saffer and Chaloupka 1999; DeSimone and Farrelly 2003; Williams et al. 2004; Yörük and Yörük 2011). Our results provide little evidence that the legalization of medical marijuana leads to increased use of alcohol or cocaine.

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<sup>13</sup> Although the results are not reported, we estimated equation (1) for respondents 18 years of age and older. There was no evidence that the legalization of medical marijuana was associated with an increase in marijuana use among this age group. Appendix Table 5 presents estimates that incorporate the sample weights provided by the national YRBS. They are similar to those reported in Table 3 and Table 4.

#### 4.1 Analysis of the National Longitudinal Survey of Youth 1997

In this section, we examine the relationship between MMLs and the use of marijuana by youth in the National Longitudinal Survey of Youth 1997 (NLSY97). The NLSY97, which is conducted annually, is a nationally representative sample of individuals who were 12 through 16 years of age as of December 31<sup>st</sup>, 1996. It contains detailed information on educational attainment, family background and socio-economic status, and its respondents are asked a host of questions with regard to marijuana use including, “On how many days have you used marijuana in the last 30 days?”<sup>14</sup> Because our focus is on teenagers, we limit the analysis to respondents ages 12 through 19 at the time of the survey.

There are two primary benefits to using the NLSY97 data. First, unlike the YRBS, the NLSY97 includes high school dropouts. This is important because high school dropouts are more likely to use marijuana than their counterparts who stay in school (Bray et al. 2000). Second, because the NLSY97 data follow adolescents over time, it is possible to control for unobserved heterogeneity at the individual level.

However, there are two significant drawbacks to using NLSY97 data. First, California legalized medical marijuana before data collection began and several other states legalized medical marijuana when most of the NLSY97 respondents were in their twenties and thirties.<sup>15</sup> Second, several of the states that legalized medical marijuana in the late 1990s and early 2000s contributed only a handful of observations to the NLSY97.

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<sup>14</sup> Based on the answers to this question, we are able to construct measures of marijuana use that correspond to the marijuana use measures in the YRBS data. Economists who have used these data to study determinants of marijuana use include Aughinbaugh and Gittleman (2004), Cowen (2011), and Yörük and Yörük (2011).

<sup>15</sup> For instance, New Mexico legalized medical marijuana in 2007, when the average age of NLSY97 respondents was 25.

Table 7 presents descriptive statistics from the NLSY97 and Table 8 presents regression results. Specifically, we report estimates from the following equation:

$$(2) \quad \text{Marijuana Use}_{ist} = \beta_0 + \beta_1 \text{MML}_{st} + \mathbf{X1}_{ist} \beta_2 + \mathbf{X2}_{st} \beta_3 + \lambda_i + w_t + \Theta_s \cdot t + \varepsilon_{ist},$$

where  $i$  indexes individuals,  $s$  indexes states, and  $t$  indexes years. Year fixed effects are represented by  $w_t$ , and state-specific linear time trends are represented by  $\Theta_s \cdot t$ . The variable  $\text{MML}_{st}$  is defined as above and  $\beta_1$  represents the effect of medical marijuana legislation on marijuana use in the past 30 days. In addition, we examine the relationship between MMLs and frequent marijuana use defined as having used marijuana on at least 10 of the past 30 days. The vectors  $\mathbf{X1}_{ist}$  and  $\mathbf{X2}_{st}$  are composed of the individual- and state-level controls, respectively.<sup>16</sup>

Because NLSY97 respondents are observed in multiple years, we are able to include individual fixed effects,  $\lambda_i$ , on the right-hand side of the estimating equation. In addition to absorbing time-invariant heterogeneity at the individual level, these effects account for factors at the state level that may be correlated with marijuana use and the legalization of medical marijuana, although it is important to note that identification comes from changes in the law and from movement between states with different MMLs. All regressions are estimated as linear probability models and standard errors are corrected for clustering at the state level (Bertrand et al. 2004).

Each cell in Table 8 represents the results from a separate regression. Estimates in column (1) are based on a specification that includes only individual and year fixed effects; estimates in column (2) are based on a specification that also includes the covariates listed in

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<sup>16</sup> The state-level controls are identical to those used in the YRBS analysis. The individual-levels controls include indicators for education status, which are not available in the YRBS.

Table 7; and estimates in column (3) are based on a specification that adds state-specific linear time trends. Consistent with the YRBS analyses above, there is little evidence to support the hypothesis that MMLs encourage marijuana use by teenagers. Although 5 of the 6 coefficient estimates are positive, none are statistically significant at conventional levels. If the largest estimates are taken at face value, the legalization of medical marijuana is associated with a 0.7 percentage point increase in the probability of marijuana use in the past 30 days, and a 1.3 percentage point increase in the probability of frequent use. Appendix Table 6 presents estimates that incorporate the sample weights provided by the NLSY97.<sup>17</sup> They are consistent with those reported in Table 8.

#### **4.2 Analysis of the Treatment Episode Data Set**

Finally, we examine the relationship between MMLs and marijuana use based on state-level data from the Treatment Episode Data Set (TEDS) for the period 1992 through 2009. Federally funded drug treatment facilities are required to provide information to TEDS including whether a patient reported using marijuana prior to admission. Using these data, we constructed rates of marijuana use at the state level by year.<sup>18</sup>

There are at least two advantages to using the TEDS data. First, like the NLSY97, the TEDS data include high school dropouts. Second, the TEDS data are compiled annually and very few states fail to provide admissions data. In contrast, the YRBS data are collected biennially and only a subset of states contribute data in any given year. Descriptive statistics for the TEDS data are presented in Table 9.

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<sup>17</sup> Following Mellor (2011), we used the average of the sample weights for each individual for the years in which he or she participated in the NLSY97.

<sup>18</sup> Other economists who have used these data include Anderson (2010), Corman et al. (2010), Cunningham and Finlay (2011), and Nonnemaker et al. (2011).

To estimate the relationship between MMLs and marijuana-positive admission rates, we estimate the following equation:

$$(2) \quad \ln(\text{Marijuana admission rate}_{ast}) = \beta_0 + \beta_1 \text{MML}_{st} + \mathbf{X}_{st} \boldsymbol{\beta}_2 + v_s + w_t + \Theta_s \cdot t + \varepsilon_{ast},$$

where  $a$  indexes whether the observed admission rate is for males or females,  $s$  indexes states, and  $t$  indexes years. The dependent variable is the natural logarithm of the sex-specific marijuana admissions rate per 100,000 of the relevant population. Because TEDS does not provide the exact age or date of birth, we consider marijuana admission rates for two age groups: 15- through 17-year-olds and 18- through 20-year-olds. Again, the variable  $\text{MML}_{st}$  indicates whether a MML was in effect in state  $s$  and year  $t$ , the vector  $\mathbf{X}_{st}$  is composed of the controls described in Table 9, and  $v_s$  and  $w_t$  are state and year fixed effects, respectively, and state-specific linear time trends are represented by  $\Theta_s \cdot t$ .

Table 10 presents the estimates from (3).<sup>19</sup> Each cell represents the results of a separate regression. Estimates in column (1) are based on specifications that only include state and year fixed effects. The estimates in column (2) are based on specifications that add the covariates, and the estimates in column (3) are based on specifications that include state-specific linear time trends. Consistent with the YRBS and NLSY97 analyses above, there is no evidence to support the hypothesis that MMLs increase marijuana use among 15- through 17-year-olds. In fact, the estimates of  $\beta_1$ , although statistically insignificant, are uniformly negative. Likewise, there is no evidence that medical marijuana laws are associated with increased use among 18- through 20-year-olds.

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<sup>19</sup> The slight difference in sample size between estimates for 15- through 17-year-olds and 18- through 20-year-olds is due to missing values.

## 5. CONCLUSION

Medical marijuana is popular with the general public. A recent Gallup poll found that 70 percent of Americans say they favor making marijuana legally available for doctors to prescribe in order to reduce pain and suffering (Mendes 2010).

Given this level of support, it could be viewed as surprising that only 17 states have legalized medical marijuana. However, opponents of medical marijuana have employed a number of effective arguments, several of which focus on the use of marijuana by teenagers. For instance, Montana State Senator Jeff Essmann was quoted in 2011 as saying, “The number one goal is to reduce access and availability to the young people of this state that are being sent an incorrect message that this is an acceptable product for them to be using” (Florio 2011).

In order to examine the relationship between medical marijuana laws and youth consumption, we draw on data from the national and state Youth Risk Behavior Surveys (YRBS) for the years 1993 through 2011. These data cover a period when 16 states, including California, Colorado, Montana, Oregon and Washington, legalized medical marijuana, and allow us to estimate the effect of legalization on outcomes such as marijuana use in the past month, frequent marijuana use, and the use of other substances such as alcohol and cocaine.

Our results are not consistent with the hypothesis that the legalization of medical marijuana caused an increase in the use of marijuana and other substances among high school students. In fact, estimates from our preferred specifications are consistently negative and are never statistically distinguishable from zero. Using the 95 percent confidence interval around these estimates suggests that the impact of legalizing medical marijuana on the probability of marijuana use in the past 30 days is no larger than 0.8 percentage points, and the impact of



legalization on the probability of frequent marijuana use in the past 30 days is no larger than 0.7 percentage points. In comparison, based on nationally representative data from Monitoring the Future, marijuana use in the past 30 days among 12th graders increased by 4.3 percentage points from 2006 to 2011 (Johnston et al. 2011); based on national YRBS data, marijuana use among high school students increased by 3.4 percentage points from 2007 to 2011.

In addition to the YRBS analysis, we examine data from the National Longitudinal Survey of Youth 1997 (NLSY97) and the Treatment Episode Data Set (TEDS). The NLSY97 allows us to follow survey respondents over time, while the TEDS data allow us to examine a high-risk population. There is little evidence that marijuana use is related to the legalization of medical marijuana in either of these data sources, a result that is consistent with research showing that marijuana use among adults is more sensitive to changes in policy than marijuana use among youths (Farrelly et al. 1999; Williams 2004).

Although our estimates do not lend support to the often-voiced argument that legalization leads to increased consumption of marijuana among teenagers, it is important to note that our study has at least one limitation: the YRBS data are only available through 2011 and the TEDS data are only available through 2009. In the past year, several states have seen dramatic changes to the market for medical marijuana. For instance, as a result of Drug Enforcement Agency raids, the number of providers in Montana has plummeted. As future waves of the YRBS are released, researchers will be in a position to update our estimates and explore whether these changes have affected the behavior of teenagers.

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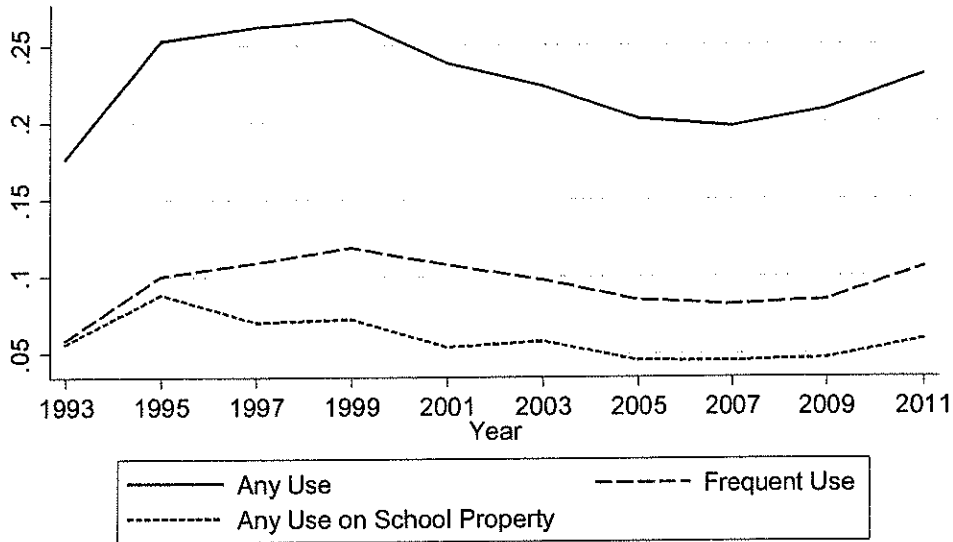
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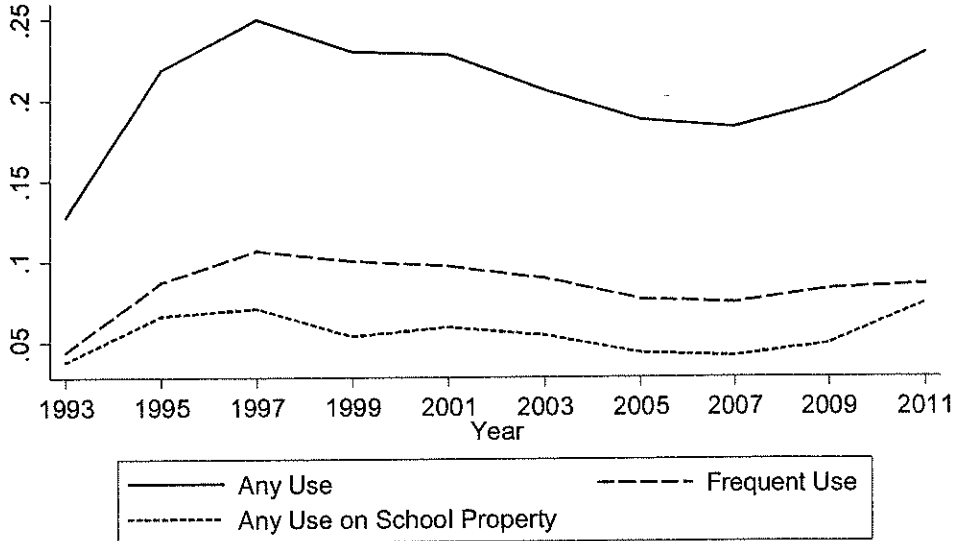
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Figure 1. Past 30 Day Marijuana Use  
National YRBS 1993-2011



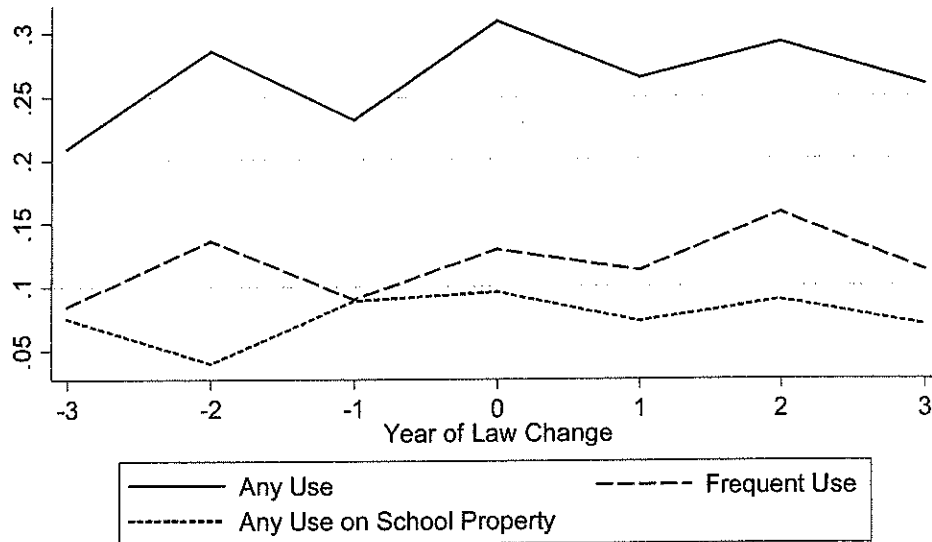
Based on weighted data from the national YRBS. Appendix Table 1 presents information on which states passed a MML between 1993 and 2011.

Figure 2. Past 30 Day Marijuana Use  
State YRBS 1993-2011



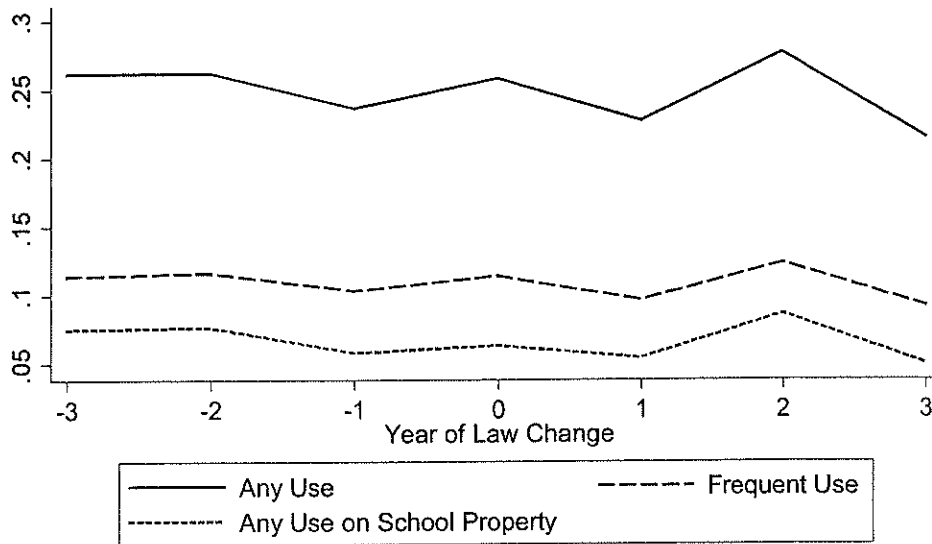
Based on unweighted data from the state YRBS. Appendix Table 1 presents information on which states passed a MML between 1993 and 2011.

Figure 3. Past 30 Day Marijuana Use  
National YRBS 1993-2011



Based on weighted data from the national YRBS. Appendix Table 1 presents information on which states passed a MML between 1993 and 2011.

Figure 4. Past 30 Day Marijuana Use  
State YRBS 1993-2011



Based on unweighted data from the state YRBS. Appendix Table 1 presents information on which states passed a MML between 1993 and 2011.



**Table 1. Descriptive Statistics: YRBS 1993-2011**

	National YRBS		State YRBS		Description
	MML = 1	MML = 0	MML = 1	MML = 0	
<b>Dependent Variables</b>					
<i>Marijuana Use in Past 30 Days</i>	.234	.220	.221	.195	= 1 if respondent has used marijuana in past 30 days, = 0 otherwise
<i>Frequent Marijuana Use in Past 30 Days</i>	.094	.091	.095	.082	= 1 if respondent has used marijuana at least 10 out of the past 30 days, = 0 otherwise
<i>Marijuana Use at School in Past 30 Days</i>	.070	.060	.058	.048	= 1 if respondent has used marijuana at school in past 30 days, = 0 otherwise
<i>Offered, Sold, or Given Drug on School Property</i>	.314	.259	.254	.252	= 1 if respondent has been offered, sold, or given illegal drug at school, = 0 otherwise
<i>Alcohol Use in Past 30 Days</i>	.439	.458	.367	.421	= 1 if respondent has used alcohol in past 30 days, = 0 otherwise
<i>Binge Drinking in Past 30 Days</i>	.262	.267	.222	.256	= 1 if respondent has binge drank in past 30 days, = 0 otherwise
<i>Cocaine Use in Past 30 Days</i>	.050	.037	.032	.029	= 1 if respondent has used cocaine in past 30 days, = 0 otherwise
<b>Independent Variables</b>					
<i>Age</i>	16.0	16.2	15.8	16.0	Age of respondent
<i>Male</i>	.485	.490	.487	.483	= 1 if respondent is male, = 0 if respondent is female
<i>Grade 9</i>	.248	.239	.259	.284	= 1 if respondent is in grade 9, = 0 otherwise
<i>Grade 10</i>	.239	.247	.275	.275	= 1 if respondent is in grade 10, = 0 otherwise
<i>Grade 11</i>	.253	.256	.252	.244	= 1 if respondent is in grade 11, = 0 otherwise
<i>Grade 12</i>	.259	.256	.213	.196	= 1 if respondent is in grade 12, = 0 otherwise
<i>Black</i>	.079	.260	.042	.161	= 1 if respondent is black, = 0 otherwise
<i>White</i>	.324	.435	.682	.633	= 1 if respondent is white, = 0 otherwise
<i>Other Race</i>	.597	.305	.276	.206	= 1 if respondent is of an other race, = 0 otherwise
<i>Decriminalization Law</i>	.812	.193	.366	.240	= 1 if state has decriminalized marijuana, = 0 otherwise
<i>BAC 0.08 Law</i>	.963	.587	.974	.666	= 1 if state has a BAC 0.08 law, = 0 otherwise
<i>Beer tax</i>	.182	.283	.231	.269	State real beer tax (2000 dollars)
<i>Real State Income</i>	10.4	10.2	10.3	10.2	Natural logarithm of state real income per capita
<i>Unemployment Rate</i>	7.61	5.94	6.94	5.78	State unemployment rate
<b>Observations</b>	<b>23,504</b>	<b>116,889</b>	<b>105,602</b>	<b>540,573</b>	

Notes: Means are based on unweighted data from the national and state YRBS (1993-2011).

**Table 2. Medical Marijuana Laws and Youth Consumption, 1993-2011**

	<u>National YRBS</u>			<u>State YRBS</u>			<u>Combined National and State</u>		
<i>Panel A: Marijuana Use in Past 30 Days</i>									
MML	-.056*** (0.019)	-.047*** (.014)	-.029 (.026)	-.014* (.008)	-.011 (.010)	-.005 (.006)	-.021** (.009)	-.019* (.010)	-.010 (.009)
Observations	140,393	140,393	140,393	646,175	646,175	646,175	786,568	786,568	786,568
<i>Panel B: Frequent Marijuana Use in Past 30 Days</i>									
MML	-.035** (.015)	-.030*** (.011)	-.016 (.018)	-.006 (.005)	-.004 (.005)	-.003 (.004)	-.011* (.006)	-.009 (.006)	-.007 (.007)
Observations	140,393	140,393	140,393	646,175	646,175	646,175	786,568	786,568	786,568
State FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
State-specific trends	No	No	Yes	No	No	Yes	No	No	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table 3. Medical Marijuana Laws and Youth Consumption by Gender**

	<u>National YRBS</u>		<u>State YRBS</u>		<u>Combined National and State</u>	
<i>Panel A: Marijuana Use in Past 30 Days</i>						
	Male	Female	Male	Female	Male	Female
MML	-0.029 (.026)	-0.028 (.028)	.002 (.009)	-.009 (.009)	-.006 (.013)	-.012 (.013)
Observations	68,675	71,718	312,728	333,447	381,403	406,205
<i>Panel B: Frequent Marijuana Use in Past 30 Days</i>						
	Male	Female	Male	Female	Male	Female
MML	-.014 (.020)	-.017 (.016)	-.002 (.005)	-.004 (.004)	-.005 (.008)	-.007 (.006)
Observations	68,675	71,718	254,371	333,447	381,403	406,205
State FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
State-specific trends	Yes	Yes	Yes	Yes	Yes	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table 4. Medical Marijuana Laws and Youth Consumption by Age Group**

	<u>National YRBS</u>		<u>State YRBS</u>		<u>Combined National and State</u>	
<i>Panel A: Marijuana Use in Past 30 Days</i>						
	<u>Age&lt;17</u>	<u>Age≥17</u>	<u>Age&lt;17</u>	<u>Age≥17</u>	<u>Age&lt;17</u>	<u>Age≥17</u>
MML	-.046*	-.006	-.008	.002	-.012	-.006
	(.023)	(.035)	(.007)	(.010)	(.011)	(.018)
Observations	80,494	59,899	423,043	222,132	492,457	282,031
<i>Panel B: Frequent Marijuana Use in Past 30 Days</i>						
	<u>Age&lt;17</u>	<u>Age≥17</u>	<u>Age&lt;17</u>	<u>Age≥17</u>	<u>Age&lt;17</u>	<u>Age≥17</u>
MML	-.018	-.014	-.002	-.005	-.005	-.008
	(.017)	(.021)	(.003)	(.006)	(.006)	(.009)
Observations	80,494	59,899	423,043	222,132	492,457	282,031
State FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
State-specific trends	Yes	Yes	Yes	Yes	Yes	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table 5. Medical Marijuana Laws and School Accessibility**

	<u>National YRBS</u>	<u>State YRBS</u>	<u>Combined National and State</u>
<i>Panel A: Marijuana Use at School in Past 30 Days</i>			
MML	-.013 (.018)	-.002 (.003)	-.004 (.007)
Observations	140,393	577,229	717,622
<i>Panel B: Offered, Sold, or Given Drug in Past 12 Months on School Property</i>			
MML	-.023 (.018)	-.031** (.014)	-.027** (.013)
Observations	140,393	612,488	752,881
State FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
Covariates	Yes	Yes	Yes
State Linear Trends	Yes	Yes	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses. The sample sizes in Panel B are smaller than those in Panel A because several states did not ask the *Offered, Sold, or Given Drug in Past 12 Months on School Property* question every year.

**Table 6. Medical Marijuana Laws and Other Substances**

	<u>National YRBS</u>	<u>State YRBS</u>	<u>Combined National and State</u>
<i>Panel A: Alcohol Use in Past 30 days</i>			
MML	.016 (.028)	-.011 (.009)	-.006 (.009)
Observations	135,537	612,004	747,541
<i>Panel B: Binge Drinking in Past 30 Days</i>			
MML	.001 (.019)	-.009 (.008)	-.005 (.008)
Observations	141,690	625,625	768,315
<i>Panel C: Cocaine Use in Past 30 Days</i>			
MML	-.012 (.011)	-.004* (.003)	-.009* (.005)
Observations	141,626	542,724	684,350
State FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
Covariates	Yes	Yes	Yes
State Linear Trends	Yes	Yes	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table 7. Descriptive Statistics: NLSY97**

	MML = 1	MML = 0	Description
<b>Dependent Variables</b>			
<i>Marijuana Use in Past 30 Days</i>	.161	.145	= 1 if respondent has used marijuana in past 30 days, = 0 otherwise
<i>Frequent Marijuana Use in Past 30 Days</i>	.061	.058	= 1 if respondent has used marijuana at least 10 out of the past 30 days, = 0 otherwise
<b>Independent Variables</b>			
<i>Age</i>	16.8	16.6	Age of respondent
<i>No High School Degree</i>	.728	.771	= 1 if respondent has no high school degree, = 0 otherwise
<i>GED/High School Degree</i>	.271	.228	= 1 if respondent has a GED or a high school degree, = 0 otherwise
<i>Over High School Degree</i>	.001	.000	= 1 if respondent has more than a high school degree, = 0 otherwise
<i>Decriminalization Law</i>	.909	.225	= 1 if state has decriminalized marijuana, = 0 otherwise
<i>BAC 0.08 Law</i>	.920	.326	= 1 if state has a 0.08 BAC law, = 0 otherwise
<i>Beer tax</i>	.208	.261	State real beer tax (2000 dollars)
<i>Real State Income</i>	10.4	10.3	Natural logarithm of state real income per capita
<i>Unemployment Rate</i>	5.74	4.45	State unemployment rate

Notes: Means are based on unweighted data from the National Longitudinal Survey of Youth 1997.

**Table 8. Medical Marijuana Laws and Youth Consumption: Evidence from the NLSY97**

*Panel A: Marijuana Use in Past 30 Days*

MML	.001 (.016)	.007 (.018)	-.004 (.022)
Observations	40,986	40,986	40,986

*Panel B: Frequent Marijuana Use in Past 30 Days*

MML	.011 (.010)	.013 (.011)	.008 (.014)
Observations	40,986	40,986	40,986
Individual FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
Covariates	No	Yes	Yes
State linear trends	No	No	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the National Longitudinal Survey of Youth 1997; the covariates are listed in Table 7. Standard errors, corrected for clustering at the state level, are in parentheses.



**Table 9. Descriptive Statistics: Treatment Episode Data Analysis**

	MML = 1	MML = 0	Description
<b>Dependent Variables</b>			
<i>Marijuana admission rate, ages 15-17</i>	1,326	779	Marijuana admission rate for 15- through 17-year-olds per 100,000
<i>Marijuana admission rate, ages 18-20</i>	817	657	Marijuana admission rate for 18- through 20-year-olds per 100,000
<b>Independent Variables</b>			
<i>Male rate</i>	.500	.504	= 1 if admissions rate is for males, = 0 otherwise
<i>Decriminalization Law</i>	.587	.181	= 1 if state has decriminalized marijuana, = 0 otherwise
<i>BAC 0.08 Law</i>	.903	.513	= 1 if state has a 0.08 BAC law, = 0 otherwise
<i>Beer tax</i>	.258	.256	State real beer tax (2000 dollars)
<i>Real State Income</i>	10.3	10.2	Natural logarithm of state real income per capita
<i>Unemployment Rate</i>	5.72	5.12	State unemployment rate

Notes: Means are based on unweighted data from the Treatment Episode Data Set (1992-2009).

**Table 10. Medical Marijuana Laws and Treatment Episodes**

	(1)	(2)	(3)
	<i>Marijuana admission rate, ages 15-17</i>	<i>Marijuana admission rate, ages 15-17</i>	<i>Marijuana admission rate, ages 15-17</i>
MML	-.027 (.120)	-.034 (.113)	-.067 (.115)
N	1737	1737	1737
R <sup>2</sup>	.608	.852	.909
	(1)	(2)	(3)
	<i>Marijuana admission rate, ages 18-20</i>	<i>Marijuana admission rate, ages 18-20</i>	<i>Marijuana admission rate, ages 18-20</i>
MML	-.045 (.068)	-.026 (.068)	-.061 (.051)
N	1756	1756	1756
R <sup>2</sup>	.493	.873	.899
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Covariates	No	Yes	Yes
State linear trends	No	No	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the Treatment Episode Data Set (1992-2009). The dependent variable is equal to the natural log of the marijuana admissions rate per 100,000 population; the covariates are listed in Table 9. Regressions are weighted using the relevant state age- and gender-specific populations. Standard errors, corrected for clustering at the state level, are in parentheses.

**Appendix Table 1. Medical Marijuana Laws, 1993-2011**

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	Effective date
Alaska	March 4, 1999
Arizona	April 14, 2011
California	November 6, 1996
Colorado	June 1, 2001
Delaware	May 13, 2011
District of Columbia	July 27, 2010
Hawaii	December 28, 2000
Maine	December 22, 1999
Michigan	December 4, 2008
Montana	November 2, 2004
Nevada	October 1, 2001
New Jersey	October 1, 2010
New Mexico	July 1, 2007
Oregon	December 3, 1998
Rhode Island	January 3, 2006
Vermont	July 1, 2004
Washington	November 3, 1998

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Note: In Connecticut, the legalization of medical marijuana is scheduled to take place on October 1, 2012.

Appendix Table 2. Number of Observations by State-Year: National YRBS

	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	Total
AL	782	97	781	55	306	630	...	475	1,027	308	4,461
AZ*	429	...	1,076	130	399	341	279	588	353	1,087	4,462
AR	393	282	358	...	...	261	...	411	297	...	2,002
CA*	2,082	1,161	1,929	2,423	2,139	1,672	1,527	2,072	2,741	1,796	19,542
CO*	256	99	267	...	635	...	...	...	189	234	1,680
CT	...	...	217	...	...	...	230	...	...	...	447
DE*	...	212	...	...	...	360	...	...	...	221	793
DC*	...	499	...	...	...	...	...	...	...	295	794
FL	513	532	664	845	1,042	1,393	532	732	222	1,361	7,836
GA	893	435	339	800	476	408	1,796	344	1,296	120	6,907
HI*	...	...	...	301	...	...	...	...	229	...	530
ID	...	...	...	...	155	...	238	...	...	258	651
IL	702	237	...	224	431	312	471	576	1,450	972	5,375
IN	...	...	...	...	176	407	169	395	...	266	1,413
IA	...	241	774	...	...	...	236	245	...	...	1,496
KS	170	...	201	...	...	307	275	...	197	295	1,445
KY	...	...	...	...	...	...	527	357	...	211	1,095
LA	...	278	568	606	...	677	155	...	411	...	2,695
ME*	247	150	236	196	199	197	...	...	...	...	1,225
MD	144	...	801	...	...	260	...	...	...	...	1,205
MA	357	269	1,606	...	249	211	255	708	...	282	3,937
MI*	144	1,076	490	509	329	392	283	295	313	617	4,448
MN	319	...	...	...	...	...	95	...	185	...	599
MS	352	478	326	624	335	...	...	348	...	93	2,556
MO	181	540	...	550	458	260	102	343	84	341	2,859
MT*	...	...	...	...	197	...	...	...	...	...	197
NE	396	...	...	...	...	...	...	...	...	...	396
NV*	...	...	...	...	232	...	...	...	378	198	808
NJ*	...	...	720	232	213	297	309	669	364	111	2,915
NM*	657	...	276	...	152	100	...	218	596	...	1,999
NY	1,217	510	355	700	298	893	450	894	1,159	622	7,098

Appendix Table 2. Number of Observations by State-Year: National YRBS (continued)

	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	Total
NC	296	114	327	506	659	...	628	558	...	686	3,774
OH	524	546	538	551	221	290	270	...	...	...	2,940
OK	...	...	223	...	392	...	232	277	...	...	1,124
OR*	188	...	...	...	183	...	268	...	243	...	882
PA	356	658	271	477	...	316	407	210	1,039	408	4,142
RI*	...	...	...	74	...	...	...	...	...	...	74
SC	390	...	330	776	...	874	283	...	...	...	2,653
SD	...	...	...	...	...	295	...	...	...	...	295
TN	507	346	564	263	588	...	391	162	...	286	3,107
TX	2,715	1,642	935	2,668	2,006	2,574	1,705	1,438	1,312	1,721	18,716
UT	...	...	...	...	...	178	268	193	...	...	639
VT*	...	...	...	...	...	57	...	...	...	...	57
VA	...	64	...	718	...	240	345	424	96	201	2,088
WA*	373	82	103	...	52	...	100	...	245	165	1,120
WV	301	...	...	...	260	...	228	243	457	251	1,740
WI	...	...	289	521	234	175	239	178	675	645	2,956

Notes: States that legalized medical marijuana are denoted with a star superscript and post-legalization observations are italicized.

Appendix Table 3. Number of Observations by State-Year: State YRBS

	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	Total
AL	4,269	3,773	3,544	2,007	1,508	1,038	975	...	1,418	1,328	19,860
AK*	...	1,595	...	...	...	1,414	...	1,256	1,302	1,278	6,845
AZ*	...	...	...	...	...	1,939	1,872	1,668	1,484	1,948	8,911
AR	...	2,223	1,950	1,426	1,661	...	1,438	1,535	1,580	1,302	13,115
CO*	...	...	...	...	...	...	1,459	...	1,451	1,437	4,347
CT	...	...	1,709	...	...	...	2,108	1,974	2,298	1,968	10,057
DE*	...	...	...	2,313	2,842	2,955	2,604	2,387	2,267	2,165	17,533
ID	3,907	...	...	...	1,680	1,694	1,414	1,378	2,114	1,663	13,850
IL	3,953	3,020	...	...	...	...	...	2,326	2,887	3,403	15,589
IA	...	...	1,498	...	...	...	1,339	1,425	...	1,519	5,781
KS	...	...	...	...	...	...	1,618	1,682	1,991	1,823	7,114
KY	...	...	1,561	...	...	1,528	3,178	3,391	1,692	1,650	13,000
ME*	...	1,375	1,795	1,305	...	1,616	1,304	1,277	8,419	8,982	26,073
MD	...	...	...	...	...	...	1,373	1,467	1,562	2,529	6,931
MI*	...	...	4,277	2,600	3,472	3,332	3,144	3,390	3,271	4,052	27,538
MS	1,431	1,251	1,462	1,579	1,777	1,458	...	1,537	1,749	1,729	13,973
MO	...	4,787	1,451	1,601	1,625	1,530	1,851	1,512	1,595	...	15,952
MT*	4,936	2,476	2,502	2,856	2,572	2,617	2,947	3,849	1,766	4,002	30,523
NE	3,154	...	...	...	...	2,862	3,651	...	...	2,644	12,311
NV*	2,001	1,507	1,441	1,659	1,405	1,917	1,488	1,737	2,007	...	15,162
NH	2,651	2,128	...	...	...	1,294	1,249	1,595	1,459	1,378	11,754
NJ*	...	...	...	...	2,026	...	1,470	...	1,716	1,619	6,831
NM*	...	...	...	...	...	...	5,020	2,539	4,835	5,596	18,290
NY	...	...	3,673	3,303	...	9,021	9,194	12,780	13,959	12,544	64,474
NC	2,686	1,921	...	...	2,477	2,479	3,762	3,363	5,485	2,174	24,347
ND	...	...	...	1,800	1,564	1,636	1,700	1,725	1,782	1,873	12,080
RI*	...	...	1,476	...	1,351	1,759	2,302	2,102	3,093	3,813	15,896
SC	4,636	5,302	5,347	4,449	...	1,238	1,202	1,202	1,055	1,382	24,612
SD	1,326	1,170	1,577	1,639	1,564	1,762	1,544	1,561	2,115	1,507	15,765
TN	3,226	...	...	...	...	1,899	1,519	2,020	2,176	2,584	13,464
TX	...	...	...	...	6,864	...	4,032	3,123	3,459	4,017	21,495

**Appendix Table 3. Number of Observations by State-Year: State YRBS (continued)**

	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	Total
UT	4,376	3,123	1,340	1,467	1,029	1,350	1,401	1,885	1,538	1,651	19,160
VT*	...	5,860	6,783	...	6,942	5,901	6,941	5,825	8,347	...	46,599
WV	2,778	2,045	1,796	1,365	...	1,701	1,298	1,358	1,578	2,121	16,040
WI	3,199	...	1,294	1,304	2,070	2,078	2,250	2,050	2,391	2,941	19,577

Notes: States that legalized medical marijuana are denoted with a star superscript and post-legalization observations are italicized.

**Appendix Table 4. Weighted National YRBS Analysis**

**National YRBS**

*Panel A: Marijuana Use in Past 30 Days*

MML	-.019 (.015)	-.016 (.013)	-.004 (.018)
Observations	140,393	140,393	140,393

*Panel B: Frequent Marijuana Use in Past 30 Days*

MML	-.006 (.015)	-.005 (.013)	.013 (.015)
Observations	140,393	140,393	140,393
State FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
Covariates	No	Yes	Yes
State-specific trends	No	No	Yes

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses.



**Appendix Table 5. Weighted National YRBS Analysis by Gender and Age**

National YRBS

*Panel A: Marijuana Use in Past 30 Days*

	<u>Male</u>	<u>Female</u>	<u>Age&lt;17</u>	<u>Age&gt;17</u>
MML	-.018 (.020)	.010 (.021)	-.030 (.018)	.040 (.030)
Observations	68,675	71,718	80,494	59,899

*Panel B: Frequent Marijuana Use in Past 30 Days*

	<u>Male</u>	<u>Female</u>	<u>Age&lt;17</u>	<u>Age&gt;17</u>
MML	.025 (.017)	.000 (.017)	.009 (.019)	.023 (.014)
Observations	68,675	71,718	80,494	59,899
State FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes
Covariates	Yes	Yes	Yes	Yes
<u>State-specific trends</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>

\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the YRBS (1993-2011); the covariates are listed in Table 1. Standard errors, corrected for clustering at the state level, are in parentheses.

**Appendix Table 6. Weighted NLSY97 Analysis**

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*Panel A: Marijuana Use in Past 30 Days*

MML	-.003 (.013)	.003 (.014)	-.010 (.022)
Observations	40,986	40,986	40,986

*Panel B: Frequent Marijuana Use in Past 30 Days*

MML	.011 (.011)	.015 (.011)	.009 (.016)
Observations	40,986	40,986	40,986
Individual FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
Covariates	No	Yes	Yes
State linear trends	No	No	Yes

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\* Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each cell represents a separate OLS estimate based on data from the National Longitudinal Survey of Youth 1997; the covariates are listed in Table 7. Standard errors, corrected for clustering at the state level, are in parentheses.

THE BENEFITS OF MEDICAL MARIJUANA: STUDIES AND MEDIA  
ATTENTION

**EXHIBIT #4**

# Why I changed my mind on weed

By Dr. Sanjay Gupta, CNN Chief Medical Correspondent

Updated 8:44 PM ET, Thu August 8, 2013

Over the last year, I have been working on a new documentary called "Weed." The title "Weed" may sound cavalier, but the content is not.

I traveled around the world to interview medical leaders, experts, growers and patients. I spoke candidly to them, asking tough questions. What I found was stunning.

Long before I began this project, I had steadily reviewed the scientific literature on medical marijuana from the United States and thought it was fairly unimpressive. Reading these papers five years ago, it was hard to make a case for medicinal marijuana. I even wrote about this in a TIME magazine article, back in 2009, titled "Why I would Vote No on Pot."

Well, I am here to apologize.

I apologize because I didn't look hard enough, until now. I didn't look far enough. I didn't review papers from smaller labs in other countries doing some remarkable research, and I was too dismissive of the loud chorus of legitimate patients whose symptoms improved on cannabis.

Instead, I lumped them with the high-visibility malingerers, just looking to get high. I mistakenly believed the Drug Enforcement Agency listed marijuana as a schedule 1 substance because of sound scientific proof. Surely, they must have quality reasoning as to why marijuana is in the category of the most dangerous drugs that have "no accepted medicinal use and a high potential for abuse."

They didn't have the science to support that claim, and I now know that when it comes to marijuana neither of those things are true. It doesn't have a high potential for abuse, and there are very legitimate medical applications. In fact, sometimes marijuana is the only thing that works. Take the case of Charlotte Figi, who I met in Colorado. She started having seizures soon after birth. By age 3, she was having 300 a week, despite being on seven different medications. Medical marijuana has calmed her brain, limiting her seizures to 2 or 3 per month.

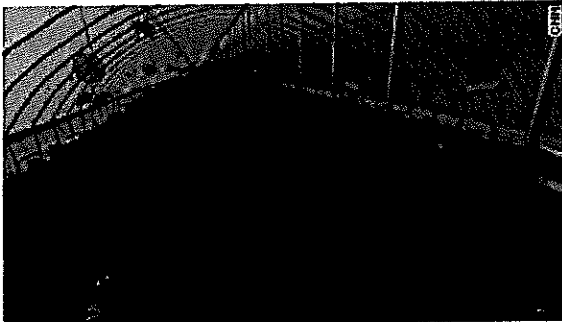


Dr. Sanjay Gupta is a neurosurgeon and CNN's chief medical correspondent.

I have seen more patients like Charlotte first hand, spent time with them and come to the realization that it is irresponsible not to provide the best care we can as a medical community, care that could involve marijuana.

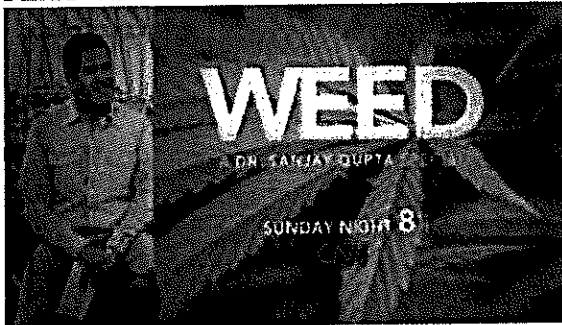
We have been terribly and systematically misled for nearly 70 years in the United States, and I apologize for my own role in that.

I hope this article and upcoming documentary will help set the record straight.



Medical facts of Marijuana 01:23

PLAY VIDEO



WEED: A Dr. Sanjay Gupta Special 00:30

PLAY VIDEO

On August 14, 1970, the Assistant Secretary of Health, Dr. Roger O. Egeberg wrote a letter recommending the plant, marijuana, be classified as a schedule 1 substance, and it has remained that way for nearly 45 years. My research started with a careful reading of that decades old letter. What I found was unsettling. Egeberg had carefully chosen his words:

"Since there is still a considerable void in our knowledge of the plant and effects of the active drug contained in it, our recommendation is that marijuana be retained within schedule 1 at least until the completion of certain studies now underway to resolve the issue."

Not because of sound science, but because of its absence, marijuana was classified as a schedule 1 substance. Again, the year was 1970. Egeberg mentions studies that are underway, but many

were never completed. As my investigation continued, however, I realized Egeberg did in fact have important research already available to him, some of it from more than 25 years earlier.

### **High risk of abuse**

In 1944, New York Mayor Fiorello LaGuardia commissioned research to be performed by the New York Academy of Science. Among their conclusions: they found marijuana did not lead to significant addiction in the medical sense of the word. They also did not find any evidence marijuana led to morphine, heroin or cocaine addiction.

We now know that while estimates vary, marijuana leads to dependence in around 9 to 10% of its adult users. By comparison, cocaine, a schedule 2 substance "with less abuse potential than schedule 1 drugs" hooks 20% of those who use it. Around 25% of heroin users become addicted.

The worst is tobacco, where the number is closer to 30% of smokers, many of whom go on to die because of their addiction.

There is clear evidence that in some people marijuana use can lead to withdrawal symptoms, including insomnia, anxiety and nausea. Even considering this, it is hard to make a case that it has a high potential for abuse. The physical symptoms of marijuana addiction are nothing like those of the other drugs I've mentioned. I have seen the withdrawal from alcohol, and it can be life threatening.

I do want to mention a concern that I think about as a father. Young, developing brains are likely more susceptible to harm from marijuana than adult brains. Some recent studies suggest that regular use in teenage years leads to a permanent decrease in IQ. Other research hints at a possible heightened risk of developing psychosis.

Much in the same way I wouldn't let my own children drink alcohol, I wouldn't permit marijuana until they are adults. If they are adamant about trying marijuana, I will urge them to wait until they're in their mid-20s when their brains are fully developed.

### **Medical benefit**

While investigating, I realized something else quite important. Medical marijuana is not new, and the medical community has been writing about it for a long time. There were in fact hundreds of journal articles, mostly documenting the benefits. Most of those papers, however, were written between the years 1840 and 1930. The papers described the use of medical marijuana to treat "neuralgia, convulsive disorders, emaciation," among other things.

A search through the U.S. National Library of Medicine this past year pulled up nearly 2,000 more recent papers. But the majority were research into the harm of marijuana, such as "Bad trip due to anticholinergic effect of cannabis," or "Cannabis induced pancreatitis" and "Marijuana use and risk of lung cancer."

In my quick running of the numbers, I calculated about 6% of the current U.S. marijuana studies investigate the benefits of medical marijuana. The rest are designed to investigate harm. That imbalance paints a highly distorted picture.

### **The challenges of marijuana research**

To do studies on marijuana in the United States today, you need two important things.

First of all, you need marijuana. And marijuana is illegal. You see the problem. Scientists can get research marijuana from a special farm in Mississippi, which is astonishingly located in the middle of the Ole Miss campus, but it is challenging. When I visited this year, there was no marijuana being grown.

The second thing you need is approval, and the scientists I interviewed kept reminding me how tedious that can be. While a cancer study may first be evaluated by the National Cancer Institute, or a pain study may go through the National Institute for Neurological Disorders, there is one more approval required for marijuana: NIDA, the National Institute on Drug Abuse. It is an organization that has a core mission of studying drug abuse, as opposed to benefit.

Stuck in the middle are the legitimate patients who depend on marijuana as a medicine, oftentimes as their only good option.

Keep in mind that up until 1943, marijuana was part of the United States drug pharmacopeia. One of the conditions for which it was prescribed was neuropathic pain. It is a miserable pain that's tough to treat. My own patients have described it as "lancinating, burning and a barrage of pins and needles." While marijuana has long been documented to be effective for this awful pain, the most common medications prescribed today come from the poppy plant, including morphine, oxycodone and dilaudid.

Here is the problem. Most of these medications don't work very well for this kind of pain, and tolerance is a real problem.

Most frightening to me is that someone dies in the United States every 19 minutes from a prescription drug overdose, mostly accidental. Every 19 minutes. It is a horrifying statistic. As much as I searched, I could not find a documented case of death from marijuana overdose.

It is perhaps no surprise then that 76% of physicians recently surveyed said they would approve the use of marijuana to help ease a woman's pain from breast cancer.

When marijuana became a schedule 1 substance, there was a request to fill a "void in our knowledge." In the United States, that has been challenging because of the infrastructure surrounding the study of an illegal substance, with a drug abuse organization at the heart of the approval process. And yet, despite the hurdles, we have made considerable progress that continues today.

Looking forward, I am especially intrigued by studies like those in Spain and Israel looking at the anti-cancer effects of marijuana and its components. I'm intrigued by the neuro-protective study by Raphael Mechoulam in Israel, and research in Israel and the United States on whether the drug might help alleviate symptoms of PTSD. I promise to do my part to help, genuinely and honestly, fill the remaining void in our knowledge.

Citizens in 20 states and the District of Columbia have now voted to approve marijuana for medical applications, and more states will be making that choice soon. As for Dr. Roger Egeberg, who wrote that letter in 1970, he passed away 16 years ago.

I wonder what he would think if he were alive today.





Marijuana Policy Project  
P.O. Box 77492  
Washington, DC 20013  
p: (202) 462-5747 • f: (202) 232-0442  
info@mpp.org • www.mpp.org

*"We change laws."*

## Medical Marijuana Dispensaries and Their Effect on Crime

Opponents of medical marijuana sometimes speculate that medical marijuana dispensaries will lead to increased crime rates in surrounding areas.<sup>1</sup> These dispensaries, they claim, will attract thieves and robbers to the facilities and breed secondary crimes in surrounding areas. Such claims have prompted empirical and statistical analyses by researchers and law enforcement agencies. In what should not come as a surprise, given the robust security at most medical marijuana facilities, these studies have routinely shown that, contrary to these concerns, dispensaries are not magnets for crime. Instead, these studies suggest that dispensaries are no more likely to attract crime than any other business, and in many cases, by bringing new business and economic activity to previously abandoned or run-down retail spaces, dispensaries actually contribute to a reduction in crime.

While the data is reassuring, one public safety challenge for dispensaries and adult use marijuana stores has been that many have been forced to operate as cash-only businesses because of banks' concern about federal legal issues. However, with new guidance that was issued by the federal government in February 2014, it is expected that more small banks and credit unions will open accounts for marijuana businesses.

What follows is a brief summary of anecdotal and scientific evidence, including law enforcement data analyses and academic research on medical marijuana dispensaries and their effect on crime. For more information on dispensaries, medical use of marijuana, state laws, and other issues related to medical marijuana, please visit [mpp.org/medical](http://mpp.org/medical).

**2009 Los Angeles Police Department survey** — In response to debate over medical marijuana regulations by the Los Angeles City Council, and claims from medical marijuana opponents that dispensaries were magnets for crime, Los Angeles Police Chief Charlie Beck asked his department to produce a report comparing the robbery rates of L.A. banks and medical marijuana dispensaries. The report indicated that there were 71 robbery reports filed with the LAPD at the city's 350 banks. Despite there being far more medical marijuana dispensaries — more than 800 at the time according to Beck — there were fewer robbery reports filed at dispensaries: just 47.

When asked about the report, and claims that dispensaries are crime magnets, Beck said, "I have tried to verify that because, of course, that is the mantra. It really doesn't bear out. ... Banks are more likely to get robbed than medical marijuana dispensaries."<sup>2</sup>

**2009 Denver Police Department survey** — An analysis of robbery and burglary rates at medical marijuana dispensaries conducted by the Denver Police Department at the request of the Denver City Council found that the robbery and burglary rates at dispensaries were lower than

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<sup>1</sup> "Across the state, we're seeing an increase in crime related to dispensaries," said Ernie Martinez, a Denver police detective who is president of the Colorado Drug Investigators Association. "Medical marijuana dispensaries' effect on crime unclear," *The Denver Post*, January 24, 2011.

[http://www.denverpost.com/news/marijuana/ci\\_17178820#ixzz1ngbvMOII](http://www.denverpost.com/news/marijuana/ci_17178820#ixzz1ngbvMOII).

<sup>2</sup> "LAPD Chief: Pot clinics not plagued by crime," *Los Angeles Daily News*, January 17, 2010.

[http://www.dailynews.com/news/ci\\_14206441](http://www.dailynews.com/news/ci_14206441).

area banks and liquor stores and on par with those of pharmacies. Specifically, the report found a 16.8 percent burglary and robbery rate for dispensaries, equal to that of pharmacies. That's lower than the 19.7 percent rate for liquor stores and the 33.7 percent rate for banks, the analysis found.<sup>3</sup>

**2010 Denver Police Department analysis** — In late 2010, the Denver Police Department looked at crime rates in areas in and around dispensaries. The analysis showed that through the first nine months of 2010, crime was down 8.2% relative to the same period in 2009. The decrease was comparable to the city's overall drop in crime of 8.8%.<sup>4</sup> *The Denver Post* completed a similar analysis and found that crime rates in some areas with the highest concentration of dispensaries saw bigger decreases in crime than neighborhoods with no dispensaries.<sup>5</sup>

**2010 Colorado Springs Police Department analysis** — An analysis by the Colorado Springs Police Department found that robbery and burglary rates at area dispensaries were on par with those of other businesses. Specifically, the department's data indicated that there were 41 criminal incidents reported at the city's 175 medical marijuana businesses in the 18-month period ending August 31, 2010. Meanwhile, over that same period, there were 797 robberies and 4,825 burglaries at other city businesses. These findings led the department's spokesman, Sgt. Darrin Abbink, to comment, "I don't think the data really supports [dispensaries] are more likely to be targeted at this point."<sup>6</sup>

**October 2011 UCLA study, "Exploring the Ecological Link Between Crime and Medical Marijuana Dispensaries,"** — Researchers from UCLA, funded by the National Institute on Drug Abuse, used data from 95 census tracts in Sacramento to analyze two types of crime (violent and property) in areas with varying concentrations of dispensaries. What they found was that while factors traditionally understood to lead to increased crime — for example, large percentages of land zoned for commercial rather than residential use, a high percentage of one-person households, the presence of highway ramps, and a higher percentage of the population being ages 15-24 — were positively associated with crime in those areas, "the density of medical marijuana dispensaries was not associated with violent or property crime rates." In their conclusion, the researchers said, "[t]hese results suggest that the density of [medical marijuana dispensaries] may not be associated with increased crime rates or that measures dispensaries take to reduce crime (i.e., doormen, video cameras) may increase guardianship, such that it deters possible motivated offenders."<sup>7</sup>

Specifically, the study applied the "routine activity theory" of crime, which suggests that crime is more likely when three criteria are met: (1) a motivated offender, (2) a suitable target, as defined by factors like value, visibility, and access, and (3) a lack of guardianship such as low residency or poor security. The authors hypothesized that the lack of a relationship between dispensaries and crime could be attributable to either of two possible conclusions: either medical marijuana dispensaries were no more valuable a target than other businesses in the area — a possibility supported by the law enforcement surveys in L.A. and Denver discussed above — or heightened security at dispensaries was sufficient to deter criminal activity in the area.

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<sup>3</sup> "Analysis: Denver pot shops' robbery rate lower than banks," *The Denver Post*, January 27, 2010. [http://www.denverpost.com/ci\\_14275637](http://www.denverpost.com/ci_14275637).

<sup>4</sup> See note 1, *supra*.

<sup>5</sup> *Id.*

<sup>6</sup> "Marijuana shops not magnets for crime, police say," *Fort Collins Gazette*, September 14, 2010. <http://www.gazette.com/articles/wall-104598-marijuana-brassfield.html>.

<sup>7</sup> <http://www.uclamedicalmarijuanaresearch.com/node/10>.

**June 2011 Regent University study** — Researcher Maura Scherrer of Regent University looked at the perception of crime, and medical marijuana dispensaries' impact on crime, among residents of Denver neighborhoods with varying socio-economic profiles. In so doing, she found that most crimes, including robbery, vandalism, and disorderly conduct increased in Denver from 2008 to 2009. However, in areas within 1,000 feet of a dispensary, rates were down for most types of crime, including burglary, larceny, and a 37.5% reduction in disorderly conduct citations. In her conclusion the author notes, "it appears that crime around the medical marijuana centers is considerably lower than citywide crime rates; a much different depiction than originally perceived."<sup>8</sup>

**February 2014 Urban Geography** — Researchers from the University of South Florida, the University of Colorado, and the New York City Criminal Justice Agency set out to determine whether medical marijuana dispensaries in Denver could be considered locally undesirable land uses (LULUs), land uses that people do not want to live close to, but which provide services to the community.<sup>9</sup> The researchers studied 275 medical marijuana centers in 75 Denver neighborhoods and concluded that:

"[w]hile public officials, and especially law enforcement, clearly warn residents about the negative effects of these centers on the communities in which they are situated, there is little evidence that residents are listening, as these centers do not appear to have any impact on the urban landscape — and therefore on the health of the communities in which they are located."<sup>10</sup>

The study did find that medical marijuana centers are more likely to be opened in areas that have higher crime rates, but that is not unusual because crime follows retail concentrations. "In short, medical marijuana facilities appear to ... be more similar to drugstores and coffee houses than they are to LULUs."<sup>11</sup>

**Los Angeles crime trends** — Los Angeles has frequently been cited as the city with the most dispensaries and the least regulation of those dispensaries. It is also the most populous city in the state that has the oldest and the broadest medical marijuana law, where any medical condition qualifies. While L.A. voters do prefer some regulation and control — and they approved a ballot measure to create a regulatory system in May 2013 — the city that has been cited as having more dispensaries than Starbucks certainly has not suffered a crime epidemic as a result of its permissive policies. On the contrary, overall crime in Los Angeles has dropped dramatically since dispensing collectives became legal in 2004. Crime rates have plummeted in the past 11 years, with decreases each of those 11 years. They are now the lowest they have been since 1949.<sup>12</sup>

**The Effect of Medical Marijuana Laws on Crime: Evidence from State Panel Data, 1990-2006**<sup>13</sup> — Researchers Robert Morris, Michael TenEyck, J.C. Barnes, and Tomislav Kovandzic

<sup>8</sup> Study available at <http://adr.coalliance.org/codr/fez/view/codr:983>.

<sup>9</sup> Lyndsay N. Boggess, Deanna M. Pérez, Kathryn Cope, Carl Root & Paul B. Stretesky, *Urban Geography* (2014): Do medical marijuana centers behave like locally undesirable land uses? Implications for the geography of health and environmental justice, *Urban Geography*.

<sup>10</sup> *Id.* at p. 15

<sup>11</sup> *Id.* at p. 16

<sup>12</sup> Kathy Mather, "L.A. crime falls for 11th year; officials note historic drops," *L.A. Times*, Jan. 13, 2014.

<http://www.latimes.com/local/lanow/la-me-ln-crime-falls-20140113,0,3357277.story#axzz2vJ6f1xlX>

<sup>13</sup> Morris RG, TenEyck M, Barnes JC, Kovandzic TV (2014). "The Effect of Medical Marijuana Laws on Crime: Evidence from State Panel Data, 1990-2006." *PLoS ONE* 9(3): e92816. doi: 10.1371/journal.pone.0092816

analyzed the association between the enactment of a medical marijuana law and state crime rates for all Part 1 offenses — homicide, rape, robbery, assault, burglary, larceny, and auto theft — as collected by the FBI. The purpose was to help inform the debate on whether passage of medical marijuana laws leads to increased crime rates. The researchers used fixed-effects panel design to identify what, if any, effect passage of a medical marijuana law has on crime rates. This design analyzes changes individual states see in their respective crime rates over time and compares the changes to the crime rate trends among states that enacted medical marijuana laws and those that did not.

While all states experienced a reduction in Part 1 offenses during the period studied, those that had passed a medical marijuana law experienced greater reductions in those offenses than those states that had not. The researchers conclude that enactment of a medical marijuana law “is not predictive of higher crime rates and *may* be related to reductions in rates of homicide and assault.”<sup>14</sup> They note that the most “important finding . . . is the lack of evidence of any increase in robbery or burglary, which are the type of crimes one might expect to gradually increase over time if the [medical marijuana laws lead to increased crime] theory was correct.”<sup>15</sup>

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<sup>14</sup> *Id.* at 5.

<sup>15</sup> *Id.*

TAB "F"

# Merrikin Engineering, LLP

*Consulting Engineers*

730 MAIN STREET  
SUITE 2C

MILLIS, MA 02054

TELEPHONE (508) 376-8883

June 19, 2015

Ellen Rosenfeld  
CommCan, Inc.  
730 Main Street  
Millis, MA 02054

Ref: 2 Marc Road & 0 Jayar Road  
Proposed Cultivation and Processing Facility

Dear Ms. Rosenfeld:

I am writing to summarize Zoning and site plan considerations for the proposed cultivation facility at 2 Marc Road & 0 Jayar Road (the "site"). The site has the following features:

- it consists of 5.2 acres of land which has been historically used as a storage and processing yard for contractors. There are no buildings on the site;
- it is located entirely within an Industrial I Zoning District;
- it is located entirely within the Groundwater Protection District; and
- it has access to municipal sewer and water.

Registered Marijuana Dispensaries (RMDs) are regulated under Section 5.BB of the Medway Zoning Bylaw, which applies to non-exempt cultivation, processing, assembly, packaging retail or wholesale sale, trade, distribution or dispensing of Marijuana for Medical Use (MMU).

The proposed use of a MMU cultivation and processing facility clearly falls within the standard definition of "horticulture". As such and pursuant to MGL 40A, Section 3, because the property is larger than 5 acres, such use is technically exempt from zoning. You have indicated, however, that you desire to work with Town officials to resolve any site design concerns they may have, and therefore intend to voluntarily proceed through the Special Permit procedures described in Section 5.BB of the Medway Zoning Bylaw.

We therefore offer the following summary of site design considerations:

- The site is a buildable lot as defined in the bylaw and is presently used for previously permitted commercial contractor uses;
- The site is situated in an "Eligible Location" within the Industrial I zoning district per the bylaw;
- The proposed use will be contained within a permanent building;
- The proposed facility is expected to include 25,000 s.f. of cultivation area and 5,000 s.f. for manufacturing and processing, for a grand total of 30,000 s.f. of building area, thereby meeting the size limitations of the Zoning Bylaw;

- The proposed RMD does not lie within 500 feet of any of the uses described in 5.BB.5.e of the Bylaw. The proximity of the Medway Dance Academy located at 23 Jayar Road has been questioned. The proposed building would be approximately 700 feet from the nearest property corner of 23 Jayar Road;
- A full site plan will be prepared and submitted as part of the Site Plan and Special Permit approval process including proposed site features, a stormwater management system in compliance with DEP Stormwater Management Standards, building drawings and other content normally required for commercial development in Medway;
- The proposed building will meet the setback requirements of the bylaw;
- The proposed parking facility will meet the quantity, location, and size requirements of the bylaw, and will be situated at the front of the building at the Marc Road site entrance;
- The RMD facility will be properly secured as required by State regulation;
- The Special Permit would not be sought until after provisional approval has been obtained from the Commonwealth, thereby complying with 5.BB.6.d.2;
- It is anticipated that the various other requirements of section 5.BB will be met; and
- The proposal will also undertake Site Plan review and may be subject to a Special Permit for use in a Groundwater Protection District. It is our expectation that such requirements will be met by the proposed site design.

Attached are two conceptual site design exhibits. Please do not hesitate to contact me if you have any questions or comments.

Yours Truly,

MERRIKIN ENGINEERING, LLP



Digitally signed by Daniel J.  
Merrikin, P.E.  
Date: 2015.06.19 09:24:06 -04'00'

Daniel J. Merrikin P.E.  
Partner

cc: File



LOCUS

PROPOSED BUILDING

500' SETBACK



**MERRIKIN  
ENGINEERING, LLP**  
730 MAIN STREET, SUITE 2C  
MILLIS, MA 02054  
ph. 508-376-8883 fax 508-376-8823

REVISION	DATE	BY
PLAN SCALE: 1" = 400' 0'                      400'                      800' 		
SHEET 1 OF 1		

**MEDWAY IND. PARK  
SKETCH  
PLAN OF LAND  
IN  
MEDWAY, MA  
PLAN DATE: 6/18/2015**



2 MARC ROAD &  
O JAYAR ROAD  
5.2± ACRES

STORMWATER  
MANAGEMENT  
AREA

STORMWATER  
MANAGEMENT  
AREA

PAVED  
LOADING  
AREA

PROPERTY LINE

20' CIRCULATING DRIVEWAY

125'

PROPOSED  
30,000 S.F.  
BUILDING

240'

24' DRIVEWAY

PROPERTY LINE

PARKING AREA

~41 SPACES

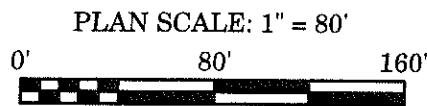


MARC ROAD



730 MAIN STREET, SUITE 2C  
MILLIS, MA 02054  
ph. 508-376-8883 fax 508-376-8823

REVISION	DATE	BY



SHEET 1 OF 1

MEDWAY IND. PARK  
SITE SKETCH  
PLAN OF LAND  
IN  
MEDWAY, MA  
PLAN DATE: 6/18/2015

TAB "G"

**SECTION C: LETTER OF SUPPORT OR NON-OPPOSITION**

*Attach a letter of support or non-opposition, using one of the templates below (Option A or B), signed by the local municipality in which the applicant intends to locate a dispensary. The applicant may choose to use either template, in consultation with the host community. If the applicant is proposing a dispensary location and a separate cultivation/processing location, the applicant must submit a letter of support or non-opposition from both municipalities. This letter may be signed by (a) the Chief Executive Officer/Chief Administrative Officer, as appropriate, for the desired municipality; or (b) the City Council, Board of Alderman, or Board of Selectmen for the desired municipality. The letter of support or non-opposition must contain the language as provided below. The letter must be printed on the municipality's official letterhead.*

**Template Option A: Use this language if signatory is a Chief Executive Officer/Chief Administrative Officer**

*I, [Name of person], do hereby provide [support/non-opposition] to [name of non-profit organization] to operate a Registered Marijuana Dispensary ("RMD") in [name of city or town].*

*I have verified with the appropriate local officials that the proposed RMD facility is located in a zoning district that allows such use by right or pursuant to local permitting.*

\_\_\_\_\_  
Name and Title of Individual

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Template Option B: Use this language if signatory is acting on behalf of a City Council, Board of Alderman, or Board of Selectman**

*The [name of council/board], does hereby provide [support/non-opposition] to [name of non-profit organization] to operate a Registered Marijuana Dispensary in [name of city or town]. I have been authorized to provide this letter on behalf of the [name of council/board] by a vote taken at a duly noticed meeting held on [date].*

*The [name of council/board] has verified with the appropriate local officials that the proposed RMD facility is located in a zoning district that allows such use by right or pursuant to local permitting.*

\_\_\_\_\_  
Name and Title of Individual (or person authorized to act on behalf of council or board) (add more lines for names if needed)

\_\_\_\_\_  
Signature (add more lines for signatures if needed)

\_\_\_\_\_  
Date

Information on this page has been reviewed by the applicant, and where provided by the applicant, is accurate and complete, as indicated by the initials of the authorized signatory here: \_\_\_\_\_

# AGENDA

## ITEM #2

### Appointment – Richard Di Iulio – Full Member Planning and Economic Development Board

*Associated back up materials attached.*

- Memorandum from Susy Affleck-Childs, PEDB Coordinator, dated June 24, 2015

**Proposed motion:** I move that the Board appoint Richard Di Iulio as full member of the Planning & Economic Development Board to replace the position vacated by Karyl Spiller-Walsh until the May 2016 elections.



**TOWN OF MEDWAY**  
**Planning & Economic Development**  
155 Village Street  
Medway, Massachusetts 02053

*Andy Rodenhiser, Chairman*  
*Robert K. Tucker, Vice-Chairman*  
*Thomas A. Gay, Clerk*  
*Matthew J. Hayes, P.E.*  
*Karyl Spiller-Walsh*  
*Richard Di Iulio, Associate Member*

**MEMORANDUM**

June 24, 2015

**TO:** Medway Board of Selectmen  
**FROM:** Susy Affleck-Childs, Planning and Economic Development Coordinator  
**RE:** Planning and Economic Development Board Vacancy  
Appointment of Richard Di Iulio

Karyl Spiller-Walsh has resigned her position as a member of the Medway Planning and Economic Development Board effective June 30, 2015.

At its meeting on June 23, 2015, the Planning and Economic Development Board voted to appoint Richard Di Iulio to fill that vacancy until the May 2016 elections. The PEDB requests and enthusiastically recommends that the BOS also appoint Rich Di Iulio to this position.

Rich has served as the PEDB's Associate Member since September 2013. He has reliably attended PEDB meetings, actively participated in discussions, and attended training programs.

# AGENDA

## ITEM #3

### Approval – DOER Energy Manager Grant Year 2

*Associated back up materials attached.*

- Email from Paul Carey, Grant Coordinator for Massachusetts Department of Energy Resources, dated June 5, 2015
- Second year extension for the Medway/Millis Energy manager grant contract

**Proposed motion:** I move that the Board authorize the Chair to execute the Commonwealth's Standard Form of Contract for Year 2 of the energy manager grant.

**From:** Carey, Paul S (ENE) [<mailto:paul.s.carey@state.ma.us>]  
**Sent:** Friday, June 05, 2015 2:19 PM  
**To:** Board of Selectmen; Robert Weiss  
**Cc:** Brown, Kelly (ENE)  
**Subject:** Medway/Millis Energy manager grant-2nd year

Good Day:

Attached please find the second year extension for the Medway/Millis Energy manager grant contract. The second year of funding for this grant will provide \$35,000 to fund an energy manager position and activities led by the position. Congratulations on the renewal!

Please review this contract, and return a wet ink copy of the signature page to me by mail at the address below.

The requirements of the contract are similar to the first year grant. We ask that you supply us with a work plan in the next few months, and then a progress report about 3 months after that. The particular requirements are detailed on pages 33-34 of the attached contract.

Let me know if you have any questions.

**Paul Carey, Grant Coordinator**

Massachusetts Department of Energy Resources

**Green Communities Division**

100 Cambridge Street, Suite 1020, Boston, MA 02114

Ph: 617.626.7372 Fax: 617.727.0030

<http://www.mass.gov/doer/>



***Creating a Greener Energy Future for the Commonwealth***

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**COMMONWEALTH OF MASSACHUSETTS ~ STANDARD CONTRACT FORM**



This form is jointly issued and published by the Executive Office for Administration and Finance (ANF), the Office of the Comptroller (CTR) and the Operational Services Division (OSD) as the default contract for all Commonwealth Departments when another form is not prescribed by regulation or policy. Any changes to the official printed language of this form shall be void. Additional non-conflicting terms may be added by Attachment. Contractors may not require any additional agreements, engagement letters, contract forms or other additional terms as part of this Contract without prior Department approval. Click on hyperlinks for definitions, instructions and legal requirements that are incorporated by reference into this Contract. An electronic copy of this form is available at [www.mass.gov/osc](http://www.mass.gov/osc) under [Guidance For Vendors - Forms](#) or [www.mass.gov/osd](http://www.mass.gov/osd) under [OSD Forms](#).

<b>CONTRACTOR LEGAL NAME:</b> (and d/b/a): <u>Town of Medway</u>		<b>COMMONWEALTH DEPARTMENT NAME:</b> Department of Energy Resources <b>MMARS Department Code:</b> DOER-ENE	
<b>Legal Address: (W-9, W-4,T&amp;C):</b> 155 Village St, Medway, MA 02053		<b>Business Mailing Address:</b> 100 Cambridge St, Ste 1020, Boston, MA 02114	
<b>Contract Manager:</b> Dennis Crowley		<b>Billing Address (if different):</b>	
<b>E-Mail:</b> <u>bos@townofmedway.org</u>		<b>Contract Manager:</b> Paul Carey	
<b>Phone:</b> 508-533-3264	<b>Fax:</b>	<b>E-Mail:</b> <u>Paul.S.Carey@state.ma.us</u>	
<b>Contractor Vendor Code:</b> VC6000191877		<b>Phone:</b> 617-626-7372	<b>Fax:</b> 617-727-0030
<b>Vendor Code Address ID (e.g. "AD001"):</b> AD (Note: The Address ID Must be set up for EFT payments.)		<b>MMARS Doc ID(s):</b> CT ENE 2015ENEP01MEDWAY0113	
		<b>RFR/Procurement or Other ID Number:</b> PON-ENE-2014-011	
<b>___ NEW CONTRACT</b>		<b><u>X</u> CONTRACT AMENDMENT</b>	
<b>PROCUREMENT OR EXCEPTION TYPE: (Check one option only)</b> ___ <u>Statewide Contract</u> (OSD or an OSD-designated Department) ___ <u>Collective Purchase</u> (Attach OSD approval, scope, budget) ___ <u>Department Procurement</u> (includes State or Federal grants 815 CMR 2.00) (Attach RFR and Response or other procurement supporting documentation) ___ <u>Emergency Contract</u> (Attach justification for emergency, scope, budget) ___ <u>Contract Employee</u> (Attach <u>Employment Status Form</u> , scope, budget) ___ <u>Legislative/Legal or Other:</u> (Attach authorizing language/justification, scope and budget)		Enter Current Contract End Date <u>Prior</u> to Amendment: <u>August 24</u> , 2015 Enter Amendment Amount: \$ <u>35,000</u> . (or "no change") <b>AMENDMENT TYPE: (Check one option only. Attach details of Amendment changes.)</b> <u>X</u> <u>Amendment to Scope or Budget</u> (Attach updated scope and budget) ___ <u>Interim Contract</u> (Attach justification for Interim Contract and updated scope/budget) ___ <u>Contract Employee</u> (Attach any updates to scope or budget) ___ <u>Legislative/Legal or Other:</u> (Attach authorizing language/justification and updated scope and budget)	
The following <b>COMMONWEALTH TERMS AND CONDITIONS (T&amp;C)</b> has been executed, filed with CTR and is incorporated by reference into this Contract. ___ Commonwealth Terms and Conditions ___ Commonwealth Terms and Conditions For Human and Social Services			
<b>COMPENSATION:</b> (Check ONE option): The Department certifies that payments for authorized performance accepted in accordance with the terms of this Contract will be supported in the state accounting system by sufficient appropriations or other non-appropriated funds, subject to intercept for Commonwealth owed debts under 815 CMR 9.00. ___ <u>Rate Contract</u> (No Maximum Obligation. Attach details of all rates, units, calculations, conditions or terms and any changes if rates or terms are being amended.) <u>X</u> <u>Maximum Obligation Contract</u> Enter Total Maximum Obligation for total duration of this Contract (or <u>new</u> Total if Contract is being amended). \$ <u>85,000</u>			
<b>PROMPT PAYMENT DISCOUNTS (PPD):</b> Commonwealth payments are issued through EFT 45 days from invoice receipt. Contractors requesting accelerated payments must identify a PPD as follows: Payment issued within 10 days ___% PPD; Payment issued within 15 days ___% PPD; Payment issued within 20 days ___% PPD; Payment issued within 30 days ___% PPD. If PPD percentages are left blank, identify reason: <u>X</u> agree to standard 45 day cycle ___ statutory/legal or Ready Payments (G.L. c. 29, § 23A); ___ only initial payment (subsequent payments scheduled to support standard EFT 45 day payment cycle. See <u>Prompt Pay Discounts Policy</u> .)			
<b>BRIEF DESCRIPTION OF CONTRACT PERFORMANCE OR REASON FOR AMENDMENT:</b> (Enter the Contract title, purpose, fiscal year(s) and a detailed description of the scope of performance or what is being amended for a Contract Amendment. Attach all supporting documentation and justifications.) To amend the scope, end date, and budget.			
<b>ANTICIPATED START DATE:</b> (Complete ONE option only) The Department and Contractor certify for this Contract, or Contract Amendment, that Contract obligations: ___ 1. may be incurred as of the <u>Effective Date</u> (latest signature date below) and <u>no</u> obligations have been incurred <u>prior</u> to the <u>Effective Date</u> . ___ 2. may be incurred as of <u>2014</u> , a date <u>LATER</u> than the <u>Effective Date</u> below and <u>no</u> obligations have been incurred <u>prior</u> to the <u>Effective Date</u> . <u>X</u> 3. were incurred as of <u>July 1</u> , 2014, a date <u>PRIOR</u> to the <u>Effective Date</u> below, and the parties agree that payments for any obligations incurred prior to the <u>Effective Date</u> are authorized to be made either as settlement payments or as authorized reimbursement payments, and that the details and circumstances of all obligations under this Contract are attached and incorporated into this Contract. Acceptance of payments forever releases the Commonwealth from further claims related to these obligations.			
<b>CONTRACT END DATE:</b> Contract performance shall terminate as of <u>August 24</u> , 2016, with no new obligations being incurred after this date unless the Contract is properly amended, provided that the terms of this Contract and performance expectations and obligations shall survive its termination for the purpose of resolving any claim or dispute, for completing any negotiated terms and warranties, to allow any close out or transition performance, reporting, invoicing or final payments, or during any lapse between amendments.			
<b>CERTIFICATIONS:</b> Notwithstanding verbal or other representations by the parties, the "Effective Date" of this Contract or Amendment shall be the latest date that this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, or a later Contract or Amendment Start Date specified above, subject to any required approvals. The Contractor makes all certifications required under the attached <u>Contractor Certifications</u> (incorporated by reference if not attached hereto) under the pains and penalties of perjury, agrees to provide any required documentation upon request to support compliance, and agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached or incorporated by reference herein according to the following hierarchy of document precedence, the applicable <u>Commonwealth Terms and Conditions</u> , this Standard Contract Form including the <u>Instructions and Contractor Certifications</u> , the Request for Response (RFR) or other solicitation, the Contractor's Response, and additional negotiated terms, provided that additional negotiated terms will take precedence over the relevant terms in the RFR and the Contractor's Response only if made using the process outlined in <u>801 CMR 21.07</u> , incorporated herein, provided that any amended RFR or Response terms result in best value, lower costs, or a more cost effective Contract.			
<b>AUTHORIZING SIGNATURE FOR THE CONTRACTOR:</b>		<b>AUTHORIZING SIGNATURE FOR THE COMMONWEALTH:</b>	
X: _____ Date: _____ (Signature and Date Must Be Handwritten At Time of Signature)		X: _____ Date: _____ (Signature and Date Must Be Handwritten At Time of Signature)	
Print Name: <u>John A. Foresto</u>		Print Name: <u>Stephen A. White</u>	
Print Title: <u>Chair, Board of Selectmen</u>		Print Title: <u>Chief Financial Officer</u>	



## INSTRUCTIONS AND CONTRACTOR CERTIFICATIONS

The following instructions and terms are incorporated by reference and apply to this Standard Contract Form. Text that appears underlined indicates a "hyperlink" to an internet or bookmarked site and are unofficial versions of these documents and Departments and Contractors should consult with their legal counsel to ensure compliance with all legal requirements. Using the Web Toolbar will make navigation between the form and the hyperlinks easier. Please note that not all applicable laws have been cited.

**CONTRACTOR LEGAL NAME (AND D/B/A):** Enter the Full Legal Name of the Contractor's business as it appears on the Contractor's W-9 or W-4 Form (Contract Employees only) and the applicable Commonwealth Terms and Conditions if Contractor also has a "doing business as" (d/b/a) name, BOTH the legal name and the "d/b/a" name must appear in this section.

**Contractor Legal Address:** Enter the Legal Address of the Contractor as it appears on the Contractor's W-9 or W-4 Form (Contract Employees only) and the applicable Commonwealth Terms and Conditions, which must match the legal address on the 1099I table in MMARS (or the Legal Address in HR/CMS for Contract Employee).

**Contractor Contract Manager:** Enter the authorized Contract Manager who will be responsible for managing the Contract. The Contract Manager should be an Authorized Signatory or, at a minimum, a person designated by the Contractor to represent the Contractor, receive legal notices and negotiate ongoing Contract issues. The Contract Manager is considered "Key Personnel" and may not be changed without the prior written approval of the Department. If the Contract is posted on COMMBUYS, the name of the Contract Manager must be included in the Contract on COMMBUYS.

**Contractor E-Mail Address/Phone/Fax:** Enter the electronic mail (e-mail) address, phone and fax number of the Contractor Contract Manager. This information must be kept current by the Contractor to ensure that the Department can contact the Contractor and provide any required legal notices. Notice received by the Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address will meet any written legal notice requirements.

**Contractor Vendor Code:** The Department must enter the MMARS Vendor Code assigned by the Commonwealth. If a Vendor Code has not yet been assigned, leave this space blank and the Department will complete this section when a Vendor Code has been assigned. The Department is responsible under the Vendor File and W-9s Policy for verifying with authorized signatories of the Contractor, as part of contract execution, that the legal name, address and Federal Tax Identification Number (TIN) in the Contract documents match the state accounting system.

**Vendor Code Address ID:** (e.g., "AD001") The Department must enter the MMARS Vendor Code Address ID identifying the payment remittance address for Contract payments, which MUST be set up for EFT payments PRIOR to the first payment under the Contract in accordance with the Bill Paying and Vendor File and W-9 policies.

**COMMONWEALTH DEPARTMENT NAME:** Enter the full Department name with the authority to obligate funds encumbered for the Contract.

**Commonwealth MMARS Alpha Department Code:** Enter the three (3) letter MMARS Code assigned to this Commonwealth Department in the state accounting system.

**Department Business Mailing Address:** Enter the address where all formal correspondence to the Department must be sent. Unless otherwise specified in the Contract, legal notice sent or received by the Department's Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address for the Contract Manager will meet any requirements for legal notice.

**Department Billing Address:** Enter the Billing Address or email address if invoices must be sent to a different location. Billing or confirmation of delivery of performance issues should be resolved through the listed Contract Managers.

**Department Contract Manager:** Identify the authorized Contract Manager who will be responsible for managing the Contract, who should be an authorized signatory or an employee designated by the Department to represent the Department to receive legal notices and negotiate ongoing Contract issues.

**Department E-Mail Address/Phone/Fax:** Enter the electronic mail (e-mail) address, phone and fax number of the Department Contract Manager. Unless otherwise specified in the Contract, legal notice sent or received by the Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address will meet any requirements for written notice under the Contract.

**MMARS Document ID(s):** Enter the MMARS 20 character encumbrance transaction number associated with this Contract which must remain the same for the life of the Contract. If multiple numbers exist for this Contract, identify all Doc Ids.

**RFR/Procurement or Other ID Number or Name:** Enter the Request for Response (RFR) or other Procurement Reference number, Contract ID Number or other reference/tracking number for this Contract or Amendment and will be entered into the Board Award Field in the MMARS encumbrance transaction for this Contract.

## NEW CONTRACTS (left side of Form):

Complete this section ONLY if this Contract is brand new. (Complete the CONTRACT AMENDMENT section for any material changes to an existing or an expired Contract, and for exercising options to renew or annual contracts under a multi-year procurement or grant program.)

**PROCUREMENT OR EXCEPTION TYPE:** Check the appropriate type of procurement or exception for this Contract. Only one option can be selected. See State Finance Law and General Requirements, Acquisition Policy and Fixed Assets, the Commodities and Services Policy and the Procurement Information Center (Department Contract Guidance) for details.

**Statewide Contract (OSD or an OSD-designated Department).** Check this option for a Statewide Contract under OSD, or by an OSD-designated Department.

**Collective Purchase approved by OSD.** Check this option for Contracts approved by OSD for collective purchases through federal, state, local government or other entities.

**Department Contract Procurement.** Check this option for a Department procurement including state grants and federal sub-grants under 815 CMR 2.00 and State Grants and Federal Subgrants Policy, Departmental Master Agreements (MA). If multi-Department user Contract, identify multi-Department use is allowable in Brief Description.

**Emergency Contract.** Check this option when the Department has determined that an unforeseen crisis or incident has arisen which requires or mandates immediate purchases to avoid substantial harm to the functioning of government or the provision of necessary or mandated services or whenever the health, welfare or safety of clients or other persons or serious damage to property is threatened.

**Contract Employee.** Check this option when the Department requires the performance of an Individual Contractor, and when the planned Contract performance with an Individual has been classified using the Employment Status Form (prior to the Contractor's selection) as work of a Contract Employee and not that of an Independent Contractor.

**Legislative/Legal or Other.** Check this option when legislation, an existing legal obligation, prohibition or other circumstance exempts or prohibits a Contract from being competitively procured, or identify any other procurement exception not already listed. Legislative "earmarks" exempt the Contract solely from procurement requirements, and all other Contract and state finance laws and policies apply. Supporting documentation must be attached to explain and justify the exemption.

## CONTRACT AMENDMENT (Right Side of Form)

Complete this section for any Contract being renewed, amended or to continue a lapsed Contract. All Contracts with available options to renew must be amended referencing the original procurement and Contract doc ids, since all continuing contracts must be maintained in the same Contract file (even if the underlying appropriation changes each fiscal year.) "See Amendments, Suspensions, and Termination Policy."

**Enter Current Contract End Date:** Enter the termination date of the Current Contract being amended, even if this date has already passed. (Note: Current Start Date is not requested since this date does not change and is already recorded in MMARS.)

**Enter Amendment Amount:** Enter the amount of the Amendment increase or decrease to a Maximum Obligation Contract. Enter "no change" for Rate Contracts or if no change.

**AMENDMENT TYPE:** Identify the type of Amendment being done. Documentation supporting the updates to performance and budget must be attached. **Amendment to Scope or Budget.** Check this option when renewing a Contract or executing any Amendment ("material change" in Contract terms) even if the Contract has lapsed. The parties may negotiate a change in any element of Contract performance or cost identified in the RFR or the Contractor's response which results in lower costs, or a more cost-effective or better value performance than was presented in the original selected response, provided the negotiation results in a better value within the scope of the RFR than what was proposed by the Contractor in the original selected response. Any "material" change in the Contract terms must be memorialized in a formal Amendment even if a corresponding MMARS transaction is not needed to support the change. Additional negotiated terms will take precedence over the relevant terms in the RFR and the Contractor's Response only if made using the process outlined in 801 CMR 21.07, incorporated herein, provided that any amended RFR or Response terms result in best value, lower costs, or a more cost effective Contract.

**Interim Contracts.** Check this option for an Interim Contract to prevent a lapse of Contract performance whenever an existing Contract is being re-procured but the new procurement has not been completed, to bridge the gap during implementation between an expiring and a new procurement, or to contract with an interim Contractor when a current Contractor is unable to complete full performance under a Contract.

**Contract Employee.** Check this option when the Department requires a renewal or other amendment to the performance of a Contract Employee.

**Legislative/Legal or Other.** Check this option when legislation, an existing legal obligation, prohibition or other circumstance exempts or prohibits a Contract from being competitively procured, or identify any other procurement exception not already listed. Legislative "earmarks" exempt the Contract solely from procurement requirements, and all other Contract and state finance laws and policies apply. Attach supporting documentation to explain and justify the exemption and whether Contractor selection has been publicly posted.

## COMMONWEALTH TERMS AND CONDITIONS

Identify which Commonwealth Terms and Conditions the Contractor has executed and is incorporated by reference into this Contract. This Form is signed only once and recorded on the Vendor Customer File (VCUST). See Vendor File and W-9s Policy.



### COMPENSATION

Identify if the Contract is a **Rate Contract** (with no stated Maximum Obligation) or a **Maximum Obligation Contract** (with a stated Maximum Obligation) and identify the Maximum Obligation. If the Contract is being amended, enter the new Maximum Obligation used upon the increase or decreasing Amendment. The Total Maximum Obligation must reflect the total funding for the dates of service under the contract, including the Amendment amount if the Contract is being amended. The Maximum Obligation must match the MMARS encumbrance. Funding and allotments must be verified as available and encumbered prior to incurring obligations. If a Contract includes both a Maximum Obligation component and Rate Contract component, check off both, specific Maximum Obligation amounts or amended amounts and Attachments must clearly outline the Contract breakdown to match the encumbrance.

### PAYMENTS AND PROMPT PAY DISCOUNTS

Payments are processed within a 45 day payment cycle through EFT in accordance with the Commonwealth Bill Paying Policy for investment and cash flow purposes. Departments may NOT negotiate accelerated payments and Payees are NOT entitled to accelerated payments UNLESS a prompt payment discount (PPD) is provided to support the Commonwealth's loss of investment earnings for this earlier payment, or unless a payment is legally mandated to be made in less than 45 days (e.g., construction contracts, Ready Payments under G.L. c. 29, s. 23A). See Prompt Pay Discounts Policy. PPD are identified as a percentage discount which will be automatically deducted when an accelerated payment is made. Reduced contract rates may not be negotiated to replace a PPD. If PPD fields are left blank please identify that the Contractor agrees to the standard 45 day cycle; a statutory/legal exemption such as Ready Payments (G.L. c. 29, § 23A); or only an initial accelerated payment for reimbursements or start up costs for a grant, with subsequent payments scheduled to support standard EFT 45 day payment cycle. Financial hardship is not a sufficient justification to accelerate cash flow for all payments under a Contract. Initial grant or contract payments may be accelerated for the first invoice or initial grant installment, but subsequent periodic installments or invoice payments should be scheduled to support the Payee cash flow needs and the standard 45 day EFT payment cycle in accordance with the Bill Paying Policy. Any accelerated payment that does not provide for a PPD must have a legal justification in Contract file for audit purposes explaining why accelerated payments were allowable without a PPD.

### BRIEF DESCRIPTION OF CONTRACT PERFORMANCE

Enter a brief description of the Contract performance, project name and/or other identifying information for the Contract to specifically identify the Contract performance, match the contract with attachments, determine the appropriate expenditure code (as listed in the Expenditure Classification Handbook) or to identify or clarify important information related to the Contract such as the Fiscal Year(s) of performance (ex. "FY2012" or "FY2012-14"). Identify settlements or other exceptions and attach more detailed justification and supporting documents. Enter "Multi-Department Use" if other Departments can access procurement. For Amendments, identify the purpose and what items are being amended. Merely stating "see attached" or referencing attachments without a narrative description of performance is insufficient.

### ANTICIPATED START DATE

The Department and Contractor must certify WHEN obligations under this Contract/Amendment may be incurred. Option 1 is the default option when performance may begin as of the Effective Date (latest signature date and any required approvals). If the parties want a new Contract or renewal to begin as of the upcoming fiscal year then list the fiscal year(s) (ex. "FY2012" or "FY2012-14") in the Brief Description section. Performance starts and encumbrances reflect the default Effective Date (if no FY is listed) or the later FY start date (if a FY is listed). Use Option 2 only when the Contract will be signed well in advance of the start date and identify a specific future start date. Do not use Option 2 for a fiscal year start unless it is certain that the Contract will be signed prior to fiscal year. Option 3 is used in lieu of the Settlement and Release Form when the Contract/Amendment is signed late, and obligations have already been incurred by the Contractor prior to the Effective Date for which the Department has either requested, accepted or deemed legally eligible for reimbursement, and the Contract includes supporting documents justifying the performance or proof of eligibility, and approximate costs. Any obligations incurred outside the scope of the Effective Date under any Option listed, even if the incorrect Option is selected, shall be automatically deemed a settlement included under the terms of the Contract and upon payment to the Contractor will release the Commonwealth from further obligations for the identified performance. All settlement payments require justification and must be under same encumbrance and object codes as the Contract payments. Performance dates are subject to G.L. c.4, § 9.

### CONTRACT END DATE

The Department must enter the date that Contract performance will terminate. If the Contract is being amended and the Contract End Date is not changing, this date must be re-entered again here. A Contract must be signed for at least the initial duration but not longer than the period of procurement listed in the RFR, or other solicitation document (if applicable). No new performance is allowable beyond the end date without an amendment, but the Department may allow a Contractor to complete minimal close out

performance obligations if substantial performance has been made prior to the termination date of the Contract and prior to the end of the fiscal year in which payments are appropriated, provided that any close out performance is subject to appropriation and funding limits under state finance law, and CTR may adjust encumbrances and payments in the state accounting system to enable final close out payments. Performance dates are subject to G.L. c.4, § 9.

### CERTIFICATIONS AND EXECUTION

See Department Head Signature Authorization Policy and the Contractor Authorized Signatory Listing for policies on Contractor and Department signatures.

**Authorizing Signature for Contractor/Date:** The Authorized Contractor Signatory must (in their own handwriting and in ink) sign AND enter the date the Contract is signed. See section above under "Anticipated Contract Start Date". Acceptance of payment by the Contractor shall waive any right of the Contractor to claim the Contract/Amendment is not valid and the Contractor may not void the Contract. **Rubber stamps, typed or other images are not acceptable.** Proof of Contractor signature authorization on a Contractor Authorized Signatory Listing may be required by the Department if not already on file.

**Contractor Name /Title:** The Contractor Authorized Signatory's name and title must appear legibly as it appears on the Contractor Authorized Signatory Listing.

**Authorizing Signature For Commonwealth/Date:** The Authorized Department Signatory must (in their own handwriting and in ink) sign AND enter the date the Contract is signed. See section above under "Anticipated Start Date". **Rubber stamps, typed or other images are not accepted.** The Authorized Signatory must be an employee within the Department legally responsible for the Contract. See Department Head Signature Authorization. The Department must have the legislative funding appropriated for all the costs of this Contract or funding allocated under an approved interdepartmental Service Agreement (ISA). A Department may not contract for performance to be delivered to or by another state department without specific legislative authorization (unless this Contract is a Statewide Contract). For Contracts requiring Secretariat signoff, evidence of Secretariat signoff must be included in the Contract file.

**Department Name /Title:** Enter the Authorized Signatory's name and title legibly.

### CONTRACTOR CERTIFICATIONS AND LEGAL REFERENCES

Notwithstanding verbal or other representations by the parties, the "Effective Date" of this Contract or Amendment shall be the latest date that this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, or a later Contract or Amendment Start Date specified, subject to any required approvals. The Contractor makes all certifications required under this Contract under the pains and penalties of perjury, and agrees to provide any required documentation upon request to support compliance, and agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached or incorporated by reference herein:

**Commonwealth and Contractor Ownership Rights.** The Contractor certifies and agrees that the Commonwealth is entitled to ownership and possession of all "deliverables" purchased or developed with Contract funds. A Department may not relinquish Commonwealth rights to deliverables nor may Contractors sell products developed with Commonwealth resources without just compensation. The Contract should detail all Commonwealth deliverables and ownership rights and any Contractor proprietary rights.

**Qualifications.** The Contractor certifies it is qualified and shall at all times remain qualified to perform this Contract; that performance shall be timely and meet or exceed industry standards for the performance required, including obtaining requisite licenses, registrations, permits, resources for performance, and sufficient professional, liability; and other appropriate insurance to cover the performance. If the Contractor is a business, the Contractor certifies that it is listed under the Secretary of State's website as licensed to do business in Massachusetts, as required by law.

**Business Ethics and Fraud, Waste and Abuse Prevention.** The Contractor certifies that performance under this Contract, in addition to meeting the terms of the Contract, will be made using ethical business standards and good stewardship of taxpayer and other public funding and resources to prevent fraud, waste and abuse.

**Collusion.** The Contractor certifies that this Contract has been offered in good faith and without collusion, fraud or unfair trade practices with any other person, that any actions to avoid or frustrate fair and open competition are prohibited by law, and shall be grounds for rejection or disqualification of a Response or termination of this Contract.

**Public Records and Access** The Contractor shall provide full access to records related to performance and compliance to the Department and officials listed under Executive Order 195 and G.L. c. 11, s.12 seven (7) years beginning on the first day after the final payment under this Contract or such longer period necessary for the resolution of any litigation, claim, negotiation, audit or other inquiry involving this Contract. Access to view Contractor records related to any breach or allegation of fraud, waste and/or abuse may not be denied and Contractor can not claim confidentiality or trade secret protections solely for viewing but not retaining documents. Routine Contract performance compliance reports or documents related to any alleged breach or allegation of non-compliance, fraud, waste, abuse or collusion may be provided electronically and shall be provided at Contractor's own expense. Reasonable costs for copies of non-routine Contract related records shall not exceed the rates for public records under 950 C.M.R. 32.00.



**Debarment.** The Contractor certifies that neither it nor any of its subcontractors are currently debarred or suspended by the federal or state government under any law or regulation including, Executive Order 147; G.L. c. 29, s. 29F; G.L. c.30, § 39R; G.L. c.149, § 27C; G.L. c.149, § 44C; G.L. c.149, § 148B and G.L. c. 152, s. 25C.

**Applicable Laws.** The Contractor shall comply with all applicable state laws and regulations including but not limited to the applicable Massachusetts General Laws; the Official Code of Massachusetts Regulations; Code of Massachusetts Regulations (unofficial); 801 CMR 21.00 (Procurement of Commodity and Service Procurements, including Human and Social Services); 815 CMR 2.00 (Grants and Subsidies); 808 CMR 1.00 (Compliance, Reporting and Auditing for Human And Social Services); AICPA Standards; confidentiality of Department records under G.L. c. 66A; and the Massachusetts Constitution Article XVIII if applicable.

**Invoices.** The Contractor must submit invoices in accordance with the terms of the Contract and the Commonwealth Bill Paving Policy. Contractors must be able to reconcile and properly attribute concurrent payments from multiple Departments. Final invoices in any fiscal year must be submitted no later than August 15<sup>th</sup> for performance made and received (goods delivered, services completed) prior to June 30<sup>th</sup>, in order to make payment for that performance prior to the close of the fiscal year to prevent reversion of appropriated funds. Failure to submit timely invoices by August 15<sup>th</sup> or other date listed in the Contract shall authorize the Department to issue an estimated payment based upon the Department's determination of performance delivered and accepted. The Contractor's acceptance of this estimated payment releases the Commonwealth from further claims for these invoices. If budgetary funds revert due to the Contractor's failure to submit timely final invoices, or for disputing an estimated payment, the Department may deduct a penalty up to 10% from any final payment in the next fiscal year for failure to submit timely invoices.

**Payments Subject To Appropriation.** Pursuant to G.L. c. 29 § 26, § 27 and § 29, Departments are required to expend funds only for the purposes set forth by the Legislature and within the funding limits established through appropriation, allotment and subsidiary, including mandated allotment reductions triggered by G.L. c. 29, § 9C. A Department cannot authorize or accept performance in excess of an existing appropriation and allotment, or sufficient non-appropriated available funds. Any oral or written representations, commitments, or assurances made by the Department or any other Commonwealth representative are not binding. The Commonwealth has no legal obligation to compensate a Contractor for performance that is not requested and is intentionally delivered by a Contractor outside the scope of a Contract. Contractors should verify funding prior to beginning performance.

**Intercept.** Contractors may be registered as Customers in the Vendor file if the Contractor owes a Commonwealth debt. Unresolved and undisputed debts, and overpayments of Contract payments that are not reimbursed timely shall be subject to intercept pursuant to G.L. c. 7A, s. 3 and 815 CMR 9.00. Contract overpayments will be subject to immediate intercept or payment offset. The Contractor may not penalize any state Department or assess late fees, cancel a Contract or other services if amounts are intercepted or offset due to recoupment of an overpayment, outstanding taxes, child support, other overdue debts or Contract overpayments.

**Tax Law Compliance.** The Contractor certifies under the pains and penalties of perjury tax compliance with Federal tax laws; state tax laws including but not limited to G.L. c. 62C; G.L. c. 62C, s. 49A; compliance with all state tax laws, reporting of employees and contractors, withholding and remitting of tax withholdings and child support and is in good standing with respect to all state taxes and returns due; reporting of employees and contractors under G.L. c. 62E, withholding and remitting child support including G.L. c. 119A, s. 12; TIR 05-11; New Independent Contractor Provisions and applicable TIRs.

**Bankruptcy, Judgments, Potential Structural Changes, Pending Legal Matters and Conflicts.** The Contractor certifies it has not been in bankruptcy and/or receivership within the last three calendar years, and the Contractor certifies that it will immediately notify the Department in writing at least 45 days prior to filing for bankruptcy and/or receivership, any potential structural change in its organization, or if there is any risk to the solvency of the Contractor that may impact the Contractor's ability to timely fulfill the terms of this Contract or Amendment. The Contractor certifies that at any time during the period of the Contract the Contractor is required to affirmatively disclose in writing to the Department Contract Manager the details of any judgment, criminal conviction, investigation or litigation pending against the Contractor or any of its officers, directors, employees, agents, or subcontractors, including any potential conflicts of interest of which the Contractor has knowledge, or learns of during the Contract term. Law firms or Attorneys providing legal services are required to identify any potential conflict with representation of any Department client in accordance with Massachusetts Board of Bar Overseers (BBO) rules.

**Federal Anti-Lobbying and Other Federal Requirements.** If receiving federal funds, the Contractor certifies compliance with federal anti-lobbying requirements including 31 USC 1352; other federal requirements; Executive Order 11246; Air Pollution Act; Federal Water Pollution Control Act and Federal Employment Laws.

**Protection of Personal Data and Information.** The Contractor certifies that all steps will be taken to ensure the security and confidentiality of all Commonwealth data for which the Contractor becomes a holder, either as part of performance or inadvertently during performance, with special attention to restricting access, use and disbursement of personal data and information under G.L. c. 93H and c. 66A and Executive Order 504. The

Contractor is required to comply with G.L. c. 93I for the proper disposal of all paper and electronic media, backups or systems containing personal data and information, provided further that the Contractor is required to ensure that any personal data or information transmitted electronically or through a portable device be properly encrypted using (at a minimum) Information Technology Division (ITD) Protection of Sensitive Information, provided further that any Contractor having access to credit card or banking information of Commonwealth customers certifies that the Contractor is PCI compliant in accordance with the Payment Card Industry Council Standards and shall provide confirmation compliance during the Contract, provide further that the Contractor shall immediately notify the Department in the event of any security breach including the unauthorized access, disbursement, use or disposal of personal data or information, and in the event of a security breach, the Contractor shall cooperate fully with the Commonwealth and provide access to any information necessary for the Commonwealth to respond to the security breach and shall be fully responsible for any damages associated with the Contractor's breach including but not limited to G.L. c. 214, s. 3B.

**Corporate and Business Filings and Reports.** The Contractor certifies compliance with any certification, filing, reporting and service of process requirements of the Secretary of the Commonwealth, the Office of the Attorney General or other Departments as related to its conduct of business in the Commonwealth; and with its incorporating state (or foreign entity).

**Employer Requirements.** Contractors that are employers certify compliance with applicable state and federal employment laws or regulations, including but not limited to G.L. c. 5, s. 1 (Prevailing Wages for Printing and Distribution of Public Documents); G.L. c. 7, s. 22 (Prevailing Wages for Contracts for Meat Products and Clothing and Apparel); minimum wages and prevailing wage programs and payments; unemployment insurance and contributions; workers' compensation and insurance, child labor laws, AGO fair labor practices; G.L. c. 149 (Labor and Industries); G.L. c. 150A (Labor Relations); G.L. c. 151 and 455 CMR 2.00 (Minimum Fair Wages); G.L. c. 151A (Employment and Training); G.L. c. 151B (Unlawful Discrimination); G.L. c. 151E (Business Discrimination); G.L. c. 152 (Workers' Compensation); G.L. c. 153 (Liability for injuries); 29 USC c. 8 (Federal Fair Labor Standards); 29 USC c. 28 and the Federal Family and Medical Leave Act.

**Federal And State Laws And Regulations Prohibiting Discrimination** including but not limited to the Federal Equal Employment Opportunity (EEO) Laws the Americans with Disabilities Act; 42 U.S.C. Sec. 12,101, et seq., the Rehabilitation Act; 29 USC c. 16, s. 794; 29 USC c. 16, s. 701; 29 USC c. 14, 623; the 42 USC c. 45; (Federal Fair Housing Act); G.L. c. 151B (Unlawful Discrimination); G.L. c. 151E (Business Discrimination); the Public Accommodations Law G.L. c. 272, s. 92A; G.L. c. 272, s. 98 and 98A, Massachusetts Constitution Article CXIV and G.L. c. 93, s. 103; 47 USC c. 5, sc. II, Part II, s. 255 (Telecommunication Act; Chapter 149, Section 105D, G.L. c. 151C, G.L. c. 272, Section 92A, Section 98 and Section 98A, and G.L. c. 111, Section 199A, and Massachusetts Disability-Based Non-Discrimination Standards For Executive Branch Entities, and related Standards and Guidance, authorized under Massachusetts Executive Order or any disability-based protection arising from state or federal law or precedent. See also MCAD and MCAD links and Resources.

**Small Business Purchasing Program (SBPP).** A Contractor may be eligible to participate in the SBPP, created pursuant to Executive Order 523, if qualified through the SBPP COMMBUYS subscription process at: [www.commbuys.com](http://www.commbuys.com) and with acceptance of the terms of the SBPP participation agreement.

**Limitation of Liability for Information Technology Contracts (and other Contracts as Authorized).** The Information Technology Mandatory Specifications and the IT Acquisition Accessibility Contract Language are incorporated by reference into Information Technology Contracts. The following language will apply to Information Technology contracts in the U01, U02, U03, U04, U05, U06, U07, U08, U09, U10, U75, U98 object codes in the Expenditure Classification Handbook or other Contracts as approved by CTR or OSD. Pursuant to Section 11. Indemnification of the Commonwealth Terms and Conditions, the term "other damages" shall include, but shall not be limited to, the reasonable costs the Commonwealth incurs to repair, return, replace or seek cover (purchase of comparable substitute commodities and services) under a Contract. "Other damages" shall not include damages to the Commonwealth as a result of third party claims, provided, however, that the foregoing in no way limits the Commonwealth's right of recovery for personal injury or property damages or patent and copyright infringement under Section 11 nor the Commonwealth's ability to join the contractor as a third party defendant. Further, the term "other damages" shall not include, and in no event shall the contractor be liable for, damages for the Commonwealth's use of contractor provided products or services, loss of Commonwealth records, or data (or other intangible property), loss of use of equipment, lost revenue, lost savings or lost profits of the Commonwealth. In no event shall "other damages" exceed the greater of \$100,000, or two times the value of the product or service (as defined in the Contract scope of work) that is the subject of the claim. Section 11 sets forth the contractor's entire liability under a Contract. Nothing in this section shall limit the Commonwealth's ability to negotiate higher limitations of liability in a particular Contract, provided that any such limitation must specifically reference Section 11 of the Commonwealth Terms and Conditions. In the event the limitation of liability conflicts with accounting standards which mandate that there can be no cap of damages, the limitation shall be considered waived for that audit engagement. These terms may be applied to



other Contracts only with prior written confirmation from the Operational Services Division or the Office of the Comptroller. The terms in this Clarification may not be modified.

**Northern Ireland Certification.** Pursuant to G.L. c. 7 s. 22C for state agencies, state authorities, the House of Representatives or the state Senate, by signing this Contract the Contractor certifies that it does not employ ten or more employees in an office or other facility in Northern Ireland and if the Contractor employs ten or more employees in an office or other facility located in Northern Ireland the Contractor certifies that it does not discriminate in employment, compensation, or the terms, conditions and privileges of employment on account of religious or political belief; and it promotes religious tolerance within the work place, and the eradication of any manifestations of religious and other illegal discrimination; and the Contractor is not engaged in the manufacture, distribution or sale of firearms, munitions, including rubber or plastic bullets, tear gas, armored vehicles or military aircraft for use or deployment in any activity in Northern Ireland.

**Pandemic, Disaster or Emergency Performance.** In the event of a serious emergency, pandemic or disaster outside the control of the Department, the Department may negotiate emergency performance from the Contractor to address the immediate needs of the Commonwealth even if not contemplated under the original Contract or procurement. Payments are subject to appropriation and other payment terms.

**Consultant Contractor Certifications (For Consultant Contracts "HH" and "NN" and "U05" object codes subject to G.L. Chapter 29, s. 29A).** Contractors must make required disclosures as part of the RFR Response or using the Consultant Contractor Mandatory Submission Form.

**Attorneys.** Attorneys or firms providing legal services or representing Commonwealth Departments may be subject to G.L. c. 30, s. 65, and if providing litigation services must be approved by the Office of the Attorney General to appear on behalf of a Department, and shall have a continuing obligation to notify the Commonwealth of any conflicts of interest arising under the Contract.

**Subcontractor Performance.** The Contractor certifies full responsibility for Contract performance, including subcontractors, and that comparable Contract terms will be included in subcontracts, and that the Department will not be required to directly or indirectly manage subcontractors or have any payment obligations to subcontractors.

#### EXECUTIVE ORDERS

For covered Executive state Departments, the Contractor certifies compliance with applicable Executive Orders (see also Massachusetts Executive Orders), including but not limited to the specific orders listed below. A breach during period of a Contract may be considered a material breach and subject Contractor to appropriate monetary or Contract sanctions.

**Executive Order 481. Prohibiting the Use of Undocumented Workers on State Contracts.** For all state agencies in the Executive Branch, including all executive offices, boards, commissions, agencies, Departments, divisions, councils, bureaus, and offices, now existing and hereafter established, by signing this Contract the Contractor certifies under the pains and penalties of perjury that they shall not knowingly use undocumented workers in connection with the performance of this Contract; that, pursuant to federal requirements, shall verify the immigration status of workers assigned to a Contract without engaging in unlawful discrimination; and shall not knowingly or recklessly alter, falsify, or accept altered or falsified documents from any such worker

**Executive Order 130. Anti-Boycott.** The Contractor warrants, represents and agrees that during the time this Contract is in effect, neither it nor any affiliated company, as hereafter defined, participates in or cooperates with an international boycott (See IRC § 999(b)(3)-(4), and IRS Audit Guidelines Boycotts) or engages in conduct declared to be unlawful by G.L. c. 151E, s. 2. A breach in the warranty, representation, and agreement contained in this paragraph, without limiting such other rights as it may have, the Commonwealth shall be entitled to rescind this Contract. As used herein, an affiliated company shall be any business entity of which at least 51% of the ownership interests are directly or indirectly owned by the Contractor or by a person or persons or business entity or entities directly or indirectly owning at least 51% of the ownership interests of the Contractor, or which directly or indirectly owns at least 51% of the ownership interests of the Contractor.

**Executive Order 346. Hiring of State Employees By State Contractors.** Contractor certifies compliance with both the conflict of interest law G.L. c. 268A specifically s. 5 (f) and this order, and includes limitations regarding the hiring of state employees by private companies contracting with the Commonwealth. A privatization contract shall be deemed to include a specific prohibition against the hiring at any time during the term of Contract, and for any position in the Contractor's company, any state management employee who is, was, or will be involved in the preparation of the RFP, the negotiations leading to the awarding of the Contract, the decision to award the Contract, and/or the supervision or oversight of performance under the Contract.

**Executive Order 444. Disclosure of Family Relationships With Other State Employees.** Each person applying for employment (including Contract work) within the Executive Branch under the Governor must disclose in writing the names of all immediate family related to immediate family by marriage who serve as employees or elected officials of the Commonwealth. All disclosures made by applicants hired by the Executive Branch under the Governor shall be made available for public inspection to the extent permissible by law by the official with whom such disclosure has been filed.

#### Executive Order 504. Regarding the Security and Confidentiality of Personal Information.

For all Contracts involving the Contractor's access to personal information, as defined in G.L. c. 93H, and personal data, as defined in G.L. c. 66A, owned or controlled by Executive Department agencies, or access to agency systems containing such information or data (herein collectively "personal information"), Contractor certifies under the pains and penalties of perjury that the Contractor (1) has read Commonwealth of Massachusetts Executive Order 504 and agrees to protect any and all personal information; and (2) has reviewed all of the Commonwealth Information Technology Division's Security Policies. Notwithstanding any contractual provision to the contrary, in connection with the Contractor's performance under this Contract, for all state agencies in the Executive Department, including all executive offices, boards, commissions, agencies, departments, divisions, councils, bureaus, and offices, now existing and hereafter established, the Contractor shall: (1) obtain a copy, review, and comply with the contracting agency's Information Security Program (ISP) and any pertinent security guidelines, standards, and policies; (2) comply with all of the Commonwealth of Massachusetts Information Technology Division's "Security Policies"; (3) communicate and enforce the contracting agency's ISP and such Security Policies against all employees (whether such employees are direct or contracted) and subcontractors; (4) implement and maintain any other reasonable appropriate security procedures and practices necessary to protect personal information to which the Contractor is given access by the contracting agency from the unauthorized access, destruction, use, modification, disclosure or loss; (5) be responsible for the full or partial breach of any of these terms by its employees (whether such employees are direct or contracted) or subcontractors during or after the term of this Contract, and any breach of these terms may be regarded as a material breach of this Contract; (6) in the event of any unauthorized access, destruction, use, modification, disclosure or loss of the personal information (collectively referred to as the "unauthorized use"): (a) immediately notify the contracting agency if the Contractor becomes aware of the unauthorized use; (b) provide full cooperation and access to information necessary for the contracting agency to determine the scope of the unauthorized use; and (c) provide full cooperation and access to information necessary for the contracting agency and the Contractor to fulfill any notification requirements. Breach of these terms may be regarded as a material breach of this Contract, such that the Commonwealth may exercise any and all contractual rights and remedies, including without limitation indemnification under Section 11 of the Commonwealth's Terms and Conditions, withholding of payments, Contract suspension, or termination. In addition, the Contractor may be subject to applicable statutory or regulatory penalties, including and without limitation, those imposed pursuant to G.L. c. 93H and under G.L. c. 214, § 3B for violations under M.G.L. c. 66A.

**Executive Orders 523, 524 and 526.** Executive Order 526 (Order Regarding Non-Discrimination, Diversity, Equal Opportunity and Affirmative Action which supersedes Executive Order 478), Executive Order 524 (Establishing the Massachusetts Supplier Diversity Program which supersedes Executive Order 390), Executive Order 523 (Establishing the Massachusetts Small Business Purchasing Program.) All programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background. The Contractor and any subcontractors may not engage in discriminatory employment practices; and the Contractor certifies compliance with applicable federal and state laws, rules, and regulations governing fair labor and employment practices; and the Contractor commits to purchase supplies and services from certified minority or women-owned businesses, small businesses, or businesses owned by socially or economically disadvantaged persons or persons with disabilities. These provisions shall be enforced through the contracting agency, OSD, and/or the Massachusetts Commission Against Discrimination. Any breach shall be regarded as a material breach of the contract that may subject the contractor to appropriate sanctions.



## II. COMMONWEALTH TERMS AND CONDITIONS

This Commonwealth Terms and Conditions form is jointly issued by the Executive Office for Administration and Finance (ANF), the Office of the Comptroller (CTR) and the Operational Services Division (OSD) for use by all Commonwealth of Massachusetts ("State") Departments and Contractors. *Any changes or electronic alterations by either the Department or the Contractor to the official version of this form, as jointly published by ANF, CTR and OSD, shall be void.* Upon execution of these Commonwealth Terms and Conditions by the Contractor and filing as prescribed by the Office of the Comptroller, these Commonwealth Terms and Conditions will be incorporated by reference into any Contract for Commodities and Services executed by the Contractor and any State Department, in the absence of a superseding law or regulation requiring a different Contract form. Performance shall include services rendered, obligations due, costs incurred, commodities and deliverables provided and accepted by the Department, programs provided or other commitments authorized under a Contract. A deliverable shall include any tangible product to be delivered as an element of performance under a Contract. The Commonwealth is entitled to ownership and possession of all deliverables purchased or developed with State funds. Contract shall mean the Standard Contract Form issued jointly by ANF, CTR and OSD.

1. **Contract Effective Start Date.** Notwithstanding verbal or other representations by the parties, or an earlier start date indicated in a Contract, the effective start date of performance under a Contract shall be the date a Contract has been executed by an authorized signatory of the Contractor, the Department, a later date specified in the Contract or the date of any approvals required by law or regulation, whichever is later.

2. **Payments And Compensation.** The Contractor shall only be compensated for performance delivered and accepted by the Department in accordance with the specific terms and conditions of a Contract. All Contract payments are subject to appropriation pursuant to M.G.L. C. 29, §26, or the availability of sufficient non-appropriated funds for the purposes of a Contract, and shall be subject to intercept pursuant to M.G.L. C. 7A, §3 and 815 CMR 9.00. Overpayments shall be reimbursed by the Contractor or may be offset by the Department from future payments in accordance with state finance law. Acceptance by the Contractor of any payment or partial payment, without any written objection by the Contractor, shall in each instance operate as a release and discharge of the State from all claims, liabilities or other obligations relating to the performance of a Contract.

3. **Contractor Payment Mechanism.** All Contractors will be paid using the Payment Voucher System unless a different payment mechanism is required. The Contractor shall timely submit invoices (Payment Vouchers - Form PV) and supporting documentation as prescribed in a Contract. The Department shall review and return rejected invoices within fifteen (15) days of receipt with a written explanation for rejection. Payments shall be made in accordance with the bill paying policy issued by the Office of the Comptroller and 815 CMR 4.00, provided that payment periods listed in a Contract of less than forty-five (45) days from the date of receipt of an invoice shall be effective only to enable a Department to take advantage of early payment incentives and shall not subject any payment made within the forty-five (45) day period to a penalty. The Contractor Payroll System, shall be used only for "Individual Contractors" who have been determined to be "Contract Employees" as a result of the Department's completion of an Internal Revenue Service SS-8 form in accordance with the Omnibus Budget Reconciliation Act (OBRA) 1990, and shall automatically process all state and federal mandated payroll, tax and retirement deductions.

4. **Contract Termination Or Suspension.** A Contract shall terminate on the date specified in a Contract, unless this date is properly amended in accordance with all applicable laws and regulations prior to this date, or unless terminated or suspended under this Section upon prior written notice to the Contractor. The Department may terminate a Contract without cause and without penalty, or may terminate or suspend a Contract if the Contractor breaches any material term or condition or fails to perform or fulfill any material obligation required by a Contract, or in the event of an elimination of an appropriation or availability of sufficient funds for the purposes of a Contract, or in the event of an unforeseen public emergency mandating immediate Department action. Upon immediate notification to the other party, neither the Department nor the Contractor shall be deemed to be in breach for failure or delay in performance due to Acts of God or other causes factually beyond their control and without their fault or negligence. Subcontractor failure to perform or price increases due to market fluctuations or product availability will not be deemed factually beyond the Contractor's control.

5. **Written Notice.** Any notice shall be deemed delivered and received when submitted in writing in person or when delivered by any other appropriate

method evidencing actual receipt by the Department or the Contractor. Any written notice of termination or suspension delivered to the Contractor shall state the effective date and period of the notice, the reasons for the termination or suspension, if applicable, any alleged breach or failure to perform, a reasonable period to cure any alleged breach or failure to perform, if applicable, and any instructions or restrictions concerning allowable activities, costs or expenditures by the Contractor during the notice period.

6. **Confidentiality.** The Contractor shall comply with M.G.L. C. 66A if the Contractor becomes a "holder" of "personal data". The Contractor shall also protect the physical security and restrict any access to personal or other Department data in the Contractor's possession, or used by the Contractor in the performance of a Contract, which shall include, but is not limited to the Department's public records, documents, files, software, equipment or systems.

7. **Record-keeping And Retention, Inspection Of Records.** The Contractor shall maintain records, books, files and other data as specified in a Contract and in such detail as shall properly substantiate claims for payment under a Contract, for a minimum retention period of seven (7) years beginning on the first day after the final payment under a Contract, or such longer period as is necessary for the resolution of any litigation, claim, negotiation, audit or other inquiry involving a Contract. The Department shall have access, as well as any parties identified under Executive Order 195, during the Contractor's regular business hours and upon reasonable prior notice, to such records, including on-site reviews and reproduction of such records at a reasonable expense.

8. **Assignment.** The Contractor may not assign or delegate, in whole or in part, or otherwise transfer any liability, responsibility, obligation, duty or interest under a Contract, with the exception that the Contractor shall be authorized to assign present and prospective claims for money due to the Contractor pursuant to a Contract in accordance with M.G.L. C. 106, §9-318. The Contractor must provide sufficient notice of assignment and supporting documentation to enable the Department to verify and implement the assignment. Payments to third party assignees will be processed as if such payments were being made directly to the Contractor and these payments will be subject to intercept, offset, counter claims or any other Department rights which are available to the Department or the State against the Contractor.

9. **Subcontracting By Contractor.** Any subcontract entered into by the Contractor for the purposes of fulfilling the obligations under a Contract must be in writing, authorized in advance by the Department and shall be consistent with and subject to the provisions of these Commonwealth Terms and Conditions and a Contract. Subcontracts will not relieve or discharge the Contractor from any duty, obligation, responsibility or liability arising under a Contract. The Department is entitled to copies of all subcontracts and shall not be bound by any provisions contained in a subcontract to which it is not a party.

10. **Affirmative Action, Non-Discrimination In Hiring And Employment.** The Contractor shall comply with all federal and state laws, rules and regulations promoting fair employment practices or prohibiting employment discrimination and unfair labor practices and shall not discriminate in the hiring of any applicant for employment nor shall any qualified employee be demoted, discharged or otherwise subject to discrimination in the tenure, position, promotional opportunities, wages, benefits or terms and conditions of their employment because of race, color, national origin, ancestry, age, sex, religion, disability, handicap, sexual orientation or for exercising any rights afforded by law. The Contractor commits to purchasing supplies and services from certified minority or women-owned businesses, small businesses or businesses owned by socially or economically disadvantaged persons or persons with disabilities.

11. **Indemnification.** Unless otherwise exempted by law, the Contractor shall indemnify and hold harmless the State, including the Department, its agents, officers and employees against any and all claims, liabilities and costs for any personal injury or property damages, patent or copyright infringement or other damages that the State may sustain which arise out of or in connection with the Contractor's performance of a Contract, including but not limited to the negligence, reckless or intentional conduct of the Contractor, its agents, officers, employees or subcontractors. The Contractor shall at no time be considered an agent or representative of the Department or the State. After prompt notification of a claim by the State, the Contractor shall have an opportunity to participate in the defense of such claim and any negotiated settlement agreement or judgment. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph. Any indemnification of the Contractor shall be subject to appropriation and applicable law.

12. **Waivers.** Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any way limit the legal or equitable remedies available to that party. No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach.



## II. COMMONWEALTH TERMS AND CONDITIONS

13. **Risk Of Loss.** The Contractor shall bear the risk of loss for any Contractor materials used for a Contract and for all deliverables, Department personal or other data which is in the possession of the Contractor or used by the Contractor in the performance of a Contract until

possession, ownership and full legal title to the deliverables are transferred to and accepted by the Department.

14. **Forum, Choice of Law And Mediation.** Any actions arising out of a Contract shall be governed by the laws of Massachusetts, and shall be brought and maintained in a State or federal court in Massachusetts which shall have exclusive jurisdiction thereof. The Department, with the approval of the Attorney General's Office, and the Contractor may agree to voluntary mediation through the Massachusetts Office of Dispute Resolution (MODR) of any Contract dispute and will share the costs of such mediation. No legal or equitable rights of the parties shall be limited by this Section.

15. **Contract Boilerplate Interpretation, Severability, Conflicts With Law, Integration.** Any amendment or attachment to any Contract which contains conflicting language or has the affect of a deleting, replacing or modifying any printed language of these Commonwealth Terms and Conditions, as officially published by ANF, CTR and OSD, shall be interpreted as superseded by the official printed language. If any provision of a Contract is found to be superseded by state or federal law or regulation, in whole or in part, then both parties shall be relieved of all obligations under that provision only to the

extent necessary to comply with the superseding law, provided however, that the remaining provisions of the Contract, or portions thereof, shall be enforced to the fullest extent permitted by law. All amendments must be executed by the parties in accordance with Section 1. of these Commonwealth Terms and Conditions and filed with the original record copy of a Contract as prescribed by CTR. The printed language of the Standard Contract Form, as officially published by ANF, CTR and OSD, which incorporates by reference these Commonwealth Terms and Conditions, shall supersede any conflicting verbal or written agreements relating to the performance of a Contract, or attached thereto, including contract forms, purchase orders or invoices of the Contractor. The order of priority of documents to interpret a Contract shall be as follows: the printed language of the Commonwealth Terms and Conditions, the Standard Contract Form, the Department's Request for Response (RFR) solicitation document and the Contractor's Response to the RFR solicitation, excluding any language stricken by a Department as unacceptable and including any negotiated terms and conditions allowable pursuant to law or regulation.

IN WITNESS WHEREOF, The Contractor certify under the pains and penalties of perjury that it shall comply with these Commonwealth Terms and Conditions for any applicable Contract executed with the Commonwealth as certified by their authorized signatory below:

CONTRACTOR AUTHORIZED SIGNATORY: \_\_\_\_\_

(signature)

Print Name: John A. Foresto

Title: Chairman, Medway Board of Selectmen

Date:

(Check One):  Organization  Individual

Full Legal Organization or Individual Name: Town of Medway

Doing Business As: Name (If Different):

Tax Identification Number: 04-6001217

Address: 155 Village Street, Medway, MA 02053

Telephone: (508) 533-3264 FAX: (508) 321-4988

### **INSTRUCTIONS FOR FILING THE COMMONWEALTH TERMS AND CONDITIONS**

A "Request for Verification of Taxation Reporting Information" form (Massachusetts Substitute W-9 Format), that contains the Contractor's correct TIN, name and legal address information, must be on file with the Office of the Comptroller. If the Contractor has not previously filed this form with the Comptroller, or if the information contained on a previously filed form has changed, please fill out a W-9 form and return it attached to the executed COMMONWEALTH TERMS AND CONDITIONS.

If the Contractor is responding to a Request for Response (RFR), the COMMONWEALTH TERMS AND CONDITIONS must be submitted with the Response to RFR or as specified in the RFR. Otherwise, Departments or Contractors must timely submit the completed and properly executed COMMONWEALTH TERMS AND CONDITIONS (and the W-9 form if applicable) to the: **Payee and Payments Unit, Office of the Comptroller, 9th Floor, One Ashburton Place, Boston, MA 02108** in order to record the filing of this form on the MMARS Vendor File. Contractors are required to execute and file this form only once.

### III. Background

1. On November 22, 2013, DOER issued the Energy Managers Grant Program Opportunity Notice (PON) PON-ENE-2014-011, (“the PON”) and amended it on January 13, 2014. The grant agreement resulting from this process is subject to 815 CMR 2.00 et seq.
2. Town of Medway (“Grantee”) submitted a response to the PON on or before the February 14, 2014 due date.
3. DOER has selected the Grantee to receive Energy Managers Grant funds for projects described in Grantee’s response to the PON.
4. DOER approves the expenditure of funds as described in Attachment D (Budget) for the work planned and described in Attachment C (Scope of Grant Award).
5. The Grantee agrees to complete the projects described in the Scope of Grant Award (collectively referred to as “the Project”).

This Agreement incorporates and makes part hereof certain Attachments and Forms which have been provided and accepted by the parties as part to this Agreement. Copies of such agreed upon Attachments and Forms are attached hereto set forth in their entirety and made part of this Agreement by reference:

THE COMMONWEALTH STANDARD CONTRACT FORM

COMMONWEALTH TERMS AND CONDITIONS

BACKGROUND

ATTACHEMENT A: ENERGY MANAGERS GRANT APPLICATION MATERIALS

ATTACHMENT B: GRANTEE RESPONSE

ATTACHMENT C: SCOPE OF GRANT AWARD

ATTACHMENT D: BUDGET

ATTACHMENT E: TEMPLATE JOB DESCRIPTION

THE COMMONWEALTH OF MASSACHUSETTS STANDARD CONTRACT ATTACHMENTS

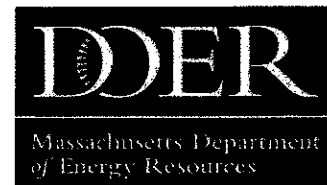
1. GRANTEE AUTHORIZED SIGNATORY LISTING
2. W-9 FORM
3. EFT



## IV. ATTACHMENT A: ENERGY MANAGERS GRANT APPLICATION MATERIALS



## Energy Managers Grants: November 2013




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# GRANT APPLICATION

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### GENERAL INFORMATION

- On-staff Energy Managers provide cities, towns, and regional school districts with crucial support for identifying, organizing, funding, implementing and monitoring energy efficiency and renewable energy projects that can deliver significant taxpayers savings through lower energy bills while contributing to overall community sustainability and economic development. Energy Managers are also responsible for initiating and leading K-12 and community-wide energy education efforts within their cities and towns.

This grant program is intended to provide seed funding for a long-term Energy Manager position. This is two-year grant for one position, with fewer funds paid in year two. DOER expects that the applicant will assume the balance of the funding required in Year Two, and, after the two-year period, will assume all funding for the position.

- DOER is providing funds for applicants to hire their own Energy Managers on either full-time or part-time basis, or to increase the hours of an existing Energy Manager currently working no more than 15 hours per week, to be awarded on a competitive basis.
- Following the execution of Energy Managers contracts, DOER will provide a no-cost, half-day workshop for municipalities that will include presentations by existing Energy Managers who will outline best practices and tips for achieving clean energy results through these positions.
- A total of \$1.7M is available for disbursement by the Green Communities Division over the 2 year period.
  - In Year One, a single applicant may receive a grant of up to \$50,000 for a full-time Energy Manager (minimum 32 hours per week), or up to \$25,000 for a part-time Energy Manager (less than 32 hours per week).
  - In Year Two, a single applicant may receive a grant of up to \$35,000 for a full-time Energy Manager (minimum 32 hours per week), or up to \$17,500 for a part-time Energy Manager (less than 32 hours per week).
  - Year Two funding will not be automatic, but is dependent on achievement of the following criteria:

- Twice yearly reports filed with DOER's Green Communities Division that provide detailed information about the Energy Manager's activities and achievements and how they are contributing to the municipality's clean energy goals.
- For full-time positions, achieving at least two energy saving and/or renewable energy goals identified in the applicant's work plan for Year One; for part-time positions, achieving at least one of these goals.
- For a full-time position, initiation and execution of at least three total school-related and community-wide energy education initiatives in Year One, at least one of which must be a community-wide effort. For a part-time position, initiation and execution of one school-related and one community-wide energy education initiatives in Year One For a position in a municipality, explanation of how the Energy Manager position has increased communication on energy issues across multiple municipal departments, including schools. For a position in a Regional School District, an explanation of how the Energy Manager has increased communication on energy issues across the School District, including partnering with member towns on community-wide energy education initiatives.
- **All applications are due via the online submission process outlined in Attachment E by 5pm in Friday, February 14<sup>th</sup> 2014.**

## **ELIGIBILITY CRITERIA**

- **ALL** Massachusetts municipalities, regardless of Green Community designation status or electric utility provider, as well as regional school districts, are eligible to apply for Energy Manager grants.  
**NOTE: Applicants may be eligible for EITHER funding for an Energy Manager position OR 10 percent of Green Communities grant funding for administration of Green Communities grants, but NOT FOR BOTH sources of funding.**
- Regional planning agencies (RPAs) may apply for Energy Manager funding on behalf of at least 2 but no more than 3 multiple municipalities intending to share the services and expertise of a single Energy Manager.
  - A single RPA may submit more than 1 but no more than 3 applications for multiple municipalities.
  - If an application submitted by an RPA is awarded funds, the Green Communities Division will contract with the RPA to manage the funding.
- At least 2 but no more than 3 municipalities may submit an application directly to share an Energy Manager without an RPA. One municipality must be designated the lead, and if the application is awarded funds, the Green Communities Division will contract with the lead municipality to manage the funding.
- Funding is only provided for NEW positions, or to increase the hours of an existing position funded for 15 hours or less per week.

The applicant must provide a minimum of a 10 percent match of funding for the position, with no more than 5 percent of the match allowed as in-kind. Match provided by an RPA applying on behalf of multiple municipalities is acceptable.

- Applications must contain, at a minimum, the information requested in the application. DOER will reject incomplete applications.
- A municipality must have an Energy Committee that has been created by the Chief Executive Officer. A Regional School District (RSD) must have an energy task force or committee that has been created by the Superintendent.
- The municipality or RSD must have a user authorized to use MEI or be using some other energy tracking tool such as EPA Portfolio Manager or School Dude.
- ***All applications are due via the online submission process outlined in Attachment E by 5pm in Friday, February 14<sup>th</sup> 2014.***

### **EVALUATION CRITERIA**

- Demonstrated need, including economic need due to budget cuts
- High quality and realistic work plan and budget
- Plan for future funding to support the position in Year 2 and after the grant period ends

*NOTE: DOER will make awards, to the extent possible, in a manner that reflects the regional diversity of the Commonwealth.*

### **REQUESTED APPLICATION MATERIALS TO BE SUBMITTED ONLINE**

- A Work Plan for the Energy Manager (Attachment A)
- A detailed budget (Attachment B)
- Certification of Application (Attachment C)
- Any Supporting Materials (Attachment D), including:
  - For municipalities, a letter signed by the CEO demonstrating evidence of an Energy Committee formed by the CEO, including when the committee was formed, the names of the members and the role they fill (e.g. elected official, municipal staff, volunteer), and the name of the chair
  - For RSDs, a letter signed by the Superintendent demonstrating evidence of an energy task force or committee formed by the Superintendent, including when the group was formed, the names of the members and the role they fill (e.g. School Committee member, school staff, parent) and the name of the chair
  - Letters of support from community or school groups
- For applications for more than 1 municipality, Attachments C and D must be provided for each city or town. Attachments A and B can be provided separately for each city or town, or consolidated with materials and information clearly delineated for each.

Attachment E contains Instructions for online submission

## **GRANT DISBURSEMENT**

- DOER will disburse funding after execution of the grant contract.
- Disbursement of Year Two funding will be dependent on achievement of criteria outlined above

## **ASKING QUESTIONS**

- This application information is available at [www.comm-PASS.com](http://www.comm-PASS.com) as PON-ENE-2014-011 and [www.mass.gov/energy/greencommunities](http://www.mass.gov/energy/greencommunities) under “Publications and Reports”.
- **ALL questions must be posted to the bidder’s forum on Comm-PASS ([www.comm-pass.com](http://www.comm-pass.com)) by 5pm Tuesday February 11, 2014.** All answers, notifications, releases and amendments to this grant opportunity will be posted on Comm-PASS. Please do not send questions to staff members, posting and answering of questions on Comm-PASS allows all potential applicants to have access to all questions and answers. To *post* questions :
  - From [www.comm-pass.com](http://www.comm-pass.com), scroll to the bottom of the page and select **Search for bidders’ forum**, located near the middle of the page.
  - Under **\*\*AND\*\*** Search by Specific Criteria, enter PON-ENE-2014-011 into the Referenced Solicitation Number search bar and click Search.
  - Click the link at the top of the page that says, “There are 1 Forum(s) found that match your search criteria.”
  - On the right side of the page, click the eyeglasses under **View** to access the forum.
  - This Summary page contains information about the forum for ENE-2014-011 including its opening and closing dates. To post a question to the forum, click **Ask a Question in the Forum**, located in the top right corner of the page **before** the closing date has passed.
  - Enter the required sign-in information (this will be kept private from the general public and is only visible to the forum manager and contact person) and click **Next Step** at the bottom of the page.
  - Enter your question into the **Question** box and click **Submit Question** at the bottom of the page. The question will now be posted into the forum.

To *view* all questions and answers:

- From [www.comm-pass.com](http://www.comm-pass.com), scroll to the bottom of the page and select Search for bidders’ forum, located near the middle of the page.
- Under **\*\*AND\*\*** Search by Specific Criteria, enter PON-ENE-2014-011 into the Referenced Solicitation Number search bar and click Search.
- Click the link at the top of the page that says, “There are 1 Forum(s) found that match your search criteria.”
- On the right side of the page, click the eyeglasses under **View** to access the forum.
- This Summary page contains information about the forum for ENE-2014-011 including its opening and closing dates.  
To see all previously posted questions and answers, click the **Question/Answer** tab, located in the top right corner of the page **before** the closing date has passed.
- All questions posted are listed. To see the answer, click the eyeglasses under View column next to the question you wish to see the answer to.

**LEAD APPLICANT INFORMATION**

Municipality/Regional School District/Regional Planning Agency		Point of Contact	
Street Address		Title	
City/Town	State MA	Telephone	Email
Zip Code			

For a multiple municipality request, please list all municipalities included in application:

**Please mark the appropriate line with an X and fill in funding application amount:**  
 Applying for Energy Manager Grant:

\_\_\_\_\_ Full-time position (greater than 32 hours per week)

- Year One Amount Requested (up to \$50,000) \_\_\_\_\_

\_\_\_\_\_ Part-time position (32 hours or fewer per week)

- Year One Amount Requested (up to \$25,000) \_\_\_\_\_

**\* In order to be deemed complete, an application MUST contain the required signature in Attachment C and ALL information requested.**

## ATTACHMENT A

**PLEASE ATTACH A DETAILED WORK PLAN FOR THE ENERGY MANAGER POSITION, LIMITING YOUR RESPONSE TO NO MORE THAN THREE PAGES. The Work Plan is expected to justify the need for the number of hours and budget requested.**

- If this is a multi-municipality application being submitted by a RPA or a group of municipalities, please address all of the below for EACH city or town. The page limit is 3 pages for each municipality in an application for more than one municipality.

For a multiple municipality request, describe the role and function of the RPA.

***The following must be included in order for the application to be deemed complete. You must address EACH bullet:***

- Describe the need for the position, and what gap this position will fill that is not currently being addressed; note who, if anyone, currently addresses energy issues and projects for the applicant; describe why an Energy Manager is critical for your municipality or RSD to implement these projects and to meet overall clean energy goals;
- Identify specific energy-saving projects the Energy Manager will focus on in Year One, as well as clearly defined projects and goals the Energy Manager will achieve over the course of the two-year grant;
  - Break down projects and goals into Year One and Year Two, with at least two energy saving and/or renewable energy goals identified for achieving each year.
- Identify what energy tracking tool is being used; if using MassEnergyInsight (MEI), who is the authorized user; if not using MEI, provide evidence, such as printouts tracking energy usage, for other tool being used.
- Provide a target for annual clean energy benefits (e.g. estimated savings as a percentage of current energy costs/bills) that will result from the Energy Manager's work;
- Identify the clean energy projects the municipality or RSD has completed to date and how the Energy Manager will continue to monitor and/or improve upon these projects;
- Provide an outline of school and community-wide energy education initiatives the Energy Manager will lead in Year One.
- For a position in a municipality, explain how the Energy Manager will enhance communication on energy across multiple municipal departments, including schools. For a position in a Regional School District, how will the Energy Manager enhance communication on energy issues across the School District, including member towns.
- Explain how your municipality/RSD will sustain the Energy Manager position beyond Year One (with reduced DOER funding), and beyond Year Two, if Year Two funding is provided (with DOER no longer funding the position);

ATTACHMENT B

PLEASE ATTACH A DETAILED BUDGET FOR THE ENERGY MANAGER POSITION, LIMITING YOUR RESPONSE TO NO MORE THAN TWO PAGES

The following must be included in order for the application to be deemed complete. You must address each item:

AMOUNT of Funding  
Being Requested:

\$
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	DOER Funds	Matching Funds	Total
Salary ( ___ hrs/wk; \$ ___/hr)			
Mileage Expenses			
Outreach/Education Materials			
Other Expenses (Specify)			
<b>TOTAL</b>			

- Specify how many hours the Energy Manager will work each week; if the grant will increase the hours of an existing position, how many additional hours per week
- A budget that delineates in percentages how much of the grant funding (i.e., how much of the Energy Manager's time and effort) will be spent on each work plan activity. For a multi-municipality request, indicate the percentage of time spent by the position on each community.
- Provide supporting documentation to justify the hourly rate of the position
- Specify how the municipality or RSD will fund the matching portion of the budget
- Include a detailed plan for how the position will be sustained and funded beyond the life of the grant

ATTACHMENT C

**CERTIFICATION OF APPLICATION**

The Certification of Application below must be provided as a *scanned pdf with signature*.

**CERTIFICATION OF APPLICATION**

The Chief Executive Officer must complete this certification.

I, \_\_\_\_\_ am authorized to execute said Application on behalf of -  
\_\_\_\_\_, the applying municipality or regional school district and verify that the information in the Energy Manager Grant Application is true. In addition, by signing this statement, I am attesting that the municipality/RSD is committed to sustaining the position and providing funds in future years beyond the life of this grant for the position subject to appropriate approval processes.

\_\_\_\_\_  
[Signature of Chief Executive Officer]

\_\_\_\_\_  
[Title of Chief Executive Officer]

\_\_\_\_\_  
[Date]

**NOTE:** THE CHIEF EXECUTIVE OFFICER IS DEFINED AS THE MANAGER IN ANY CITY HAVING A MANAGER AND IN ANY TOWN HAVING A CITY FORM OF GOVERNMENT, THE MAYOR IN ANY OTHER CITY, AND THE BOARD OF SELECTMEN IN ANY OTHER TOWN UNLESS SOME OTHER OFFICER OR BODY IS DESIGNATED TO PERFORM THE FUNCTIONS OF A CHIEF EXECUTIVE OFFICER UNDER THE PROVISIONS OF A LOCAL CHARTER OR LAWS HAVING THE FORCE OF A CHARTER.  
FOR REGIONAL SCHOOL DISTRICTS, THE CHIEF EXECUTIVE OFFICER IS THE SUPERINTENDENT.



## ATTACHMENT D

- For municipalities, a letter signed by the CEO demonstrating evidence of an Energy Committee formed by the CEO, including when the committee was formed, the names of the members and the role they fill (e.g. elected official, municipal staff, volunteer), and the name of the chair.
- For RSDs, a letter signed by the Superintendent demonstrating evidence of an energy task force or committee formed by the Superintendent, including when the group was formed, the names of the members and the role they fill (e.g. School Committee member, school staff, parent) and the name of the chair.
- Letters of support from community or school groups. These letters are not required, but will be taken in to consideration in evaluation of the application.

## ATTACHMENT E

### INSTRUCTIONS—ONLINE GRANT APPLICATION SYSTEM

#### Conventions in the Instructions

- Items in < > are clickable; e.g. <Submit> is a clickable **Submit** button
- Items that are underlined and blue are hyperlinks to other web pages
- Items in quotes (" ") are possible choices

Please read and follow the short, easy-to-follow instructions.

Please submit only once; if you need to add another document or have any problems or questions about the online process, please contact Jane Pfister, [Jane.Pfister@state.ma.us](mailto:Jane.Pfister@state.ma.us)

#### Getting Started

- If this is the FIRST TIME the municipality or entity is submitting an application to the Green Communities Division, it will need to provide basic information to its Regional Coordinator that will enable DOER to pre-set the Online System to recognize the applicant. Please provide the municipal or entity name, legal address including zip code, and the primary contact name, title, email, and phone number. The primary contact will receive an email invitation to the online application system and will be required to create a user profile.
- For municipalities that are Designated Green Communities, provide the Regional Coordinator with the name and email of the primary contact who will submit the Energy Manager grant application. The primary contact will receive an email inviting them to create a user profile (if he/she is a new contact for the municipality) or confirming their access to the online system (if he/she has previously used it).
- Use a high speed (broadband) Internet connection if possible. Dial-up connections work, but may be frustratingly slow.
- **No paper submission** is required or accepted for the grant application. The process is online and electronic only.



#### Application Materials Checklist – ARE YOUR MATERIALS READY?

- Begin each of your electronic files with your municipal/entity name followed by wording that makes the content of the file clear – this is **REQUIRED**
- Signed Certification of Application (Attachment B)(PDF file)

**PLEASE NOTE:** You cannot return to a partially completed form to add or correct information. If you log out without using the <Submit> button, nothing has been saved in the system. If you want to practice using the system, just don't use the <Submit> button. When you use the <Submit> button the information on the form along with uploaded files will be saved to DOER's system. If you log back in, the form will be blank BUT the system saved your files and information.

**Please only submit once.** If you do not see your city, town, or entity name on the drop-down pick list, made a mistake, or forgot something, please contact Jane Pfister at [jane.pfister@state.ma.us](mailto:jane.pfister@state.ma.us) / 617-626-1194.

## Energy Manager Grant Application Process

1. Fill out the online grant application form completely. You will upload multiple files using the form. Begin EACH file name with city, town or entity name then wording that makes the content of the file clear.
2. Upload the Energy Manager Grant Application (as Word or PDF), Work Plan (Attachment A), Budget (Attachment B), and, signed Certification of Application (Attachment C) (as PDF), and any other supporting materials (Attachment D) using the Upload fields (green lines near the bottom of the form). For each file to be uploaded, click in a blank white space or on a grey <Browse> button , browse to and select a file on your computer, then double click on it or choose open in the dialog box. The file's path on your computer will show in the blank white space.
3. Review the form and upload line carefully to make sure everything is complete and how you want it. Use the calendar icon below the upload lines to select the date-time, then click on the <Submit> button.
  - o When you  submit a form you may receive the following message: "This form is non-secure - do you still want to send it?" It's just informational; nothing to worry about. Answer <Yes>.
4. After you have clicked the <Submit> button, you will be redirected to a confirmation page that says your application has been submitted. Shortly you will receive an email from DOER confirming that the Green Communities Division has received your grant application and confirming the number of files uploaded.

## Get Help

**Pre-Grant Application Process** - [Contact your Regional Coordinator](#)

**Online Process and Technical Issues** - [Contact Jane.Pfister@state.ma.us](mailto:Jane.Pfister@state.ma.us) / 617-626-1194

V. ATTACHMENT B: GRANTEE RESPONSE

RESPONSE INCLUDED:

DOER Energy Manager Grant Application

LEAD APPLICANT INFORMATION

<b>Municipality/Regional School District/Regional Planning Agency</b>			<b>Point of Contact</b>	
TOWN OF MEDWAY			Susan E. Affleck-Childs	
<b>Street Address</b>			<b>Title</b>	
155 Village Street			Planning and Economic Development Coordinator	
<b>City/Town</b>	<b>State</b>	<b>Zip Code</b>	<b>Telephone</b>	<b>Email</b>
Medway,	MA	02053	508-533-3291	<a href="mailto:sachilds@townofmedway.org">sachilds@townofmedway.org</a>

For a multiple municipality request, please list all municipalities included in application:

- Town of Medway**
- Town of Millis**

Please mark the appropriate line with an X and fill in funding application amount:  
Applying for Energy Manager Grant:

  X   Full-time position (greater than 32 hours per week)

- Year One Amount Requested (up to \$50,000): \$50,000

       Part-time position (32 hours or fewer per week)

- Year One Amount Requested (up to \$25,000) \_\_\_\_\_

\* In order to be deemed complete, an application MUST contain the required signature in Attachment C and ALL information requested.

**ATTACHMENT A – Medway/Millis**

**PLEASE ATTACH A DETAILED WORK PLAN FOR THE ENERGY MANAGER POSITION, LIMITING YOUR RESPONSE TO NO MORE THAN THREE PAGES. The Work Plan is expected to justify the need for the number of hours and budget requested.**

- If this is a multi-municipality application being submitted by a RPA or a group of municipalities, please address all of the below for EACH city or town. The page limit is 3 pages for each municipality in an application for more than one municipality.

For a multiple municipality request, describe the role and function of the RPA. *The following must be included in order for the application to be deemed complete. You must address EACH bullet:*

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- Describe the need for the position, and what gap this position will fill that is not currently being addressed; note who, if anyone, currently addresses energy issues and projects for the applicant; describe why an Energy Manager is critical for your municipality or RSD to implement these projects and to meet overall clean energy goals;

**INTRODUCTION** – The Towns of Medway and Millis are filing a joint application for funding to support a full time Energy Manager. The position would be shared by both communities. The Metropolitan Area Planning Council has provided technical assistance to us in the preparation of this application, but MAPC will not be involved in the administration of the grant or the delivery of the Energy Manager position’s services.

**MEDWAY** - The Town of Medway has a successful history of promoting and implementing energy conservation and alternative energy measures to reduce the Town’s energy consumption, produce cost savings, and reduce emission of greenhouse gases. It installed a solar PV system on the High School in 2009, was designated a Green Community in 2010, and carried out a series of GC funded energy efficiency improvements in municipal buildings and installed a solar PV system on the Middle School in 2011. In doing so, Medway is making strong progress toward meeting its Green Communities goal of a 20% consumption reduction by the end of 2014.

With the assistance of the Metropolitan Area Planning Council (MAPC), Medway completed a *Local Energy Action Program (LEAP) Plan* in 2013. The LEAP Plan has identified many more projects and initiatives that would further reduce energy consumption in the community as a whole as well as in municipal and school buildings, vehicles and facilities. A copy of Medway’s LEAP plan is attached. However, no current municipal staff member is available to focus exclusively on energy programming to implement the LEAP Plan. Through the use of Mass Energy Insight (MEI) and the installation of several energy management systems in school/municipal buildings, there is a large amount of energy use data available that needs to be evaluated. There is an Energy Committee of dedicated volunteers that has considerable expertise but limited time. The Department of Public Services is responsible for a multitude of conventional public works tasks and maintains all Town buildings and infrastructure and cannot dedicate a staff member to focus solely on energy management. The School Department has taken aggressive steps to implement alternative energy and conservation measures and education initiatives but does not have the resources to designate a staff person to focus solely on energy. The Planning and Economic Development Board’s staff person is not able to allocate additional hours to energy-related activities. We have talent and interest but our staff resources are limited.

Energy Manager's tasks in both towns so this effort will be initiated in Millis in the first year. Again, economies of scale and synergies may result in more cost effective programs if developed in a manner to serve both communities simultaneously where practical.

The projects and goals expected to be achieved in the first two years in Millis are as follows:

**Year 1**

1. Completion of a base inventory of energy consumption including all energy sources for all municipal buildings, open space and recreation facilities, street and traffic lights, water and sewer facilities, transfer station and vehicles.
2. Completion of a municipal vehicle inventory including model, make and year, miles per gallon, weight (over 8500 pounds Gross Vehicle Weight), drive (2w, 4w or aw), department and function.
3. Development of a vehicle fuel-efficient replacement policy for consideration by the Board of Selectmen and School Superintendent.
4. Initiate and coordinate HVAC energy audits of all Town buildings (including schools), and prioritize recommendations. This will provide guidance for the development of the Energy Reduction Plan that would be included in Millis' Green Communities application.
5. Development of Zoning Bylaw changes allowing by-right siting of renewable or alternative energy facilities (generation, research and development and/or manufacturing) for in consultation with the Planning Board and Board of Selectmen for consideration by Town Meeting.
6. Evaluation of the new stretch energy code and a recommendation to Board of Selectmen as to whether to present it for adoption to Town Meeting.
7. Development and commencement of a community outreach campaign to businesses and residents to encourage conservation measures and alternative energy sources.
8. Evaluate benefits of converting streetlights and traffic signals to LED lamps
9. Prepare the Green Communities application for the fall of 2015.
10. Provide support to Energy Committee.

**Year 2**

1. Make recommendation regarding submittal of application for Green Community designation and coordinate the preparation of the application.
2. Implement and oversee one of the highest priority recommendations of the energy audits.
3. Replacement of streetlights and traffic signals with LED lamps.
4. Continue outreach campaign to encourage conservation and renewable/alternative energy measures among residents and businesses.
5. Preparation of a long-term capital budget and maintenance plan to ensure continued progress in reducing energy consumption and implementation of renewable/alternative energy systems.

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- **Identify what energy tracking tool is being used; if using MassEnergyInsight (MEI), who is the authorized user; If not using MEI, provide evidence, such as printouts tracking energy usage, for other tool being used.**

Medway already uses MEI as its energy consumption tracking tool. Currently Medway MEI authorized users include DPS/Facilities staff, School Department facilities staff, and members of the Energy Committee. Millis intends to use MEI as well; the authorized MEI users will include the Town Administrator, Finance Director and both DPW and School Department facilities staff and members of the Energy Committee. Of course, the Energy Manager will become an authorized MEI user in both Medway and Millis.

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- Provide a target for annual clean energy benefits (e.g. estimated savings as a percentage of current energy costs/bills) that will result from the Energy Manager's work;

**MEDWAY** — Medway's Green Communities Energy Reduction Plan developed in 2010 projects a 20.8% decrease in the Town's energy use by the end of 2014. Although Medway made some strong progress in reducing energy consumption during 2011 and 2012, the MEI data shows some slippage during 2013. We are hopeful that some additional energy conservation measures implemented during the second half of 2013 (new furnace at town hall and purchase of 4 energy efficient vehicles for the Town fleet) will generate and show reduced consumption in the months ahead. Based on our progress to date and recognizing that additional reductions become more difficult unless or until there are additional technology advances, we believe that, at a minimum, an additional 10% reduction is achievable over the next few years. This will be accomplished through a combination of energy efficiency measures, alternative energy sources, as well as energy conservation programs.

**MILLIS** - For Millis, since it is just initiating an energy efficiency program, the target for clean energy benefits is a 20% reduction within 5 years.

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- Identify the clean energy projects the municipality or RSD has completed to date and how the Energy Manager will continue to monitor and/or improve upon these projects

#### **MEDWAY**

1. Installed solar PV systems at the High School, Middle School and Fire Station
2. Medway Public Schools entered into an ESCO for repairs to multiple school facilities.
3. Green Communities Grant projects - Replaced lighting with LED lamps in Town Hall and Police station; installed variable frequency drives at well pump stations; installed an EMS at Medway Public Library; conducted an LED street light demo; building improvement projects – building envelope, lighting controls, window replacement, etc.
4. Participated in a Solarize Mass program - 39 residential and commercial projects contracted with Second Generation Energy to install solar PV systems to produce 488.6 kWh of electricity.
5. Signed a 20 year net metering sales agreement for a solar farm in Plympton, MA.

#### **MILLIS**

1. A solar PV installation is in the process of being constructed at the Millis High/Middle School and is expected to be completed by the end of April, 2014.
2. The Millis DPW is working with Mass DEP and students at Worcester Polytechnic Institute to analyze the energy uses of the DPS, water and sewer facilities.

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- Provide an outline of school and community-wide energy education initiatives the Energy Manager will lead in Year One.

Medway's recent involvement in the Solarize Mass program provides a base on which both towns can establish additional community outreach programs using the Solarize Medway participants as examples of the benefits of installing solar PV systems. Both Towns will also promote the services available to residents, businesses and the Town through MassSave. This will be done using tax and/or water/sewer bills, web site, periodic press releases, presentations at business and community groups, etc.

The Energy Manager will work with both school systems to bring energy and conservation-related hands-on resources into the classroom in concert with the schools' science/ environmental curriculum. The Energy Manager will collaborate with the Medway High School principal to develop a Community Service Honors program for juniors/seniors to work in the community on

energy-reduction and resource management projects. The Energy Manager will interact with the Medway Middle and High Schools' after-school "Green Clubs" and assist in incorporating energy conservation into the curriculum for the 6<sup>th</sup> grade's annual, week-long environmental trip/camp. Other school based initiatives outlined in Medway's LEAP Plan will be explored.

Finally, the Energy Manager will utilize both communities' web sites and cable access channels to produce programming to promote energy consciousness and information about programs and practices to community residents and businesses.

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- **For a position in a municipality, explain how the Energy Manager will enhance communication on energy across multiple municipal departments, including schools.**

The Energy Committee in Medway includes citizens with varied energy related experience and liaison members from the Board of Selectmen, Medway Public Schools, and the Planning and Economic Development Board. The newly created Millis Energy Committee includes 5 residents so far with plans to add members. Both Energy Committees include engineers and educators as well as individuals with other technical skills and experience in planning, organizing and executing large-scale technical projects and teams. The Energy Manager will provide support to both Energy Committees and will communicate Energy Committee priorities to the appropriate Town departments. By their involvement in MEI, the Energy Manger will provide periodic reports to all municipal departments that use energy so that they will be able to monitor their consumption. This regular communication will facilitate discussions between the departments and the Energy Manager to identify opportunities for reduced energy consumption. The Energy Manager will have a physical presence in each town, which will facilitate the important face-to-face contact with the municipal departments. The Energy Manager will also participate in each Town's department head staff meetings with the Town Administrator which will enhance communication and collaboration.

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- **Explain how your municipality/RSD will sustain the Energy Manager position beyond Year One (with reduced DOER funding), and beyond Year Two, if Year Two funding is provided (with DOER no longer funding the position);**

The DOER grant provides the opportunity for both towns to use the Energy Manager position to generate sufficient savings in energy costs to sustain the position. In Medway, energy costs in its base year for the Green Communities program were approximately \$1 million. Using a simplified example, a 20% reduction in base year costs reduces the annual cost to approximately \$800,000. An additional energy use reduction of 10% over time due to implementation of the Energy Manager position would produce about an estimated additional \$80,000 per year in energy cost savings. That more than exceeds the cost of Medway's share of the position's salary and benefits. While some portion of the savings may be needed to offset the costs of the energy saving measures, most of those costs are expected to be covered by the capital budget and grants, leaving the balance in the operating budget to cover the costs of the Energy Manager.

Millis's energy costs in FY13 were \$761,719. A 20% reduction over time would result in an annual savings of \$152,343 which is more than enough to cover Millis's share of the Energy Manager costs. Again, most of the energy saving measures in Millis are expected to be funded through the municipal capital budget and grants.



## ATTACHMENT B – Medway/Millis

**PLEASE ATTACH A DETAILED BUDGET FOR THE ENERGY MANAGER POSITION, LIMITING YOUR RESPONSE TO NO MORE THAN TWO PAGES**

*The following must be included in order for the application to be deemed complete. You must address each item:*

### FY 15

AMOUNT of DOER Funding Being Requested:	\$50,000			
		<b>Matching Funds</b>		
	<b>DOER Funds</b>	<b>Medway</b>	<b>Millis</b>	<b>Total</b>
Salary (40 hrs/wk; \$29.04/hr)	\$50,000	\$ 5,204	\$ 5,204	\$60,408
Benefits		\$10,688	\$10,688	\$21,376
Mileage Expenses		\$ 200	\$ 200	\$ 400
Community Outreach/Education Materials		\$ 1,000	\$ 1,000	\$ 2,000
Other Expenses (Specify)				
<i>Office supplies</i>		\$ 250	\$ 250	\$ 500
<i>Phone</i>		\$ 300	\$ 300	\$ 600
<i>Professional Development/Training</i>		\$ 500	\$ 500	\$ 1,000
<i>Office set-up (computer, desk, etc.)</i>		\$ 2,000	\$ 2,000	\$ 4,000
<b>TOTAL</b>	<b>\$50,000</b>	<b>\$20,142</b>	<b>\$ 20,142</b>	<b>\$ 90,284</b>

### FY 16

AMOUNT of DOER Funding Being Requested:	\$35,000			
		<b>Matching Funds</b>		
	<b>DOER Funds</b>	<b>Medway</b>	<b>Millis</b>	<b>Total</b>
Salary (40 hrs/wk; \$30/hr)	\$35,000	\$ 13,700	\$ 13,700	\$62,400
Benefits		\$ 10,688	\$ 10,688	\$21,376
Mileage Expenses		\$ 200	\$ 200	\$ 400
Community Outreach/Education Materials		\$ 1,000	\$ 1,000	\$ 2,000
Other Expenses (Specify)				
<i>Office supplies</i>		\$ 250	\$ 250	\$ 500
<i>Phone</i>		\$ 300	\$ 300	\$ 600
<i>Professional Development/Training</i>		\$ 500	\$ 500	\$ 1,000
<b>TOTAL</b>	<b>\$ 35,000</b>	<b>\$ 26,638</b>	<b>\$ 26,638</b>	<b>\$ 88,276</b>

- Specify how many hours the Energy Manager will work each week; if the grant will increase the hours of an existing position, how many additional hours per week?

The Energy Manager will work 40 hours per week, 20 hours in each town.

- A budget that delineates in percentages how much of the grant funding (i.e., how much of the Energy Manager's time and effort) will be spent on each work plan

activity. For a multi-municipality request, indicate the percentage of time spent by the position on each community.

The primary tasks and goals are listed in Attachment A. It is anticipated the Energy Manager's time would be spread among four major categories as follows:

- a. **Project Management (50%)**
  - Medway Year 1 - Tasks 1 and Task 2 (most)
  - Medway Year 2 - Task 1
  - Millis Year 1 - Tasks 1-5
  - Millis Year 2 - Tasks 2, 3 and 5
- b. **Advocacy and Outreach (25%)**
  - Medway Year 1 - Task 3
  - Medway Year 2 - Tasks 2 and 3
  - Millis Year 1 - Tasks 6 and 7
  - Millis Year 2 - Tasks 1 and 4
- c. **Research new and alternative technologies (10%)**
  - Medway Year 1 - Task 2 (part) and Task 4
  - Medway Year 2 - Task 1 (part) and Task 2 (part)
  - Millis Year 1 - Tasks 6 and 8
  - Millis Year 2 - Task 2 (part), Task 3 (part), Task 4 (part) and Task 5 (part)
- d. **Administration (15%)**
  - Medway Year 1 - Task 5 (continuing in Year 2)
  - Millis Year 1 - Task 9 (continuing in Year 2)

- **Provide supporting documentation to justify the hourly rate of the position.**

The rate of pay (\$29.04/hr) was determined by establishing it in the same range as comparable positions within the Medway Department of Public Services - Project Manager, Assistant Superintendent of Water and Sewer, and Assistant Supervisor Highway and Fleet Maintenance. The position would fall within Grade 9 of Medway's Personnel Classification Plan; the hourly rate of pay for Grade 9 positions currently ranges from \$28.39 to \$30.21. Grade 9 positions also include the Council on Aging Director, Deputy Assessor, Library Director, Assistant Treasurer/Collector and Operations Manager - Parks.

- **Specify how the municipality or RSD will fund the matching portion of the budget**

The matching funds are being included in the proposed FY 15 budget in Medway and as a separate appropriation article in Millis. For FY15, that amount would be \$20,142 for each community. For FY 16, the matching amount will be \$26,638 per town. Letters from Town Administrator Suzanne K. Kennedy (Medway) and Charles Aspinwall (Millis) are provided as Attachment F to verify that the warrant for their Town's annual 2014 town meeting will include funding support for the position during FY 15.

- **Include a detailed plan for how the position will be sustained and funded beyond the life of the grant**

The considerable amount of matching funds being provided by the two Towns in FY15 (\$40,284) and FY16 (\$53,276) to support the Energy Manager position is indicative of the Towns' interest and commitment to this program. Because of that support, the transition to providing 100% funding of the Energy Manager position in FY 17 will be made more easily. The cost savings which will be achieved as a result of the Energy Manager's work will fund the Energy Manager's position in FY 17 and beyond.

ATTACHMENT C

CERTIFICATION OF APPLICATION

The Certification of Application below must be provided as a scanned pdf with signature.

CERTIFICATION OF APPLICATION

The Chief Executive Officer must complete this certification.

I, Charles V. Vecchi am authorized to execute said Application on behalf of the Town of Millic, the applying municipality or regional school district and verify that the information in the Energy Manager Grant Application is true. In addition, by signing this statement, I am attesting that the municipality/RSD is committed to sustaining the position and providing funds in future years beyond the life of this grant for the position subject to appropriate approval processes.

[Handwritten signature of Charles V. Vecchi]
[Signature of Chief Executive Officer]

Chairman, Board of Selectmen
[Title of Chief Executive Officer]

2/3/2014

[DATE]

NOTE: THE CHIEF EXECUTIVE OFFICER IS DEFINED AS THE MANAGER IN ANY CITY HAVING A MANAGER AND IN ANY TOWN HAVING A CITY FORM OF GOVERNMENT, THE MAYOR IN ANY OTHER CITY, AND THE BOARD OF SELECTMEN IN ANY OTHER TOWN UNLESS SOME OTHER OFFICER OR BODY IS DESIGNATED TO PERFORM THE FUNCTIONS OF A CHIEF EXECUTIVE OFFICER UNDER THE PROVISIONS OF A LOCAL CHARTER OR LAWS HAVING THE FORCE OF A CHARTER.

FOR REGIONAL SCHOOL DISTRICTS, THE CHIEF EXECUTIVE OFFICER IS THE SUPERINTENDENT.

**ATTACHMENT C**

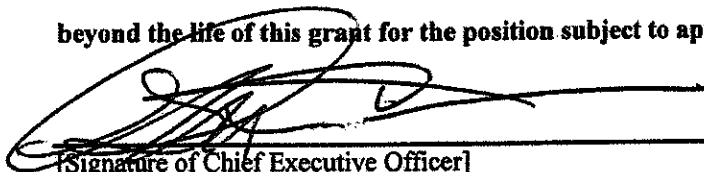
**CERTIFICATION OF APPLICATION**

The Certification of Application below must be provided as a *scanned pdf with signature*.

**CERTIFICATION OF APPLICATION**

The Chief Executive Officer must complete this certification.

I, Glenn Trindade, am authorized to execute said Application on behalf of the Town of Medway, the applying municipality and verify that the information in the Energy Manager Grant Application is true. In addition, by signing this statement, I am attesting that the municipality is committed to sustaining the position and providing funds in future years beyond the life of this grant for the position subject to appropriate approval processes.



\_\_\_\_\_  
[Signature of Chief Executive Officer]

Board of Selectmen Chairman  
\_\_\_\_\_  
[Title of Chief Executive Officer]

February 3, 2014  
\_\_\_\_\_

**[DATE]**

**NOTE:** THE CHIEF EXECUTIVE OFFICER IS DEFINED AS THE MANAGER IN ANY CITY HAVING A MANAGER AND IN ANY TOWN HAVING A CITY FORM OF GOVERNMENT, THE MAYOR IN ANY OTHER CITY, AND THE BOARD OF SELECTMEN IN ANY OTHER TOWN UNLESS SOME OTHER OFFICER OR BODY IS DESIGNATED TO PERFORM THE FUNCTIONS OF A CHIEF EXECUTIVE OFFICER UNDER THE PROVISIONS OF A LOCAL CHARTER OR LAWS HAVING THE FORCE OF A CHARTER.

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I, Charles V. Vecchi am authorized to execute said Application on behalf of the Town of Millis, the applying municipality or regional school district and verify that the information in the Energy Manager Grant Application is true. In addition, by signing this statement, I am attesting that the municipality/RSD is committed to sustaining the position and providing funds in future years beyond the life of this grant for the position subject to appropriate approval processes.

[Handwritten signature of Charles V. Vecchi]
[Signature of Chief Executive Officer]

Chairman, Board of Selectmen
[Title of Chief Executive Officer]

2/3/2014

[DATE]

NOTE: THE CHIEF EXECUTIVE OFFICER IS DEFINED AS THE MANAGER IN ANY CITY HAVING A MANAGER AND IN ANY TOWN HAVING A CITY FORM OF GOVERNMENT, THE MAYOR IN ANY OTHER CITY, AND THE BOARD OF SELECTMEN IN ANY OTHER TOWN UNLESS SOME OTHER OFFICER OR BODY IS DESIGNATED TO PERFORM THE FUNCTIONS OF A CHIEF EXECUTIVE OFFICER UNDER THE PROVISIONS OF A LOCAL CHARTER OR LAWS HAVING THE FORCE OF A CHARTER.

FOR REGIONAL SCHOOL DISTRICTS, THE CHIEF EXECUTIVE OFFICER IS THE SUPERINTENDENT.



**Medway Energy Committee**  
Town of Medway  
155 Village Street, Medway MA 02053  
Tel: (508) 533-3264  
Fax: (508) 533-3281

*Lawrence Ellsworth, Chair*  
*Carey Bergeron, Vice Chair*  
*Carole Bernstein, School Committee*  
*David Brownell, Member*  
*Peter Cooper, Member*  
*John Foresto, Board of Selectmen*  
*Charles Myers, Member*  
*Robert Tucker, PEDB*  
*Shelley Wieler, Member*

February 3, 2014

Mass Department of Energy Resources  
Green Communities Division  
100 Cambridge ST – Suite 900  
Boston, MA 02114-2119

RE: DOER Energy Manager Grant Program

To Whom It May Concern:

On January 15, 2014 at its open meeting, the Medway Energy Committee (MEC) voted unanimously to endorse the Town's initiative to apply for the Mass Department of Energy Resources Energy Manager Grant program.

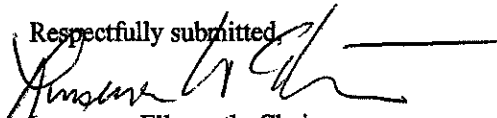
During the past 6 years, the Town of Medway has demonstrated a significant commitment to advance clean-energy and conservation efforts in the community. In 2008, the Medway Public Schools, with support from Town officials, contracted an ESCO to fund repairs to school facilities through the savings achieved by reducing natural gas and electric energy usage reduction. Since then, the Town has made strides toward reducing municipal energy consumption in all departments, including becoming a Massachusetts Green Community in 2010, and installing solar arrays on Medway High School and Middle School totaling 777 kW. In 2012, Medway was selected by the Metropolitan Area Planning Council (MAPC) to develop a LEAP (Local Energy Action Plan) to set energy goals and outline action strategies to advance the community's clean energy and carbon footprint reduction efforts; Medway's LEAP was completed in 2013. Also during 2013, Medway participated in the Solarize Mass program, achieving the Tier 5 level of installations with 39 projects totaling 488.6 kW which is expected to produce 556 megawatt-hours of electricity annually. Recently, the Medway Board of Selectmen entered into a 20 year net-metering sales agreement with Enfinity SPV Holdings, Inc. for a solar farm in Plympton, MA. Further, the Town is evaluating municipal aggregation programs to benefit the community's residents and businesses.

With this high level of commitment and variety of programs, the Town's personnel resources to manage these projects have become overwhelmed. To continue to build on these activities beyond the immediate and obvious needs and deliver new energy efficiency initiatives will require the involvement of a municipal energy manager with the dedicated time and resources to outreach to and interface with the varied departments and community groups.

Despite achieving remarkable fiscal improvements over the last 8 years, the Town of Medway remains in a challenging fiscal environment, and will require the financial assistance provided by this grant to add the position of Energy Manager to the Town's staff.

The Energy Committee enthusiastically endorses this application and we look forward to enabling our community to work together to conserve our resources and reduce our carbon footprint. We pledge our continued support and active participation to partner with an Energy Manager.

Respectfully submitted,



Lawrence Ellsworth, Chair

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*Energy Committee -- January 27, 2014*

*Page 2*

Other supporting documentation:

- medway\_Letter of Support\_20140213 - Elizabeth Kennedy;
- medway\_support-ltr\_RepLinsky; medway\_support-ltr\_Rep-Roy;
- Medway Energy Action Plan – March
- MEDWAY MILLIS - ATTACHMENT F-021214-140846
- MEDWAY MILLIS - LTR FROM MILLIS SELECTBOARD ATTACHMENT E

## VI. ATTACHMENT C – SCOPE OF GRANT AWARD

### ***COMMONWEALTH OF MASSACHUSETTS SCOPE OF GRANT AWARD AGREEMENT***

**By and Between  
Massachusetts Department of Energy Resources (DOER)  
and  
Town of Medway**

#### **SCOPE OF GRANT AWARD**

##### **1. Overview:**

This Grant Agreement between DOER and the Town of Medway (Town) is to fund the salary of an Energy Manager and shared with the Town of Millis costs associated with activities led by the position in the Towns. Funds are to be spent only in support of Energy Manager's salary and benefits if applicable; Energy Manager's documented vehicle mileage; and energy education materials.

**No changes in scope can occur or proceed without prior approval from DOER.**

##### **2. Contingencies**

Town must provide to DOER's satisfaction, certain information detailed below, and as applicable to the project, as soon as it becomes available.

(#1) Receipt of an Energy Work Plan for the second year of the grant developed for the Town as part of the progress report due on or before September 4, 2015.

(#2) Receipt of a status report on December 4, 2015 describing the progress on the municipal energy projects to date, including progress on energy education and energy outreach initiatives.

##### **3. Procurement:**

All procurement contracts and subcontracts entered into by public agencies and governmental bodies shall be governed by and in accordance with Massachusetts General Laws. Where applicable, such procurements, contracts and subcontracts shall be governed by the all provisions of either M.G.L. c.25A, § 11C or §11I, M.G.L. c.30B, or M.G.L c.149. All designer selection for building projects shall be governed by M.G.L. c.7, §§38A1/2 - O.

##### **4. Disbursement of Funds:**

**Initial Disbursement:** Twenty-five percent (25%) of the award, eight thousand seven hundred and fifty dollars and <sup>00/100</sup> (\$8,750), will be disbursed by DOER only after the execution of this Grant Agreement.

**Second Disbursement:** Fifty percent (50%) of the award seventeen thousand five hundred dollars and <sup>00/100</sup> (\$17,500), shall be disbursed upon verification by DOER that contingency #1 has been met.

**Third and Final Disbursement:** Twenty-five percent (25%) of the award, eight thousand seven hundred and fifty dollars and <sup>00/100</sup> (\$8,750), shall be disbursed after upon verification by DOER, that contingency #2 has been met.

##### **5. Separate Accounts**



The Town shall at all times conduct its business and affairs in such a manner that any and all ledger accounts and records pertaining to the receipt and expenditure of DOER funds under this Agreement shall be kept separate and distinct from all ledger accounts and records of the Town relative to any other enterprise which the Town has engaged in, developed, or administered.

**6. Unused funds:**

Any funds undisbursed or uncommitted by the Town after July 30, 2015 shall be returned to the DOER within 60 days.

**7. Publicity**

The Town will coordinate with DOER on all publicity regarding this project.

**8. Reporting and Other Required Documentation:**

The Town shall have a program to combat fraud, waste and abuse of funds and shall incorporate into its program guidance provided by the Office of the State Comptroller. Guidance may be found at <http://www.mass.gov/osc/guidance-for-agencies/internal-controls.html>

A. **Reports:** The Town shall file progress and financial reports, unless specifically exempted by DOER. Reports are due by 5pm on October 9, 2015; January 8, 2016 and September 9, 2016.

i. The October 9, 2015 report shall include:

- a. Documentation of payroll information for the Energy Manager; payroll account report or similar.
- b. An Energy Work Plan for the Town. Work Plans were included in first year report but it is expected that these will be revised for the second year. At a minimum, the Work Plan must include:
  - i. Plans for initiation of at least two clean energy projects for a full-time Energy Manager, with one clean energy project in each town.
  - ii. Detailed Plans for energy education and outreach initiatives for the schools and the wider community. As the position is shared across two municipalities, this includes conducting one school-related and one community-wide initiative in each town served resulting in four initiatives total.

ii. The January 8, 2016 report shall include

- a. The progress and status of activities performed in relation to the initial report and the Work Plan, including an explanation of any delays or obstacles encountered in meeting the performance schedule as well as a description of efforts taken to resolve delays; and
- b. The actual costs incurred to date by the Project, breaking down all costs in such manner as DOER may prescribe

**Decisions regarding funding for additional year will be based on this report**

(a) A final report of all accounting and work completed shall be due September 9, 2016, and shall include a summary of the results of the work plan; including the results of the clean energy projects completed and energy education and outreach initiatives conducted.

B. All reports above shall be submitted to:

Paul Carey, Green Communities Grant Coordinator, 617-626-7372;  
[Paul.S.Carey@state.ma.us](mailto:Paul.S.Carey@state.ma.us)

**Ownership of Reports and Other Required Documentation:** The deliverables shall be owned by the Commonwealth of Massachusetts and treated as public documents. Following the completion of the contract both the Commonwealth and the Town retain the right to make further use of the deliverables

**VII. ATTACHMENT D - BUDGET**

Check one:  Initial Budget

Budget/Account Amendment. Maximum Obligation before this Amendment: **\$50,000**  
 PRIOR MMARS DOCUMENT ID: \_\_\_\_\_ (for reference - if applicable)

CURRENT DOC ID: \_\_\_\_\_

[See Instructions for Additional Guidance on completion. Insert as many additional lines as necessary.]

A	B	C	D	E	F	G	H	I
Budget Fiscal Year	Account	Object Class	Description	Initial Amount / or Amount Prior to Amendment	Indicate Add or Reduce +/-	Amendment Amount	Enter "YES" if Amount is a prior FY budget reduction or a current FY "Carry-in" authorization for Federal Funds	New Amount After Amendment
FY15	2000-0113	P01		\$50,000		\$		\$50,000
FY16	2000-0113	P01		\$0		\$		\$34,999
FY17	2000-0113	P01		\$0		\$		\$1
						\$		\$

FISCAL YEAR SUBTOTALS AND TOTAL MAXIMUM OBLIGATION FOR DURATION OF Contract	
FISCAL YEAR: <u>2015</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$50,000
FISCAL YEAR: <u>2016</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$34,999
FISCAL YEAR: <u>2017</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$1
FISCAL YEAR: _____ SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	
<b>TOTAL MAXIMUM OBLIGATION FOR DURATION OF Contract (or New Total Maximum Obligation if amended)</b>	<b>\$85,000</b>

**IX. ATTACHMENT F--COST SHARING COMMITMENT LETTER**

Mr. Paul Carey  
MA Department of Energy Resources  
100 Cambridge Street, Suite 1020  
Boston, MA 02114

RE: Energy Manager Grant Match funding

Dear Mr. Carey:

Please let this letter serve as attestation to the MA DOER that City/Town of \_\_\_\_\_ has allocated the amount of \$ \_\_\_\_\_ for match funding as required by the Energy Manager Grant Program Opportunity Notice (PON-ENE-2014-011).

In support of this assertion I have attached the following documents \_\_\_\_\_

- X. THE COMMONWEALTH OF MASSACHUSETTS STANDARD CONTRACT ATTACHMENTS
1. Grantee AUTHORIZED SIGNATORY LISTING
  2. W-9 FORM
  3. EFT

# AGENDA

## ITEM #4

### Approval – Millstone Village Affordable Unit Price Adjustment

*Associated back up materials attached.*

- Correspondence from Ann Sherry, Affordable Housing Trust Chair, and Robert Ferrari, Affordable Housing Committee Chair, dated June 25, 2015.
- Proposed letter draft to Janice Lesniak, Division of Housing Development of Department of Housing and Community Development

**Proposed motion:** I move that the Board approve the proposed increase in pricing of Millstone Village's eight affordable units from \$170,000 to \$174,700 and authorize the chair to execute the proposed letter to the DHCD.



**TOWN OF MEDWAY**  
Affordable Housing Trust  
Affordable Housing Committee

*Ann Sherry, AHT Chair - Robert Ferrari, AHC Chair - Douglas Havens, Community Housing Coordinator*

June 25, 2015

Board of Selectmen  
Attention: John Foresto, Chair  
Medway, MA

Dear Mr. Foresto:

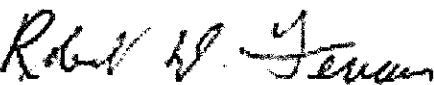
At our duly convened June 4<sup>th</sup> meeting, the Affordable Housing Trust and the Affordable Housing Committee moved, seconded and voted unanimously, by a quorum of each body, to recommend that the Board of Selectmen **agree as conditioned below** to the request of Millstone Village to increase the price of each of the venture's eight affordable units from the originally proposed \$170,000 to the newly adjusted \$174,700 by replacing Exhibit B to the venture's Regulatory Agreement - still pending final review by DHCD.

The Trust and Committee asks that the Board of Selectmen condition its agreement on the representation by Steven Venincasa, as principal, that he eschews the right to future price increases for the project's affordable units and that the price of \$174,700 will remain in effect for the initial sale of all 8 affordable units, and further, that as a basic accommodation for people with disabilities, accessible features would be provided in the affordable units without charge in those instances where notification of such need predates construction of the unit. Further, it was agreed that construction of any ramp access to a unit built in that unit's garage will be performed and that only the developer's hard cost of material and labor will be charged to the buyer.

The petitioner has requested that the Chair provide written notice of the Board's decision to the venture's marketing consultant, Maureen OHagan at MCO Housing Services. Draft Language conveying approval of the petition is attached.

Sincerely,

  
Ann Sherry, Chair

  
Bob Ferrari, Chair

PROPOSED DRAFT - PROPOSED DRAFT - PROPOSED DRAFT - PROPOSED DRAFT

July , 2015

Ms. Janice Lesniak  
Division of Housing Development  
Department of Housing and Community Development  
Suite 300  
100 Cambridge Street  
Boston, MA 02114

RE: Millstone Village - update of Exhibit B to pending LAU Regulatory Agreement

Dear Ms. Lesniak –

At the June 4<sup>th</sup> 2015 meeting of the Medway Affordable Housing Committee and Affordable Housing Trust, Mr. Venincasa agreed that, if a requested increase in the sale price of the affordable units in Millstone Village is recommended and allowed, then:

- the increased maximum sale price of \$174,700 will apply to all 8 of the venture's affordable units until sold;
- given sufficient notice, basic accommodations will be made for people with disabilities for little or no cost to the buyer, and
- access ramps will be built in garages and billed at cost to the unit owner.

Based on these representations and the recommendation of the Town's Affordable Housing Committee and Trust, the Board of Selectmen voted to endorse the developer's request to substitute the original Exhibit B of the venture's pending Regulatory Agreement with one reflecting an increase in the maximum sale price for the sale of its affordable units to \$174,700.

Sincerely,

John Foresto,  
Chair, BOS



# AGENDA

## ITEM #5

### Approval – GATRA Contract Extension – July 1 through August 31, 2015

*Associated back up materials attached.*

- Memorandum from Francis Gay, GATRA Administrator, dated June 24, 2015
- Amendment to contract dated July 1, 2014 between Greater Attleboro-Taunton Regional Transit Authority and Town of Medway

**Proposed motion:** I move that the Board authorize the Chair to execute the amendment to the contract between GATRA and the Town which will provide for the contract's extension from July 1, 2015 through August 31, 2015.



# Memo

**To:** Missy Dziczek, Director, Medway Council on Aging  
**From:** Francis J. Gay, Administrator  
**Date:** June 24, 2015  
**RE:** Two Month Extension for Contract

---

Enclosed please find two copies of an Amendment extending the FY2015 Contract for two months between GATRA and your community. The contract will cover the period of July 1, 2015 through August 31, 2015.

We are still reviewing the FY2016 Contract with our legal counsel regarding some federal grant contract updates. We plan to have the FY2016 Contract in place starting September 1, 2015.

Please have the appropriate personnel review the Amendment, and if in agreement, please have the authorized person for the Town sign both Amendments and return one copy for our files.

We look forward to working with you in providing demand response services to your community during the next year. If you have any questions, please feel free to call me.

Enclosures  
kac



GREATER ATTLEBORO-TAUNTON REGIONAL TRANSIT AUTHORITY

**AMENDMENT  
TO CONTRACT DATED JULY 1, 2014  
BETWEEN  
THE  
GREATER ATTLEBORO-TAUNTON REGIONAL TRANSIT AUTHORITY  
AND  
THE TOWN OF MEDWAY  
FOR  
TRANSIT SERVICE TO THE ELDERLY AND DISABLED  
AND LOCAL SHUTTLE ROUTES IN THE TOWN OF MEDWAY**

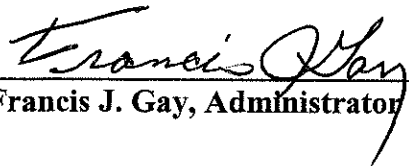
This Amendment to the Contract is made the 1<sup>st</sup> day of July, 2015 by and between the Greater Attleboro-Taunton Regional Transit Authority (GATRA) a body politic and corporate of the Commonwealth of Massachusetts, established pursuant to Massachusetts General Laws, Chapter 161B hereinafter referred to as "GATRA", and the Town of Medway, a duly organized and existing Massachusetts corporation, having a usual place of business in Medway, Massachusetts, hereinafter referred to as "Contractor".

1. It is agreed that the Contractor will provide the necessary service to operate demand response service to the elderly and disabled and local shuttle routes in the Town of Medway in accordance with the Contract between the parties dated July 1, 2014.
2. The Contractor shall provide the service for the period from July 1, 2015 through August 31, 2015, the contract term extension.
3. All other provisions of the existing contract between the parties dated July 1, 2014 shall apply to this Amendment and shall be in full force and effect.

IN WITNESS WHEREOF the parties hereto have caused this Amendment to be executed by their duly authorized officers on the day and year first written above.

**Greater Attleboro Taunton Regional  
Transit Authority**

**Town of Medway**

  
\_\_\_\_\_  
**Francis J. Gay, Administrator**

\_\_\_\_\_  
**Chairman, Board of Selectmen**

# AGENDA

## ITEM #6

**Approval of Donation Acceptance—  
Friends of Medway Public Library  
to the Medway Public Library -  
\$17,000**

*Associated back up materials attached.*

- *Notice of Donation Fund dated June 2, 2015*

**Proposed motion:** I move that the Board approve the gift from the Friends of the Medway Library to the Medway Public Library in the amount of \$17,000 to be added to the Memorial Donations account for the purchase of books, media, electronic resources and other materials, and programs.

**TOWN OF MEDWAY  
NOTICE OF DONATION FUND**

DEPARTMENT: Library DATE: 2-Jun-15

PERSON RESPONSIBLE FOR EXPENDITURE: Margaret Perkins, Library Director

NAME OF DONATION: Gift from Friends of the Medway Library

SOURCE OF FUNDS: Friends of the Medway Library

INITIAL AMOUNT: \$17,000

DURATION: one time

DESIGNATED PURPOSE To be added to the Memorial Donations account, for the purchase of books, media,  
electronic resources and other materials, and programs.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ARE MATCHING TOWN FUNDS REQUIRED? No

IF MATCHING IS NON-MONETARY (MAN HOURS, ETC.) PLEASE SPECIFY:  
None  
\_\_\_\_\_

IF MATCHING IS MONETARY PLEASE GIVE ACCOUNT NUMBER AND DESCRIPTION OF TOWN FUNDS TO BE USED:  
\_\_\_\_\_  
\_\_\_\_\_

ANY OTHER EXPOSURE TO TOWN?  
No

BOARD OF SELECTMEN:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACTION DATE \_\_\_\_\_

**DEPARTMENT HEAD MUST SUBMIT THIS FORM AND A COPY OF THE DONATION APPROVAL TO THE TOWN ADMINISTRATOR'S OFFICE FOR APPROVAL BY THE BOS TO EXPEND THE FUNDS RECEIVED FOR THE PURPOSE OF THE DONATION MGL 44 S53A**

**ONCE APPROVED - ORIGINAL TO TOWN ACCOUNTANT**

# AGENDA

## ITEM #7

### Approval – Proposal for Technical Services for Proposed Exelon Project – Power Advisory LLC

*Associated back up materials attached.*

- Proposal from Power Advisory LLC dated June 23, 2015
- Resume of Michael D. Ernst, Esq.

**Proposed motion:** I move that the Board accept the proposal to furnish technical consulting services relative to the proposed Exelon project as presented by Power Advisory LLC and to instruct the Town Administrator to prepare the necessary contract documents for execution by the Chair.



June 23, 2015

Michael E. Boynton  
Town Administrator  
Town of Medway  
155 Village Street  
Medway, MA 02053

Dear Mr. Boynton,

Per invitation of Karen Kisty, I am submitting this proposal to provide technical consulting services to the Town of Medway regarding the proposed addition of two turbines at the Exelon West Medway power plant site. More specifically, Ms. Kisty requested that I provide a proposal to

1. review the Exelon West Medway application and appendices filed with the Massachusetts Energy Facilities Siting Board (EFSB) and
2. identify all potentially significant impacts to the Town and its residents that the Town may wish to investigate further as an intervenor to the EFSB proceedings.

With your approval, I also propose to provide initial analysis of mitigation required for similar impacts to other communities based on EFSB precedent. I will first present my qualifications to conduct such an analysis and then provide proposed terms of engagement.

#### **Relevant Energy Facilities Siting Board Experience**

- **Hearing Officer for Massachusetts Energy Facilities Siting Council (1991-1993)**

Served as Hearing Officer/Administrative Law Judge for 3 major power plant projects before the EFSB, helping draft and edit discovery to explore all potentially significant impacts on the environment and local residents, presiding over evidentiary hearings, and helping draft the Tentative and Final Decisions. Presided over 50 hearings for Boston Edison's proposal to build a new gas plant at Fore River Station before Boston Edison became the first EFSB applicant for a power plant to withdraw its application due to reduced energy demand and challenges in obtaining sufficient cooling water for the facility.

- **General Counsel to the Department of Public Utilities (1995-1998)**

Helped draft the legislation merging the EFSC with the DPU, creating the Energy Facilities Siting Board, to ensure correct transfer of EFSC functions to the EFSB and guide the proper implementation of the new statute.

- **Associate Counsel in Energy Division of Rubin & Rudman Law Firm (1998-2001)**

Supported the permitting of Mystic Station in Everett and Fore River Station in Weymouth before the EFSB, including reviewing and editing testimony, responding to discovery, supporting witnesses during cross-examination and drafting sections of the briefs.

- **Vice President, Permitting & Siting, TransEnergie U.S. (2001-2006)**

Supervised permitting and siting of transmission projects, including the Cross Sound Cable submarine cable from New Haven CT to Long Island NY, which required approval before the Connecticut Siting Council and various appeals.

- **Director of Regulatory Affairs, Tetra Tech (2006-Present)**

Supervising permitting of onshore and offshore wind farms and transmission projects in Massachusetts, New England and along the East Coast. Recently reviewed the EFSB Application by National Grid to construct the Merrimack Valley Reliability Project transmission line through Tewksbury, Andover and Dracut for New Hampshire Transmission Company (EFSB 15-44). Reviewed entire EFSB application and appendices and identified potentially significant issues to investigate during the EFSB proceeding. Currently responsible for reviewing all new filings and reporting weekly any significant issues that arise to the NHT President and intervenor team.

#### **Proposed Commercial Terms and Schedule**

The proposed project budget for the initial task to review the Exelon West Medway application and appendices filed with the EFSB and submit to you a report identifying all potentially significant impacts and providing initial analysis on EFSB precedent for mitigation required for similar impacts to other communities is three thousand dollars \$3,000.00 for 15 hours at \$200 per hour. I can complete this work within five days of receipt of your written acceptance of this proposal. I would be happy to discuss this proposal at your office or by phone at your convenience.

Thank you very much for this opportunity, and the Town of Medfield's acceptance of this proposal is indicated by your signature below.

Sincerely,



Michael D. Ernst, Esq.  
Executive Advisor  
Power Advisory LLC

Accepted by:

\_\_\_\_\_  
On Behalf of Town of Medfield



**Michael D. Ernst, Esq.  
Energy & Environmental Attorney  
2 Rawson Place  
Shrewsbury, MA  
508 245-7767**

**Goal: Interesting Opportunities to Support Clean Technology & Renewable Energy**

**Experience Summary**

Mr. Ernst has over 30 years of energy experience as an energy and environmental attorney for NGOs, Mass. state agencies, a Boston energy law firm, an independent transmission development company and now as Director of Regulatory Affairs for the Tetra Tech Energy Program. At Tetra Tech, Mr. Ernst has supported the siting and permitting of offshore wind parks and submarine cables off ten states from Maine to Virginia and in the Great Lakes and Hawaii. Mr. Ernst also co-authored an analysis of the offshore wind market for Vestas.

Mr. Ernst is a policy lead for 3 annual DOE-funded studies led by Navigant Consulting analyzing offshore wind markets and identifying state and federal incentives for development of offshore wind in the U.S. He also helped draft and edit the new DOE Wind Vision Report on the future of U.S. wind to be issued shortly.

Before joining Tetra Tech, Mr. Ernst served as Vice President of a transmission development company that built the high voltage direct current, submarine Cross Sound Cable from New Haven, CT to Long Island, NY. At Rubin & Rudman LLP in Boston, he supported the permitting of three gas-fired power plants and transmission lines in Massachusetts and New York.

Mr. Ernst was General Counsel and Legislative Director of the Massachusetts Department of Public Utilities during electric industry restructuring and as a Hearing Officer for the Massachusetts Energy Facilities Siting Board for new power plants and transmission lines. He also served as Counsel to the Joint Committee on Energy of the Massachusetts Legislature for six years and Safe Energy Advocate for MassPIRG.

**Education**

JD, Northeastern University School of Law, 1980 (Founder of NUSL Chapter of Equal Justice Foundation)  
BS, Pre-Medicine, Davidson College, 1973 (Co-founder of Davidson Chapter of N.C. PIRG)

**Registrations/Certifications**

State Bar Association, MA, Number 155965  
Mediation Certification, MetroWest Mediation Services

**Select Corporate Project Experience**

***Tetra Tech, Director of Regulatory Affairs, Boston, MA (Oct.2006-Present)***

**Permitting Counsel, May 2010 – Present**

**Deepwater Block Island Offshore Wind Farm, Rhode Island**

Supervise permitting of the offshore wind park and onshore transmission interconnection from the U.S. Bureau of Ocean Energy and other federal, state and local agencies.

**Permitting Support, June 2012 – Present**

**NextEra SeaLink Submarine Cable Project**

Supporting ISO-New England and other federal, state and local approvals for 69-mile submarine and underground cable from Seabrook, NH to Boston, MA. Drafted legislation authorizing easements through state and municipal property.

**Federal Permitting Lead, January 2012 – October 2013**

**Statoil Hywind Maine Floating Turbine Pilot Project**

Supported cable routing to onshore substation for 4 floating wind turbines 20 miles off Boothbay Harbor, ME.

**Siting Lead, January 2009 – Present**

**Beacon Power Flywheel Energy Storage Facilities, NY, OH, PA, IL**

Supervised siting of 20 MW flywheel energy storage and frequency regulation facilities in New York, Ohio, Pennsylvania and Illinois. Identified Hazle Township, PA site currently under construction.

**Michael D. Ernst, Esq.  
Energy & Environmental Attorney  
2 Rawson Place  
Shrewsbury, MA  
508 245-7767**

**Transmission Interconnection Lead, May 2007 – 2013**

**Lanai Wind Farm, Lanai, HI**

Supervised routing of 50-mile submarine cable and Oahu grid interconnection from a proposed wind farm on Lanai Island, Hawaii. Supervised marine constraint analysis, route selection, electrical interconnection studies, and submission of responses to renewable energy Requests for Proposals by Hawaiian Electric Company and Department of Defense, as well as permitting of interconnections.

**Selected Previous Experience**

***TransEnergie U.S., Vice President Siting and Permitting, Westborough, MA (Oct.2001 – Oct.2006)***

**Permitting Counsel, June 2001 – December 2005**

**Cross Sound Cable – Long Island Sound**

For this approximately 25 mile submarine high voltage cable between Connecticut and Long Island, NY, helped develop successful legal strategy at ISO-New England and FERC to overcome litigation opposition by Connecticut Attorney General before Connecticut Superior and Supreme Courts, the U.S. Second Circuit Court of Appeals, and the FERC. Also negotiated an out-of-court settlement with an oyster fisherman.

**Project Director, June 2001 – February 2003**

**Lake Erie Link – Erie, PA to Ontario**

For this approximately 70 mile submarine high voltage cable across Lake Erie, served as Project Manager. Met with state and local officials in Pennsylvania and Ohio and **successfully negotiated a favorable PILOT agreement with three sets of local Pennsylvania officials**. Supervised a development team of over 100 environmental consultants and attorneys to complete environmental desktop and field studies and prepare and file the Environmental Report and a Presidential Permit Application.

***Rubin & Rudman, Associate Counsel (Oct.1998 – Oct. 2001)***

**Permitting Team Counsel, September 1998 – May 2001**

**Mystic Station, Everett, MA & Fore River Station, Weymouth, MA**

For these combined cycle natural gas-fueled power plants, Mr. Ernst supported the successful permitting through Massachusetts Energy Facilities Siting Board. Also supported the approval of the transmission interconnection from the facility to the Massachusetts electric grid.

***MA Department of Public Utilities (1993-1998)***

**General Counsel, 1995 – 1998**

Mr. Ernst was a Hearing Officer at the Energy Facilities Siting Board and DPU managing various cases involving power plants, transmission lines and other regulatory matters. He then served as Assistant General Counsel and General Counsel supervising the legal team and advising the Commission and supporting the Attorney General in litigation against the DPU.

***MA Energy Facilities Siting Board (1991-1993)***

**Hearing Officer, 1991-1993**

Mr. Ernst served as Hearing Officer on 3 major power plant cases, including the first time that a power plant proponent before the EFSB (Boston Edison), withdrew its application for the project after 50 hearings.

***Joint Committee on Energy, MA Legislature (1985-1990)***

**Research Director, 1988 – 1990**

Mr. Ernst served as counsel to the Joint Committee Co-Chairmen and Research Director drafting energy legislation and supporting passage of the bills approved by the Committee.

**Michael D. Ernst, Esq.  
Energy & Environmental Attorney  
2 Rawson Place  
Shrewsbury, MA  
508 245-7767**

***MASSPIRG (1982 – 1984)***

Mr. Ernst served as Safe Energy Advocate supporting development of renewables, energy efficiency and practical emergency response plans for nuclear power plants.

***Union of Concerned Scientists (1980 – 1981)***

Mr. Ernst supported the UCS General Counsel in preparations for the Three Mile Island hearings at the NRC.

**Professional Accomplishments**

- Over 30 years of experience as an environmental attorney for state agencies, law firms, project developers, and energy consultants.
- Supported energy project development and permitting in 15 states from Maine to Hawaii plus Canada.
- Supported all required federal, state and local approvals for 4 offshore wind parks on East Coast.
- Negotiated with the Federal Energy Regulatory Commission (FERC) and ISO-New England, PJM and Midwest ISO staff on Interconnection Studies and Agreements.
- Served as General Counsel and Legislative Director of the Massachusetts Department of Public Utilities; Hearing Officer, Massachusetts Siting Board

**Recent Presentations**

- Chairman, Environmental Business Council of New England Climate Change Program: "The Proposed Massachusetts Clean Energy Standard, Boston, MA, January 7, 2015
- Presentation at American Wind Energy Association (AWEA) Offshore Wind 2014, "Current Status of All U.S. Offshore Wind Farms," Atlantic City, NJ, October 7, 2014
- Chairman, Environmental Business Council of New England Annual Offshore Wind Conference, Boston, MA, September 30, 2014
- Speaker on Smarter, Greener Grid Webinar, VT Law School/NAEP, June 24, 2014
- Speaker at Energy Ocean 2014: "Overcoming Offshore Wind Challenges," Atlantic City, NJ, June 4, 2014
- Speaker at AWEA WINDPOWER 2014: "Offshore Wind Policy," Las Vegas, NV, May 8, 2014
- Speaker at AWEA Offshore Wind Conference: "Offshore Wind Policy" in Providence, RI, Oct. 21-23, 2013.
- Speaker at Southeastern Coastal Wind Conference, "Stakeholder Engagement and Collaboratives for Successful Wind Development" in Charleston, SC, September 10-12, 2013
- Speaker at AWEA WINDPOWER Conference 2013, "Offshore Wind Policy," Chicago, May 8, 2013.
- Co-Organizer of the Northeast Energy & Commerce Association Annual Renewable Energy Conference, Boston, February 16, 2013.
- Speaker at Law Seminars Inc. MEPA NEPA Conference: "Offshore Wind Leasing & Permitting Process," Boston, November 7, 2012.

# AGENDA

## ITEM #8

### Approval – One-Day Liquor License Applications

- a. Elena Karpova – Thayer Homestead – August 15, 2015
- b. Jaime Hodges & Susan Parlee – Thayer Homestead –  
July 12, 2015\*\* Reissue
- c. Katie Bercury – Thayer Homestead – July 31, 2015

*Associated back up materials attached.*

- Applications and Police Chief's recommendations

**Proposed motion:** I move that the Board approve all one-day alcohol licenses as presented conditioned upon fulfillment of the Police Chief's recommendations and receipt of required insurance confirmation for each respective event.

**Board of Selectmen**

Dennis P. Crowley, Chair  
John A. Foresto, Vice-Chair  
Richard A. D'Innocenzo, Clerk  
Glenn D. Trindade  
Maryjane White



Medway Town Hall  
155 Village Street  
Medway, MA 02053  
Phone (508) 533-3264  
Fax (508) 321-4988

**TOWN OF MEDWAY  
COMMONWEALTH OF MASSACHUSETTS**

**APPLICATION FOR SPECIAL ONE-DAY LIQUOR LICENSE**

MGL c.138, §14

Application for the purpose of selling or dispensing the following beverages permitted by law. A Section 12 license holder may not also be granted a Section 14 (one-day) license unless event is held at a separate location. A person holding a Section 14 license cannot purchase alcoholic beverages from a package store. Purchase must be made from a licensed wholesaler/importer, manufacturer, farmer-winery/brewery, or special permit holder.

For Profit Businesses are eligible for wine and malt license only.

Application must be submitted at least two weeks prior to event.

There is no fee for this license.

All Alcohol  Wine and Malt

Event Wedding Reception

Name of Organization/Applicant Elena Karpova

Address 990 North Colony Rd, Meriden CT 06450

SS# or FID# \_\_\_\_\_

Phone (203) 213-8297 Fax ( ) \_\_\_\_\_ Email ekarpova@webazet.com

Non-Profit Organization Y  N   
Attach non-profit certificate of exemption

Event Location Thayer Homestead

Event Date 08/15/2015

Event Hours (No later than 1:00 AM; Last call 12:30 AM) 5pm - 11pm

Is event open to the general public? Y  N

Estimated attendance 60-70

Will there be an age restriction? Y \_\_\_\_\_ N X

Minimum age allowed: \_\_\_\_\_

How, where and by whom will ID's be checked? 5-8 minors will be attending,

all relatives, they will have their own seating area, and legal gaurdians will be present to ensure no alcohol is consumed by minors.

Is there a charge for the beverages? Y \_\_\_\_\_ N X

Price structure: \_\_\_\_\_

Alcohol server(s) \_\_\_\_\_

Attach Proof of Alcohol Server Training \_\_\_\_\_

N/A

Provisions for Security, Detail Officer \_\_\_\_\_

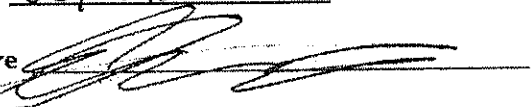
Does the applicant have knowledge of State liquor laws? Y X N \_\_\_\_\_

Experience \_\_\_\_\_

The following may be required:

Police Dept. – Detail; Fire Dept. – Detail; Board of Health – Food Permit; Building Dept. – Tent Permit

Date of Application 06/17/2015

Applicant's Signature 

Applicant's Name Elena Karpova

Address 90 North Colony Rd Meriden, CT 00450

Phone (203) 213-8297 Fax ( ) \_\_\_\_\_ Email e.karpova@whazel.com

The Board of Selectmen's Office will forward this application to the Police, Fire, and Building Departments and the Board of Health for approval and recommendations.

Police Department \_\_\_\_\_ Date \_\_\_\_\_  
315 Village St

Fire Department \_\_\_\_\_ Date \_\_\_\_\_  
44 Milford St

Board of Health \_\_\_\_\_ Date \_\_\_\_\_  
Town Hall, 2<sup>nd</sup> Fl

Building Department \_\_\_\_\_ Date \_\_\_\_\_  
Town Hall, 1<sup>st</sup> Fl



# Medway Police Department

315 Village Street  
Medway, MA 02053

Phone: 508-533-3212  
FAX: 508-533-3216  
Emergency: 911

Allen M. Tingley  
Chief of Police

June 18, 2015

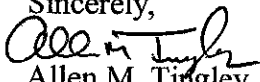
To: Michael Boynton  
Town Administrator

From: Allen M. Tingley  
Chief of Police

Re: One day liquor license- Thayer Property- Wedding Reception

I have reviewed the request from Elena Karpova for a one day liquor license for a wedding reception, to be held at the Thayer House, 2B Oak Street, on August 15, 2015. I approve of the issuance of this one day liquor license with the stipulation that the alcoholic beverages be purchased from a licensed alcohol wholesale distributor, as indicated on the license application and the Town of Medway's Alcohol Policy, there will be no on-street parking on Mechanic Street and Oak Street and that a responsible adult with some knowledge of Mass liquor laws will be checking ID's of individuals being served alcohol at the party.

Sincerely,

  
Allen M. Tingley  
Chief of Police



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

06/26/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Affinity Insurance Services, Inc. 300 Jericho Quadrangle, 3rd Floor Jericho, NY 11753		<b>CONTACT NAME:</b> Affinity Insurance Services, Inc. <b>PHONE (A/C, No. Ext):</b> 1-877-723-3933 <b>FAX (A/C, No):</b> 1-516-294-4449 <b>E-MAIL ADDRESS:</b> info@wedsafe.com	
<b>INSURED</b> Elena Karpova 990 North Colony Road Meriden, CT 06450 A Member of the Sports, Leisure & Entertainment RPG	2000686717	CP# 12169	
		<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>
		<b>INSURER A:</b> Nationwide Mutual Insurance Company	23787
		<b>INSURER B:</b>	
		<b>INSURER C:</b>	
		<b>INSURER D:</b>	

**COVERAGES**      **CERTIFICATE NUMBER:** 2000204646      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR/ LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YY)	POLICY EXP (MM/DD/YY)	LIMITS
A X	COMMERCIAL GENERAL LIABILITY CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR Host Liquor Liability Included GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER	X		6BWED000005708700	08/15/15 12:01 AM	08/16/15 12:01 AM	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$5,000,000 PRODUCTS-COMP/OP AGG \$1,000,000 PROFESSIONAL LIABILITY LEGAL LIAB TO PARTICIPANTS
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input checked="" type="checkbox"/> Not provided while in Hawaii						COMBINED SINGLE LIMIT (Ea Accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION						EACH OCCURRENCE AGGREGATE
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/ EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				PER STATUTE OTHER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**  
 Event Type: A wedding ceremony, reception and/or rehearsal; Honorees: Elena Karpova, John Pennoyer; Event Date: 08/15/2015; Location: Thayer Homestead.  
 If the event continues past 12:01 am at the location named on the certificate of insurance, such continuation shall be considered as the event date. The event includes set up and breakdown, at the event location, that occurs no more than 24 hours prior to the event or 24 hours after the event. The event also includes the rehearsal or rehearsal dinner if scheduled within 48 hours of the event, if the event is a wedding.  
 Liquor liability (as provided by CG 00 01 04 13) applies only if the insured is NOT in the business of manufacturing, distributing, selling, serving or furnishing alcoholic beverages.  
 Property Damage Liability as provided by this policy (including Damage to Premises Rented to You) is subject to a \$1,000 per occurrence deductible.  
 The certificate holder is added as an additional insured, but only for liability caused, in whole or in part, by the acts or omissions of the named insured.

<b>CERTIFICATE HOLDER</b> Town of Medway as an Additional Insured Thayer Homestead 2B Oak Street Medway, MA 02053 Event Location 1	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Scott Paul</i>
---	---



**Board of Selectmen**

- Janis P. Crowley, Chair*
- John A. Foresto, Vice-Chair*
- Michael A. D'Innocenzo, Clerk*
- William D. Trindade*
- Christy Jane White*



Medway Town Hall  
 155 Village Street  
 Medway, MA 02053  
 Phone (508) 533-3264  
 Fax (508) 321-4988

**TOWN OF MEDWAY**  
**COMMONWEALTH OF MASSACHUSETTS**

**APPLICATION FOR SPECIAL ONE-DAY LIQUOR LICENSE**

MGL c.138, §14

Application for the purpose of selling or dispensing the following beverages permitted by law. A Section 12 license holder may not also be granted a Section 14 (one-day) license unless event is held at a separate location. A person holding a Section 14 license cannot purchase alcoholic beverages from a package store. Purchase must be made from a licensed wholesaler/importer, manufacturer, farmer-winery/brewery, or special permit holder.

For Profit Businesses are eligible for wine and malt license only.

Application must be submitted at least two weeks prior to event.

There is no fee for this license.

All Alcohol \_\_\_\_\_ Wine and Malt   x  

Event   Bridal Shower  

Name of Organization/Applicant   Jaime Hodges / SUSAN PARLEE  

Address   5 Fales Street, Medway / 143 PARKER RD, DRAWUT MA  

SS# or FIU# \_\_\_\_\_   / 017-52-0244  

Phone   978 726 4395   Fax ( ) \_\_\_\_\_ Email   jaimelhodges@gmail.com  

  978 453 9384  

  robertParlee143@comcast.net  

Non-Profit Organization Y \_\_\_\_\_ N   x  

Attach non-profit certificate of exemption

Event Location   Thayer Homestead  

Event Date   July 12, 2015  

Event Hours (No later than 1:00 AM; Last call 12:30 AM)   11am - 3pm  

Is event open to the general public? Y \_\_\_\_\_ N   x  

Estimated attendance   35

Will there be an age restriction? Y  N

Minimum age allowed: \_\_\_\_\_

How, where and by whom will ID's be checked? Event by Invitation - Adults Only

Is there a charge for the beverages? Y  N

Price structure: \_\_\_\_\_

Alcohol server(s)

Attach Proof of Alcohol Server Training

Provisions for Security, Detail Officer \_\_\_\_\_

Does the applicant have knowledge of State liquor laws? Y  N

Experience \_\_\_\_\_

The following may be required:

Police Dept. - Detail; Fire Dept. - Detail; Board of Health - Food Permit; Building Dept. - Tent Permit

Date of Application May 4, 2015

Applicant's Signature J. Hodges / Susan Parlee

Applicant's Name Jaime Hodges / SUSAN PARLEE

Address 5 Fales Street, Medway / 143 PARKER RD, DRAWT MA

Phone (978) 726-4395 Fax ( ) Email jaimelhodges@gmail.com  
978-453-9384 robertparlee143@comcast.net

The Board of Selectmen's Office will forward this application to the Police, Fire, and Building Departments and the Board of Health for approval and recommendations.

Police Department \_\_\_\_\_  
315 Village St \_\_\_\_\_ Date \_\_\_\_\_

Fire Department \_\_\_\_\_  
4 Milford St \_\_\_\_\_ Date \_\_\_\_\_

Board of Health \_\_\_\_\_  
Town Hall, 2<sup>nd</sup> Fl \_\_\_\_\_ Date \_\_\_\_\_

Building Department \_\_\_\_\_  
Town Hall 1<sup>st</sup> Fl \_\_\_\_\_ Date \_\_\_\_\_



# Medway Police Department

315 Village Street  
Medway, MA 02053

Phone: 508-533-3212  
FAX: 508-533-3216  
Emergency: 911

Allen M. Tingley  
Chief of Police

May 11, 2015

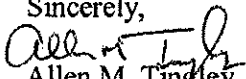
To: Michael Boynton  
Town Administrator

From: Allen M. Tingley  
Chief of Police

Re: One day liquor license- Thayer Property- Bridal Shower

I have reviewed the request from Jaime Hodges for a one day liquor license for a bridal shower, to be held at the Thayer House, 2B Oak Street, on July 12, 2015. I approve of the issuance of this one day liquor license with the stipulation that the wine/alcohol will be purchased from a licensed alcohol wholesale distributor, as indicated on the license application and the Town of Medway's Alcohol Policy and there will be no on-street parking on Mechanic Street and Oak Street and a responsible adult with some knowledge of Mass. liquor laws will be checking ID's of individuals being served alcohol at the party.

Sincerely,

  
Allen M. Tingley  
Chief of Police



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
**06/24/2015**

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.**

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<b>PRODUCER</b> Stephen J. Szczepanik Ins. 471 Alken Avenue Dracut, MA 01826 Stephen J. Szczepanik Ins.	<b>CONTACT NAME:</b> Stephen J. Szczepanik Ins. <b>PHONE (A/C, No, Ext):</b> 978-454-3106 <b>FAX (A/C, No):</b> 978-454-9376 <b>E-MAIL ADDRESS:</b> _____ <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; border: none;"><b>INSURER(S) AFFORDING COVERAGE</b></td> <td style="text-align: center; border: none;"><b>NAIC #</b></td> </tr> <tr> <td style="border: none;"><b>INSURER A: Commerce Ins</b></td> <td style="border: none;"><b>34754</b></td> </tr> <tr> <td style="border: none;"><b>INSURER B:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER C:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER D:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER E:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER F:</b></td> <td style="border: none;"></td> </tr> </table>	<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>	<b>INSURER A: Commerce Ins</b>	<b>34754</b>	<b>INSURER B:</b>		<b>INSURER C:</b>		<b>INSURER D:</b>		<b>INSURER E:</b>		<b>INSURER F:</b>	
<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>														
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<b>INSURER D:</b>															
<b>INSURER E:</b>															
<b>INSURER F:</b>															
<b>INSURED</b> <b>Robert M &amp; Susan Parlee</b> 143 Parker Road Dracut, MA 01826															

**COVERAGES      CERTIFICATE NUMBER:      REVISION NUMBER:**

**THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER: _____						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED    RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N					PER STATUTE    OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
<b>A</b>	<b>Home Owners</b>	<b>X</b>		<b>BDBVWB</b>	<b>12/14/2014</b>	<b>12/14/2015</b>	<b>Liability      1,000,000</b>

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**  
 Personal liability coverage limit of \$1,000,000 extends to 07-12-15 at the Thayer Homestead, 2B Oak St Medway, MA, owned by the Town of Medway. There are no exclusions for this event.

<b>CERTIFICATE HOLDER</b>  <p style="text-align: center;"><b>THAYERH</b></p> Thayer Homestead Town of Medway 2B Oak St Medway, MA 02053	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE Stephen J. Szczepanik Ins. 
--	--

Attn: Karen  
This is the application Dennis spoke to you about the name on for keeping the surprise.  
- Kate Bercury  
617.970.1289



**Board of Selectmen**  
Medway Town Hall  
155 Village Street  
Medway, MA 02053  
Phone (508) 533-3264  
Fax (508) 321-4988

**TOWN OF MEDWAY**  
COMMONWEALTH OF MASSACHUSETTS

**APPLICATION FOR SPECIAL ONE-DAY LIQUOR LICENSE**

MGL c.138, §14

Application for the purpose of selling or dispensing the following beverages permitted by law. A Section 12 license holder may not also be granted a Section 14 (one-day) license unless event is held at a separate location. A person holding a Section 14 license cannot purchase alcoholic beverages from a package store. Purchase must be made from a licensed wholesaler/importer, manufacturer, farmer-winery/brewery, or special permit holder.

For Profit Businesses are eligible for wine and malt license only.

Application must be submitted at least two weeks prior to event.

There is no fee for this license.

All Alcohol  Wine and Malt

Event Surprise Anniversary Party for town residents. Please keep as quiet as possible. Thank you!

Name of Organization/Applicant Kate Bercury

Address 6 Bradish Farm Rd

SS# or FID# \_\_\_\_\_

Phone 617, 970 1289 Fax ( ) \_\_\_\_\_ Email McKiernan girls@yahoo.com

Non-Profit Organization Y  N  no organization  
Attach non-profit certificate of exemption

Event Location Thayer Homestead

Event Date July 31, 2015

Event Hours (No later than 1:00 AM; Last call 12:30 AM) 6pm - 11pm, last call 10:30PM

Is event open to the general public?   No

Estimated attendance 40-50

Will there be an age restriction? Y        N X

Minimum age allowed:       

BUT children are not invited except organizers children (6) ~~ages 2,3,4,5,10,13,14~~

How, where and by whom will ID's be checked?       

Is there a charge for the beverages? Y        N no  
Price structure:       

Ages 2,3,4,5, 10,13,14  
will be supervised by their parents.

Alcohol server(s)         
Attach Proof of Alcohol Server Training t.b.d.-not yet hired

Provisions for Security, Detail Officer none

Does the applicant have knowledge of State liquor laws? Y        N       

Experience no alcohol under 21 - bartender  
will be professional. + tips certified

The following may be required:  
Police Dept. - Detail; Fire Dept. - Detail; Board of Health - Food Permit; Building Dept. - Tent Permit

Date of Application June 12, 2015

Applicant's Signature Katie Bercuny

Applicant's Name Katie Bercuny

Address 6 Bradish Farm Rd Upton MA 01568

Phone 617 970-1289 Fax N/A Email Katie\_mckiernangirls@yahoo.com

The Board of Selectmen's Office will forward this application to the Police, Fire, and Building Departments and the Board of Health for approval and recommendations.

Police Department        Date         
315 Village St

Fire Department        Date         
44 Milford St

Board of Health        Date         
Town Hall, 2<sup>nd</sup> Fl

Building Department        Date         
Town Hall, 1<sup>st</sup> Fl



# Medway Police Department

315 Village Street  
Medway, MA 02053

Phone: 508-533-3212  
FAX: 508-533-3216  
Emergency: 911

Allen M. Tingley  
Chief of Police

To: Michael Boynton  
Town Administrator

June 30, 2015

From: William Boultenhouse  
Lieutenant, Medway Police

Ref: One day liquor license, July 31, 2015

Mr. Boynton

On behalf of Chief Tingley, I have reviewed the request by Katie Bercury for a one day liquor license for July 31<sup>st</sup> at the Thayer property, 2B Oak Street Medway Ma. We find no reason this license should not be approved with the stipulation that the party's named in the application, adhere to and abide by the rules and regulations of the Town of Medway's Alcohol Policy.

Respectfully,

William K Boultenhouse  
Lieutenant, Medway Police



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
07/01/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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<b>PRODUCER</b> Educators Insurance Agency Inc 440 Lincoln Street Worcester, MA 01653-0002 Nathan Cormier		<b>CONTACT NAME:</b> Educators Insurance Agency <b>PHONE (A/C, No, Ext):</b> 888-908-6822 <b>FAX (A/C, No):</b> 508-926-5810 <b>E-MAIL ADDRESS:</b>	
		<b>INSURER(S) AFFORDING COVERAGE</b>	
		<b>INSURER A : Bay State Insurance</b>	
		<b>INSURER B :</b>	
		<b>INSURER C :</b>	
		<b>INSURER D :</b>	
		<b>INSURER E :</b>	
		<b>INSURER F :</b>	

<b>INSURED</b>	<b>Katie E. Bercury</b> <b>Scott Bercury</b> <b>6 Bradish Farm Road</b> <b>Upton, MA 01568</b>	<b>CERTIFICATE NUMBER:</b>	<b>REVISION NUMBER:</b>
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INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMPI/OP AGG \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A			PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Home Owners		HP3045249	05/30/2015	05/30/2016	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Coverage of 500000 liability will extend from this policy for the event located at Thayer Homestead 2B Oak Street Medway MA 02053 on 31st of July

<b>CERTIFICATE HOLDER</b>	<b>CANCELLATION</b>
Thayer Homestead 2B Oak Street Medway, MA 02053	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE <b>Nathan Cormier</b>



# AGENDA

## ITEM #9

**Vote –**

**Designation of Medway as Purple Heart Town – Department of Massachusetts Military Order of the Purple Heart**

*Associated back up materials attached.*

- Email from Leo David Agnew, Commander, dated June 11, 2015
- Proposed proclamation

**Proposed motion:** I move that the Board execute the proposed Proclamation for submittal to the Department of Massachusetts Military Order of the Purple Heart which will allow for Medway's designation as a Purple Heart Town.

**From:** Leo David Agnew [<mailto:abn187thpf@aol.com>]  
**Sent:** Thursday, June 11, 2015 3:57 PM  
**To:** Michael Boynton  
**Subject:** Department of Massachusetts Military Order of the Purple Heart

Mr. Boynton Town Administrator.

I am enclosing all the information and attachments concerning becoming a Purple heart Town. We have over 65 cities and towns already. Boston, Worcester, Springfield, Waltham, Attleboro, Fitchburg, Clinton, Westboro, Leominster, Berlin, Millbury, Ware, Lancister, Maynard, Pepperell, Millis, Sudbury, Topsfield, Winc hedon, Marlborough, Oxford, Northborough, Holliston, Hubbardston, Northa mpton, Westminster, Auburn, Granby, Beverly, Ashland, Webster, Athol, West Boylston, Bolton, Milford, Holyoke, Gardner, Chelmsford, Barre, Salem, Chicopee, Boxborough, BRidgewa ter, Middleton, Foxborough, Leicester, Templeton, Brookfield, Swampscott, Bo xford, Ludlow, Grafton, Shresbury, Agawam, Longmeadow, East Longmeadow, Wayland, Hopedale, Wakefield, Holden, Franklin, I'm sure I missed some.

All that is required is a proclamation honoring all who have made the ultimate sacrifice and those who have shed their blood in all war's from Medway. And honor August 7th as Purple heart Day.

When and if you decide, a copy of the proclamation signed by the board of selectmen and mailed to the Department of Massachusetts Military Order of the Purple Heart. It is then forward to National for approval.

We will then arrange a time and date to present the Town of Medway a certificate of acknowledgement plaque in becoming a Purple Heart Town.

If you have any questions ? you can contact me.

Thank you for your time and consideration.

In Patriotism.

Leo David Agnew Commander  
508-667-8176, 978-733-1499  
[abn187thpf@aol.com](mailto:abn187thpf@aol.com)

All Gave Some Some Gave All

Now, all inhabitants, and all who would visit the Town of Medway in the Commonwealth of Massachusetts, pay heed so that you may hear:

## **A PROCLAMATION**

**WHEREAS:** The people of the Town of Medway have great admiration and the utmost gratitude for all the men and women who have selflessly served their country and the community in the Armed Forces; and

**WHEREAS:** The contributions and sacrifices of the men and women from the Town of Medway who served in the Armed Forces have been vital in maintaining the freedoms and way of life enjoyed by our citizens; and

**WHEREAS:** Veterans have paid the high price of freedom by leaving their families and communities and placing themselves in harm's way for the good of all; and,

**WHEREAS:** From 1917 to present day, the Purple Heart, the oldest military decoration in present use and initially created as the Badge of Military Merit by General George Washington in 1782, has been awarded to any member of the Armed Forces who has been wounded or succumbed to wounds while engaged in any military action against an enemy of the United States, and

**WHEREAS:** Our community has a proud tradition of military service and many of our citizens have earned the Purple Heart Medal for their meritorious service;

**NOW, THEREFORE:** We, the members of the Board of Selectmen in the Town of Medway, in the Commonwealth of Massachusetts, do hereby proclaim:

**The Town of Medway, Massachusetts as a *Purple Heart Town* on behalf of its citizens to honor the sacrifice of our nation's men and women in uniform who were wounded or killed by enemies of our nation while serving to protect the freedoms valued by all Americans.**

**Medway Board of Selectmen:**

\_\_\_\_\_  
John Foresto, Chairman

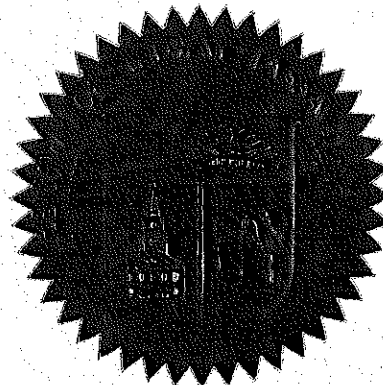
\_\_\_\_\_  
Maryjane White, Vice-Chairman

\_\_\_\_\_  
Richard D'Innocenzo, Clerk

\_\_\_\_\_  
Dennis Crowley, Member

\_\_\_\_\_  
Glenn Trindade, Member

*Given and signed the 6<sup>th</sup> day of July 2015*



# **AGENDA ITEM #10**

## **Action Items from Previous Meeting**

*Associated backup material attached.*

- Action item list

	DATE	ACTION ITEMS BOS	WHO	COMPLETED
	7/6/2010	Street acceptance progress	S. Affleck-Childs	Ongoing
2	9/20/2010	Route 109 Project	T. Holder/M. Boynton	Ongoing
3	2/4/2013	Brentwood Project	DPS	Ongoing
4	2/3/2014	Cable license renewal process (commences 36 mos. ahead of license exp.); Mtg of Cable Advisory Com	BOS	Verizon notice received; Adv Com to meet in spring 2015
5	7/28/2014	DPS Facility Building Project	DPS/TA/Committee	Ongoing
6	1/20/2015	Playground concepts for Idylbrook and existing locations	G. Trindade	2015 Fall Town Meeting
7	2/24/2015	\$1.1 mil environmental bond bill; Allocate funds to have design and engineering of project at Choate	TA/BOS	Fall Town Meeting
8	2/28/2015	Database of searchable minutes/Update Town Website	TA/IS	Summer 2015
9	2/28/2015	Police Dept real time access to School surveillance system; ID recording maintenance responsibilities	TA/Supt. of Schools	In Process
10	2/28/2015	Recommendation for proposed ALS program for EMS; Cost-benefit analysis	TA/Fire Chief	September
11	4/21/2015	Review Master Plan	J.Weiler/D. Kaeli	August
12	5/18/2015	Toxics Use Reduction Institute (TURI) grant application to pilot non-toxic natural turf management plan	DPS	June 30, 2015
13	6/1/2015	Road and Sidewalk Repair and Construction Strategy	DPS	July 2015
14	6/1/2015	Village Street Paving Plan	DPS	July 1, 2015
15	6/15/2015	Update marketing consulting services	Dennehy Pub Relator	First week August 2015
16	6/15/2015	Contract for engineering consultant - Exelon	M.Boynton	July 2015

# **AGENDA**

## **ITEM #11**

### **Approval of Warrants**

*Warrants to be provided at meeting.*

# AGENDA ITEM #12

## Approval of Minutes

*Associated backup material attached.*

- Draft Minutes – BOS meeting February 4, 2015\*\* Revised

**Proposed motion:** I move that the Board approve the draft minutes of the February 4, 2015 Board of Selectmen meeting.

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**Board of Selectmen's Meeting**  
**Wednesday, February 4, 2015 – 7:00 PM**  
**Sanford Hall**  
**15 Village Street**

**Present: Dennis Crowley, Chair; John Foresto, Vice-Chair; Richard D'Innocenzo, Clerk (7:15 PM); Glenn Trindade (7:10 PM) and Maryjane White.**

Also Present: Michael Boynton, Town Administrator; Melanie Phillips, Finance Director; Tom Holder, Director, Department of Public Services; Carol Pratt, Town Accountant.

\*\*\*\*\*

At 7:05 PM Chairman Crowley called the meeting to order and led the Pledge of Allegiance.

**Public Comments:** None.

**Discussion/Vote – Millstone Village Regulatory Agreement, MCO Housing Services:**

*The Board reviewed the following information: (1) Millstone Village Budget – Percentage Interest in Common Areas – Calculation of Percentage Interest; (2) Memo from Community Housing Coordinator; and (3) Draft agreement.*

**Selectman Trindade moved that the Board authorize the Chairman to execute the *Regulatory Agreement and the Declaration of Restrictive Covenants for Ownership Project* with Millstone Village as presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

**Discussion/Vote – Service Level Agreement for School Field Maintenance:**

*The Board reviewed a Draft Service Level Agreement.*

Mr. Holder stated that DPS involvement began as just maintaining the fields, and now it has evolved to include additional services. He indicated his staff would give it a try and see how it goes.

**Selectman Trindade moved that the Board approve the Service Level Agreement for school field maintenance, as presented; Selectman White seconded. Brief discussion followed over various components of the agreement, fees, use times, and related matters. This agreement is between the school and parks departments, and the agreement can change at the request of either of those parties. VOTE: 5-0-0.**

**Consideration of March Special Town Meeting Warrant Articles – Chapter 90 Road Maintenance Funding to be Allocated to Route 109 Project and Bylaw Amendment for Sewer Moratorium:**

*The Board reviewed draft Special Town Meeting Warrant Articles.*

**Selectman Trindade moved that the Board re-open the March 9 Special Town Meeting Warrant; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

Mr. Boynton explained that earmarking the Chapter 90 funds for the Route 109 Design Project needs to be put in place at Special Town Meeting in order to begin the process of opening dialogues with affected



1 landowners. This will help provide repaving for roads and sidewalks in addition to the roadway  
2 improvements to Route 109. Brief discussion followed.

3  
4 **Selectman Trindade moved that the Board add an article to allocate Chapter 90 funding to the Route  
5 109 project; Selectman Foresto seconded. No further discussion. Vote: 5-0-0.**

6  
7 The bylaw amendment is to enact a sewer moratorium. Chairman Crowley explained that the moratorium  
8 is for sewer extensions, and the reason for it is that when calculating the sewer flow with the two proposed  
9 projects, Salmon Health and Millstone, the Town will exceed its limit with Charles River Pollution Control  
10 District. Ordinary sewer hook-ups will not be affected; and residents can still connect to existing sewer  
11 lines. This is for a temporary halt on sewer extensions while the Town determines what its overall sewer  
12 capacity is. Brief discussion followed.

13  
14 **Selectman Trindade moved that the Board add an article to institute a sewer moratorium using  
15 language provided by Town Counsel; Selectman White seconded. No further discussion. VOTE: 5-0-0.**

16  
17 **Selectman Trindade moved that the Board closed the Special Town Meeting Warrant; Selectman  
18 Foresto seconded. No discussion. VOTE: 5-0-0.**

19  
20 **Vote – Recommendations on Warrant Articles for March 9, 2015 Special Town Meeting:**

21 *The Board reviewed the Draft Special Town Meeting Warrant which does not include the articles  
22 referenced in Agenda Item #3 as well as the draft articles referenced in Item #3.*

23  
24 **Selectman Trindade moved that the Board approve Article 1 – McGovern School Window/Door  
25 Replacement, as presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

26  
27 **Selectman Trindade moved that the Board approve Article 2 – Home Rule Petition – Redevelopment  
28 Authority, as presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

29  
30 **Selectman Trindade moved that the Board approve Article 3 – Transfer: Veterans' Benefits, as  
31 presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

32  
33 **Selectman Trindade moved that the Board approve Article 4 – Transfer: Health Care Reimbursement  
34 Account, in the amount of \$25,000; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

35  
36 **Selectman Trindade moved that the Board approve Article 5 – Chapter 90 Funding Allocation to Route  
37 109 Design Project, as presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

38  
39 **Selectman Trindade moved that the Board approve Article 6 – Bylaw Amendment: Sewer Extension  
40 Moratorium, as presented; Selectman White seconded. No discussion. VOTE: 5-0-0.**

41  
42 **Approval – Class II Car Dealer's License Application, Jonathan Henry LLC, 4 Main Street:**

43 *The Board reviewed a Class 2 Auto Dealer's license application. It was noted that the applicant has all  
44 appropriate Town sign-offs for the proposed business.*

45  
46 Present: Robert Potheau, property owner; Jonathan Henry, applicant.

1 Mr. Potheau stated this site used to be Johnny Black's years ago, the individual who developed it. He  
2 indicated that he now owns everything, noting that the used cars will be moved around back and  
3 pointed it out on a site plan. In case of emergency, the address is listed as 2-4-6 Main Street. At this  
4 time, he introduced Mr. Henry, and stated that the only repairs that to be done at this location will be  
5 on his own cars. He said Mr. Henry worked at this lot in the 80s and was the star salesman.

6  
7 Chairman Crowley asked why all these used cars need to be in Medway. Mr. Potheau responded that the  
8 business has been this way for 60 years and was quite an eyesore when it was a junkyard. Mr. Henry  
9 explained that he is not planning to do a lot of repair due to his age and physical limitations. He  
10 anticipated "retail-ready" used cars and will participate in the Adesa auto auctions only to sell, not to  
11 buy.

12  
13 **Selectman Trindade moved that the Board grant a Class 2 Auto Dealer License to Jonathan Henry LLC,**  
14 **as proposed; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

15  
16 **Vote of Support of Non-Support – Norfolk County Mosquito Control District Fiscal Year 2016 Budget:**  
17 *The Board reviewed the District's budget materials.*

18  
19 It was noted that there is a difference of approximately \$2,000 between the FY15 and FY16 budgets.

20  
21 **Selectman Trindade moved that the Board vote to support the Norfolk County Mosquito Control**  
22 **District's FY16 budget and the Town's estimated proportionate share as provided by the district;**  
23 **Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

24  
25 **Approval – One-Day Alcohol Licenses:**

26 Smith – Thayer House, February 15, 2015; Schiller – Thayer Homestead, February 28, 2015; Parsons –  
27 Thayer House, March 7, 2015

28 *The Board reviewed respective applications accompanied by Police Chief Tingley's recommendations.*

29  
30 **Selectman Trindade moved that the Board approve one-day all alcohol licenses for Debra Smith,**  
31 **Joann Schiller and Jamie Parsons for events at the Thayer Homestead on February 15, February 28 and**  
32 **March 7, respectively, each conditioned on fulfillment of the Police Chief's recommendations;**  
33 **Selectman White seconded. No discussion. VOTE: 5-0-0.**

34  
35 **Action Items from Previous Meetings:**

36 DPS Facility Study – Selectman Trindade reported that someone has been hired to perform the study; it  
37 can take up to six weeks to develop a presentation.

38  
39 Parks – Selectman Trindade stated there have been meetings to discuss improvements to selected  
40 playgrounds in town. Because laws have changed, any improvements will entail having to bring the  
41 entire playground up to code. He noted that there will be tours of playgrounds in other communities  
42 that may serve as models for the new playgrounds here.

43  
44 Net metering – Selectman Foresto reported that the agreement with the original vendor, Enfinity, has  
45 expired. The Energy Committee is trying to set up times for the new vendor to make a proposal.

46  
47 Brief discussion followed on the proposed meals tax. It is anticipated that these monies will go into the  
48 general fund, and later it can be appropriated toward deposit into the OPEB account. Ms. Carol Pratt,

1 Town Accountant, reported that the Commonwealth's position is that all money goes to general fund,  
2 clarifying that it could later be built into the budget each year as a line item to eliminate the need to  
3 appropriate the funds every year at Town Meeting.

4

5 **Selectmen's Reports:**

6 Selectman Foresto reminded residents of the spring cleanup day, Medway Clean Sweep, and  
7 emphasized that volunteers need to wear bright colors so that motorists see them.

8

9 Chairman Crowley emphasized the need for a second sidewalk plow.

10

11

12 **At 7:53 PM Selectman Trindade moved to adjourn; Selectman Foresto seconded. No discussion.**

13 **VOTE: 5-0-0.**

14

15

16 Respectfully submitted,

17 Jeanette Galliardt

# **AGENDA**

# **ITEM #13**

**Town Administrator's Report**

# **AGENDA**

# **ITEM #14**

**Selectmen's Reports**



