Assessment of
Four Wheel Drive Recreation
in the
Midwest & Northeast

History and current state of the Sport

Trail Use and Specialized Vehicle Construction

Economic Impact of Back Country Recreation

November 2009

East Coast Four Wheel Drive Association, Inc.

Better Together. Racing & Recreation.

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Section 1

Introduction and Statement of Purpose

This report was prepared by East Coast Four Wheel Drive Association to document several aspects of off-road recreation, as well as to dispel common, but popular myths regarding the sport of motorized backcountry recreation. A review of the history, structure, and intentions of East Coast Four Wheel Drive Association, and other similar associations is included in Section 1. Section 2 explains how and when backcountry trails are used as well as the various methods of special vehicle construction for use in backcountry recreation and how this special vehicle construction aids in the protection of our natural resources. Section 3 explores the economic impacts of OHV recreation by demonstrating the positive economic effect of motorized backcountry recreation within the Northeastern quadrant of the United States.

Estimates, projections and other numerical representations within this document are believed to be highly conservative. Currently there is no reliable method, within the scope of this project, to provide an accurate count of the population of backcountry recreationists. There is no mandated State or Federal laws requiring registration or licensing of vehicles used for backcountry recreation other than standard vehicle registration in each state. Due to the continued increase in sport utility vehicle (SUV) sales in the United States, no motor vehicle records from any state agency were used in the compilation of this report since it is very likely that many SUVs currently in use are used for normal street travel only. The estimated number of motorized backcountry recreationists was determined by identifying existing OHV clubs in the Northeast quadrant of the United States; each of the 198 identified clubs submitted a current count of recreationists as determined by their respective membership rosters. It is very likely that not all clubs in the region have been identified.

Any statements within this document that refer to "recreationists", "backcountry recreation", "off-road recreation", "four-wheel-drive", "OHV" or any similar statement is intended to refer to the use of light trucks and light sport utility vehicles and the people who enjoy recreating with such vehicles along abandoned or unmaintained roads, or on other designated legal trails and roads.

History of East Coast Four Wheel Drive Association and Trends in Off-Road Recreation

Introduction

The East Coast Four Wheel Drive Association (EC4WDA) was formed in 1969 primarily as a sanctioning body to organize and regulate competitive (racing) four-wheel-drive events. As recreational four wheeling (trail riding) began to increase in popularity, EC4WDA expanded to accommodate the interests of all EC4WDA members, as well as new potential members, and to ensure the needs of local communities, public lands, and private lands are treated with the utmost respect.

EC4WDA is the second largest organization of its kind in the United States, and serves more than 2,800 families in eleven states within the Northeast quadrant of the country.

Members of EC4WDA work diligently in many aspects of the four wheel drive sport, and always strive to assist local communities whenever possible. Some of the EC4WDA and individual club sponsored activities include:

- Conservation of natural resources
- Adopt-A-Road projects
- Canned food drives for local communities
- Toys-For-Tots drives
- Emergency transportation for medical staff during inclement weather
- Fire road maintenance, including the removal of downed trees and debris that might otherwise block the passage of fire and/or rescue vehicles during an emergency situation.
- Assist in search and rescue operations by providing transportation through rugged backcountry areas.
- Support and assist National Wildlife Refuges
- Membership and public education with regard to four wheel drive recreation
- Off-road safety clinics
- Trash removal in several National Forests
- Trash removal on private land, including the removal of abandoned vehicles

Organizational Structure

The EC4WDA is structured much like an average U.S. company. A Board of Directors, each serving a two (2) year term, is established with sixteen (16) members sitting on the Board during any one term. Each Board member is elected by the member body, and each Board member serves a specific office within the organization. The EC4WDA Board of Directors meets twice yearly, once in the fall and once in the spring, to discuss and review issues of

importance within the four wheel drive community as well as to implement organizational changes necessary to accommodate the needs of the member body.

Due to the size of EC4WDA both in membership number and land-mass and to facilitate enhanced communication, the Association is subdivided into five (5) Regions. Each Region elects and establishes its own Board of Directors with offices somewhat mirroring that of the Association Board of Directors. The Region officers are elected to serve a two (2) year term. Each Region meets at least twice yearly, with meeting dates scheduled just prior to the spring and fall EC4WDA Board of Directors meetings. Various issues of importance and concern to Region members are discussed and reviewed at the Region meetings. These issues and concerns are then brought before the Association Board of Directors by the Chairman of each Region.

The various Regions within EC4WDA are further subdivided into individual clubs. Each club, while adhering to the EC4WDA by-laws, enjoys autonomy, and charts its own course with regard to activity scheduling, education, recognition, and membership development among many other items. Each club also elects its own Board of Officers according to the individual needs of the specific club.

History and Current Membership In Four Wheel Drive Organizations

% Increase in Membership in 5 year increments	
1964-1970 Initial membership base established during these years.	
1971-1975	100%
1976-1980	100%
1981-1985	58%
1986-1990	42%
1991-1995	96%
1996-2000	88%
2001-2005	51%
2006-2010*	42%
* Projected	

Our research indicates that the creation of four wheel drive Associations in the United States began primarily during the 1960s. Since the inception of four wheel drive associations, club participation and membership bases in the Northeast have steadily increased, and continue to increase each year. One hundred ninety eight (198) four-wheel-drive clubs have been identified in the region as active clubs supporting 8612 families. Of the 198 clubs identified, 57 clubs maintain membership with EC4WDA. The remaining clubs are affiliated with different, but similar, sanctioning bodies.

For the purpose of this report, only clubs that could be positively identified as active Northeast four-wheel-drive clubs were included in the study. Unlike many other forms of motorized recreation, such as snowmobiling or ATV, the Northeast states do not sponsor any type of specialized registration program. Recreational four-wheel-drive vehicles are registered in each state according to individual state laws defining standard automobile registration. Although the increase in popularity of sport utility vehicles in the United States is likely a contributing factor in increased 4WD club membership, it is equally likely that many of these vehicles many have been purchased for street use only. No data from state motor vehicle divisions was collected or used in this study.

Profile of Motorized Backcountry Recreationists in the Northeast

- The average age of male off-road recreationists is 42 years.
- The average age of female off road recreationists is 40 years.
- 47% of those surveyed are employed in professional careers or are business owners.
- 86% of those surveyed have household incomes over $40,000.00 per year

Age of Adult Male Participants	42 years (mean) 38 years (mode) 39 years (median) Range 18 years to 63 years	
Age of Adult Female Participants	40 years (mean) 45 years (mode) 40 years (median) Range: 18 years to 65 years	
Size of Household	2.5 (mean) 2 (mode) 2 (median) Range: 1 member to 5 members	
Household Income	$40,000 to $60,000	39%
	$60,000 to $80,000	29%
	More than $100,000	18%
	$20,000 to $40,000	13%
	$80,000 to $100,000	10%
	Under $20,000	3%
Current Occupation	IT Professional/Engineer	19%
	Professional/Executive	9%
	Management	9%
	Self/Business Owner	8%
	Machinist/Welder	7%
	Law Enforcement/Fire	3%
	Retired	3%

Interpreting Measures of Central Tendency

Mean: an average value of the data set. It is the sum of all values of the observations divided by the number of observations.

Mode: an average value of the data set. The mode is the value that occurs most frequently. (e.g., if the ages of people in a data set were 14, 18, 18, 22, 35, the mode would be 18 because 18 occurs most frequently.

Median: an average value of the data set. The median is the middle value when all values are arranged in ascending or descending order. (e.g., if the ages of 5 people in a data set were 12, 15, 22, 37, 53, the median age would be 22 because 22 is the "middle" value)

Issues of Importance to Off-Road Recreationists	
Finding New Trails	68%
Protecting Existing Trails	84%
Having Many Different Trails	61%
Establishing OHV areas	63%
Membership in a club or association	74%
Raising Money for Legal Defense	46%
Convergence of all 4-wheel-drive organizations	39%

- Finding New Trails: Since little or no federal, state, or local resources are used to promote the sport of off road recreation, finding new, legal trails is always a challenge.

- Protecting Existing Trails: Most trails in the Northeast are located on private property. These trails are used with landowner permission. Generally permission is granted to a particular club or group of clubs. Off-road clubs self police these areas to ensure that these private lands are not abused either by members or non-members. Some trails are old town or county roads that, while still legal roads, are no longer maintained by any public management group. Natural erosion due to lack of maintenance creates challenging terrain highly suited for off-road recreation. Off road recreationists work diligently to self police these areas and prevent any abuse of property, as well as to prevent illegal closure of these roads.

- Having Many Different Trails: The majority of off-road trails are relatively short in length. It is not uncommon for a trail to be 4 miles or less in length. Off-road recreationists desire a more varied selection of legal trails to enhance their outdoor experience and to incorporate different areas of scenic value.

Donations pledged to support important issues	
$5-$10	4%
$10-$20	6%
$20-30	18%
$30-$40	16%
$40-$50	13%
$50-$60	8%
$60-100	6%
$100 or more	6%

- Raising Money for Legal Defense: It is not uncommon for off-road recreationists to negotiate with public land managers for the creation of or use of four-wheel-drive trails in mandated multiple use areas. Most often, these requests for use are denied without specific reason. If public land managers refuse to accommodate the interests of all user groups within stated multiple use areas and as defined by law, it may be necessary to file a lawsuit designed to "force" the public land managers to adhere to existing laws. Current member pledges total more than $443,000.00.

- Convergence of all 4-Wheel Drive Organizations: During the past several years, issues pertinent to the future health of off-road recreation began to increase. Illegal closure of roads was becoming more common, and opposition from self-proclaimed environmental groups was increasing. The leaders of four-wheel-drive organizations nationwide felt the need to join forces as a single body representing the needs off off-road recreation. As a result, the North American Motorized Recreation Council (NAMRC) was formed in 1997.

The North American Motorized Recreation Council (NAMRC)

"Formed in 1997, NAMRC was conceived as the need for backcountry recreationists to group together as a single voice became necessary to preserve the sport and protect the constitutional rights of our members.

At its inception, NAMRC served the interests of all four wheel drive associations in the United States. The leaders of each association were invited to join the NAMRC group to share ideas, strategy and vision to enhance the future of four wheel drive recreation. As NAMRC grew both in number and strength, the organization opened its doors to the leaders of all types of motorized recreation to include organizations devoted to the recreational use of snowmobiles, all terrain vehicles, and motorcycles.

NAMRC is a non-dues paying association. It receives no revenue from local, state or federal agencies, nor does it receive direct corporate support. NAMRC holds no treasury, and does not solicit funds from any entity. NAMRC maintains its existence and accomplishes its goals through the donation of materials and volunteer labor from participating organizations."

Member associations in NAMRC include:

American Council of Snowmobile Associations (ACSA)
American Motorcyclist Association (AMA)
Blue Ribbon Coalition (BRC)
California Association of Four Wheel Drive Clubs (CA4WDC)
California Off Road Vehicle Association (CORVA)
East Coast Four Wheel Drive Association (EC4WDA)
Hells Canyon Alliance
Idaho State Snowmobile Association (ISSA)
Land Use Network (LUN)
Nevada Four Wheel Drive Association (N4WDA)
National Off Highway Vehicle Conservation Council (NOHVCC)
Pacific Northwest Four Wheel Drive Association (PNW4WDA)
Southwest Four Wheel Drive Association (SW4WDA)
Toyota Land Cruiser Association (TLCA)
Tread Lightly!
United Four Wheel Drive Associations (UFWDA)
United Federation of Gem and Mineralogy Society (UFGMS)
Utah Four Wheel Drive Association (Utah 4WDA)

Supporting Organization:
Specialty Equipment Market Association (SEMA)

Section 2

Vehicle Construction, Driver Responsibility, and Use of Trails and Roads

With the recent popularity of Sport Utility Vehicles (SUVs), the media and auto manufacturers have presented an image of backcountry driving that in no way mirrors the true actions of backcountry recreationists. The speed and recklessness portrayed in television commercials, if repeated in actual use, would only result in severely damaged vehicles and an unconscionable risk of human safety. The average speed of vehicles engaged in backcountry recreation is approximately 3-10 MPH. During the course of a backcountry excursion, vehicle speed is generally slower than that of the average, normal walking speed of a human being. This is evidence by the fact that a trail or road as short as two miles in length may take a full day to travel from end to end.

For the recreationist who prefers to travel at greater speeds, 4-wheel-drive racing events are held throughout the Northeast. Competitive (racing) events are held at designated grounds, such as fair grounds, or grounds owned and operated by locals clubs that have been designed for competition. Four-wheel-drive competitive events are fully sanctioned, and the host club carries any necessary permits and insurance in accordance with State and/or town mandates.

Vehicle Construction

Most club member vehicles, while still registered and inspected street legal vehicles, have been modified from their original showroom condition. Certain modifications are made to ensure low impact travel along backcountry roads, and also to allow the vehicle to travel at low rates of speed without creating tire spin or other undesirable and unnecessary environment impacts. These modifications may include, but are not limited to, gear reductions, the use of locking differentials, suspension modification, suspension lifts, and specialized tire sizes and treads.

Gearing & Crawl Ratio

Vehicle axle gear ratios are modified to force the vehicle to move more slowly at higher engine revolutions. For example, a vehicle that might travel at 15MPH in first gear at 2500RPM in its showroom condition may be re-geared to travel at 5MPH at 2500RMP while in first gear. By forcing the vehicles axles to turn more slowly while maintaining engine RPM, the extremely low speed of the vehicle is steadily maintained while eliminating the possibility that the motor may stall. Tire spin can then be eliminated as the vehicle is able to "crawl" over difficult terrain. A similar analogy is that of a person walking as compared to running over an icy surface or frozen pond. A person walking slowly and deliberately over ice is less likely to slip or stumble than a person who is running over the same body of ice.

Other modifications, such as upgraded transmissions and transfer cases also help to further enhance reduction of gear ratios. Backcountry recreationists use a formula that multiplies the differential (axle) ratio, transmission ratio, and the transfer case ratio. The numerical result of the formula is referred to as the "Crawl Ratio". The higher the crawl ratio, the better suited the vehicle is for maneuvering difficult terrain without disruption of the ground surface.

Locking Differentials

Generally referred to simply as "lockers", a locking differential is a mechanical device inserted into the axle housing. A vehicle without a locking differential is commonly referred to as an "open differential", or simply as "open". With the exception of specially manufactured vehicles, most vehicles manufactured in the United States and abroad are built with "open" differentials; this simply means that the internal design of the axle is built to allow the outermost wheels of a vehicle to turn more rapidly than the innermost wheels when turning a corner. Without the open differential, when turning a corner, vehicles outermost wheels would drag through the corner rather than rotate. A common misconception among SUV owns is that a four-wheel-drive vehicle is a "locked" vehicle. In fact, most four-wheel drive vehicles are manufactured with an open differential. While an open differential is certainly advantageous for normal street use, it is not an effective device for extricating a vehicle in stuck in snow or sand. The design of the open differential "transfers" power to the wheels that have the least amount of resistance. For example, if a vehicle is stuck in snow, with one wheel spinning in the snow, and the other wheel on dry pavement, the wheel on the dry pavement will receive NO power, and will not turn, because the power has been transferred to the wheel that is slipping. A locker, when installed in the axle, forces both wheels to turn at the same speed regardless of the resistance on each wheel. In the same situation, with a vehicle stuck in snow, with one wheel spinning in the snow and the other on dry pavement, a vehicle with a locked differential would find that equal power is distributed to both wheels. Because the wheel that is on dry pavement would receive power, the vehicle will extricate itself from the snow effortlessly, and without spinning its tires.

Another technology in the automotive industry is a limited-slip differential. Essentially, a limited-slip differential is similar to a "part-time" locker. Instead of supplying no power to the wheels that slip, the slipping wheels are allowed a limited amount of power. For normal street use and winter driving, a limited slip differential can be effective in extricating a vehicle under mild circumstances.

Since a locking differential allows power to the wheels that have traction, rather than just to the wheels that are slipping, lockers are a very attractive and useful modification in backcountry recreational vehicles. The increased traction afforded the wheels with grip, reduces and/or eliminates wheel spin as the vehicle is able to pull itself up and over obstacles whether all four wheels have traction or just one wheel has traction.

There are several different commercially available lockers on the market today. Some cause the vehicle to be permanently locked; others allow the locker to "skip" when turning corners on pavement to mimic an open differential, and others allow the locker to engage and disengage at the driver’s discretion and are controlled by a button installed on the vehicle dash board.

61% of the backcountry recreationists in the Northeast have installed one or more lockers in their vehicles. The average recreationist spent approximately $469.00 on lockers, with a total of $1.7 million dollars spent on lockers alone in the Northeastern U.S.

Anti Sway Bar

Commonly referred to simply as "sway bar", almost all vehicles manufactured in the United States are equipped with an anti sway bar. The sway bar helps to keep the body of the vehicle horizontally even with the vehicle frame when moving around turns, and helps prevent the body of the vehicle from swaying too far to one side.

When driving any automobile around a corner, a driver will usually notice how the force of the moving vehicle will pull toward the outside of the turn. Not only is the human body feeling the effect of the force of the moving vehicle suddenly changing direction, but this force is also extended to the various components of the vehicle itself. Without the sway bar, the driver and passengers would not only feel themselves being pushed toward the outside of the corner, but would also feel the vehicles body roll in the same direction. The sway bar provides a more comfortable ride while on city streets, and also serves as a safety measure when traveling at greater speeds, such as on highways.

Since the sway bar prevents the vehicle body from "rolling" to one side, by default, it stabilizes the weight of the vehicle as evenly as possible. This even distribution of vehicle weight serves to prevent the vehicle from losing control and can also prevent the vehicle from rolling over when traveling at highway speeds.

Backcountry recreationists remove or disconnect the vehicle sway bar when traveling in the backcountry. Once the vehicle is no longer on pavement or hard dirt surfaces, the opposite result of the sway bar is desired.

When driving in difficult backcountry terrain, the lack of a sway bar redistributes the vehicles weight toward the wheels that have more grip on the surface, and removing weight from the wheels that will have less traction. This not only increases the vehicles backcountry performance, but also alleviates potential tire spin that would be harmful to the ground surface. Since these vehicles traverse the backcountry at extremely low rates of speed, the lack of a sway bar will not facilitate a potential vehicle roll over.

To address the need of backcountry recreationist in the disconnection of sway bars, several products, generally called "quick disconnects", are available commercially nationwide. These products are designed to allow a sway bar to be disconnected and subsequently reconnected with relative ease, and without the use of tools.

Tires

A very common misconception is that increased tire size increases the potential for environmental damage. In reality, the inverse is true. Most tire manufacturers produce a tire that is specifically designed for backcountry recreation. The tires tread design creates a tire that is more knobby in appearance; this knobby design facilitates increased vehicle performance as the tires are more able to grip uneven surfaces, such as rock ledges, and subsequently pull the vehicle up and over an obstacle. Because the tire knobs adhere to the uneven surfaces, and the vehicle is pulled rather than pushed up an

incline, other wheels that may be on a softer surface will not spin and disturb the ground soil.

In addition to the tread design, the backcountry tires are constructed with a stiff sidewall. This stiff sidewall allows for a common practice called "airing down". Standard operating tire air pressure in most tires, as recommended by manufacturers, is approximately 30-40 psi. When tires are aired down for backcountry use, the standard air pressure is reduced substantially. The air pressure used in the backcountry will vary according to the specific tire design, however, typical aired down tire pressures are 8-15 psi. By reducing the tire pressure, the bottom of the tire becomes more flattened, and the tires are softer in appearance and feel. The softened tires and wider track distributes the weight of the vehicle more evenly and allows for increased traction, which in turn reduces the possibility of tire spin. Since the aired down, softened tires are now more flexible, the tire is more able to conform to the object its traveling over, in turn creating greater traction, and again, less possibility of tire spin.

Vehicle Suspension & Body Lifts

Suspension and body lifts are often confused; however, they are entirely different modifications. A body lift is designed to raise only the body, or the sheet metal part, of the vehicle, while leaving the frame and other components, such as the engine and drive train components, at their original levels. Body lifts are sometimes used by backcountry recreationists when extra clearance is needed in fender wells to provide ample room for various tire types, however, the use of body lifts is minimal.

Suspension lifts, on the other hand, are a far more common modification. Suspension lifts are designed to raise the body, engine and drive train, without affecting the height of the vehicle frame and axles. Suspension lifts are accomplished in one of several ways, with the most common being the installation of new vehicles springs, commonly referred to as a "lift kit" conversion.

Lifts kits are commercially available, and include a new set of vehicle springs that are more bowed in shape than stock spring sets. The bowed or U-shaped spring pushes the vehicle upward from the frame.

Suspension modifications are designed to allow greater clearance for the underside of the vehicle. A glance under any vehicle, whether the family car of a modified 4x4 will show that there are many parts under the vehicle that are exposed. By lifting a vehicle, these parts are less likely to scrape against or to get stuck on obstacles along backcountry roads such as tree stumps, large rocks, etc. Without added lift, a vehicle traveling on backcountry roads might get stuck on such obstacles which could result in tire spin as the driver attempts to extricate the vehicle. The enhanced clearance provided by suspension lifts helps eliminate wheel spin and damage to the ground surface by preventing the vehicle from coming in contact with the obstacle. In addition, improved suspension lift also helps to minimize potential damage to the vehicle parts that are exposed.

Driver Responsibility

Rights of Way

Preference is always given to hikers, equestrians, mountain bikers, ATVers, and other users of any legal trail or road. Members are required to move to the side of the road, and shut off their vehicles to allow passage of another user.

Trail Blazing

Trail Blazing is the act of creating a road or trail that previously did not exist. This includes driving across open fields, or cutting through wooded, overgrown areas with or without permission from the landowner, with the exception of the legal, planned construction or reconstruction of roads or trails. Trail blazing is strictly prohibited within EC4WDA and failure to comply results in immediate and permanent revocation of membership privileges.

Use of Alcohol or Illegal Substances

The use of alcohol or other substances is strictly forbidden while on a backcountry excursion. This rule applies to all passengers as well as drivers. Any member found in violation of this rule will have their membership immediately and permanently revoked. Any possible infraction of local, state, or federal law, such as D.U.I., will immediately be reported to local law enforcement authorities.

Use of backcountry roads and trails

Road and trail use is restricted to legal areas. Members are required to contact the appropriate public land manager or private landowner to request permission to use property that is not otherwise posted as open for use by the public. Members must comply with land restrictions, without exception, in areas that are posted as such.

Ecologically sound passage

When an area along a road or trail presents a situation that could result in excessive tire spin and consequently damage the ground surface, members are required to use a winch or tow strap to pass through the area without causing damage.

Proper Use of Vehicle Recovery Equipment

The EC4WDA publishes a booklet, which among its many topics, explains the proper techniques for the use of winches, tow straps, and other recovery devices. Members are educated both in theory and in practice of proper use of these devices in an environmentally friendly manner. One example of this is when using a tree as an anchor point for winching, a wide, flat, woven nylon strap, known as a "tree saver", is first wrapped round the tree. The winch cable is then connected to the strap. This winching method ensures that no damage will be done to the tree as the strap prevents any damage to the tree and its protective bark.

Typical Backcountry Excursion

The number of vehicles participating in a given backcountry excursion depends on a number of factors with the primary factor being that of trail capacity. In most areas of the country, backcountry roads are rated on a 1 to 4 scale, with "1" being a basic gravel road passable by stock vehicles, and "4" being the most difficult passage requiring heavily modified vehicles. Roads with a lower rating can normally accommodate a larger group as the difficulty level is minimal, allowing

the group to travel at a steady pace without frequent stops. The more difficult roads are normally limited to a smaller group, as it is quite common for the group to stop many times along the way to accommodate for the extra time needed for a single vehicle to pass obstacles safely. Most clubs will require certain vehicle modifications before a vehicle will be allowed to join the group on a more difficult road. It is not uncommon for a more difficult road to be only one to two miles in length, but a small group may spend an entire day navigating from the beginning to the end of the road.

Again, depending on the difficulty level of the road, the average number of participants in a group outing may range from 5 to 20 vehicles. Excursions are not limited to a certain number of people, only a certain number of vehicles. Members often bring along friends, family members and children who ride as passengers. In addition to vehicle requirements, clubs also mandate certain safety requirements such as proper seat belts for adults and properly installed car seats for children. Other requirements include a fully charged fire extinguisher, first aid kit, and environmental clean up kits.

Most clubs plan their schedules a full year in advance and choose a trail leader that will lead the group through the various obstacles along the road. Members will sign up for an excursion on a first come-first serve basis until the vehicle limit is reached for that particular road.

A typical outing begins at a group meeting spot where participants gather and await the arrival of all participants. Meeting spots can vary from a member's home to parking areas or rest stops where vehicles can legally gather and will not cause any disruption to other motorists or pedestrians. Once all the participants have arrived, the designated trail leader lines the vehicles up single file, and leads the group over paved public roads, to the backcountry road. The group will turn in to the backcountry road and proceed until all vehicles are no longer on paved, public roads. The group is then stopped to allow time to air down tires and disconnect sway bars.

The group will travel down the backcountry road and navigate various obstacles along the way. When encountering less difficult obstacles the group will continue, without stopping, until each vehicle has moved past the obstacle. Each driver is responsible for the vehicles directly in front and in back of them, and must keep these vehicles within their line of sight throughout the day. Using this line of sight method, all vehicles will stop should one vehicle stop for any reason. The group will often stop along the road to pick up trash and debris left by others.

Most vehicles also carry a CB radio to further enhance communication among the group. Members of the outing party use the CB radios to advise others of another recreational group traveling down the same road, to advise a driver of the best route around an obstacle, or for any other matter that requires group assistance or cooperation.

When approaching an extremely difficult obstacle, the entire group will stop and visually survey the obstacle. Each vehicle then moves over the obstacle at the driver's preferred pace until all vehicles have cleared the obstacle.

At the end of the road, the group stops again to allow participants to reconnect sway bars and air up tires before venturing on to paved roads. Many vehicles have integral air supplies which they use to bring the tires back up to standard pressures, while others may use a portable air compressor that plugs in to the vehicles cigarette lighter. Depending on where the backcountry road is located, the group may choose to dine at a local restaurant, or perhaps stop for snacks somewhere along the way before leaving for home.

Tread Lightly!

Tread Lightly!® is a not-for-profit organization dedicated to the responsible use of our outdoor environment. The organization was launched by the U.S. Forest Service in 1986 and was the first major program of its kind since the Smokey Bear campaign. The primary emphasis of this group is providing educational messages that promote low impact outdoor principles, which are applicable not only to motorized backcountry recreation, but to all outdoor recreational activities.

The Principles of Tread Lightly!	
Travel and recreate with minimum impact	Staying on designated trails and routes reduces the impacts of outdoor recreation. Travel only on land or water areas that are open to your type of recreation. Be sure your vehicle size is compatible with the road or trail conditions. Cutting switchbacks and taking shortcuts can destroy vegetation and cause others to use the unauthorized route. Most trails and routes are designed to withstand the effects of recreational use. Resist the urge to create new ones.
Respect the environment and the rights of others	Respect the environment by following the Tread Lightly! principles. Remember, designated wilderness areas are reserved for travel by foot and horse only. Respect and be courteous to other users who also want to enjoy the lands and waters you are using. Set an example of courtesy for all. Be considerate and honor other's desire for solitude and a peaceful outdoor experience. Loud motors and noisy behavior will detract from a quiet outdoor setting. When driving, be especially cautious around horses, hikers and bikers. Pull off to the side of the road or trail, shut off your engine if necessary and let them pass.
Educate yourself, plan and prepare before you go	Educate yourself by having the right information, maps and equipment to make your trip safe. Land managers can tell you what areas and routes are open for your type of recreation. Travel maps are available at most offices. Know the local laws and regulations. On private land, be sure to obtain the owner or lands manager's permission to cross or use their lands. As you travel, comply with all signage. Honor all gates, fences and barriers that are there to protect our natural resources, wildlife and livestock.
Allow for future use of the outdoors, leave it better than you found it	The future and quality of outdoor recreation depend on how we use it today. Stay on designated roads and trails. Avoid sensitive areas at all times. Especially sensitive areas susceptible to scarring are stream banks, lakeshores and meadows. Improper vehicle use can cause damage to vegetation. Stay on designated roadways and trails so that new scars are not established. Cross streams only at fords where the road or trail intersects the stream. Traveling in a stream channel causes damage to aquatic life. Hill climb only in designated areas. Hillside climbing may be a challenge, but once vehicle scars are established, other vehicles follow the same ruts and cause long lasting damage. Rains cause further damage by washing deep gullies in tire ruts. Permanent and unsightly scars result. While operating your Off Highway Vehicle, be sensitive to the life sustaining needs of wildlife and livestock. In deep snow, stay clear of game so that vehicle noise and close proximity do not add stress to animals struggling to survive.
Discover the rewards of responsible recreation	Enjoyment of the great outdoors provides the opportunity to get away from it all. Family values and traditions are built with the thrill and excitement of outdoor recreation. Help preserve the beauty and inspiring attributes of our lands and waters for yourself and generations to come by recreating responsibly. Do all you can to help protect the forest, lands and waters that mean so much to you.

Participation in Backcountry Excursions

The use of recreation areas is restricted to legal areas where permission has been granted by either a public land manager or a private landowner. Trespassing on public or private lands, whether posted or not, is strictly prohibited.

Since roads and trails that are open for recreational use are scarce, it is important for all members to show the greatest respect for public and private property. All clubs within EC4WDA and those within other organizations subscribe to the motto of "pack out more than you pack in". Simply put, this means that on any given backcountry excursion, each member is responsible for removing any trash or debris left by others. At least one member of the party will carry trash bags, which are filled with debris left along the roadside or trail; the bags are then properly disposed of at the end of the day.

Although most clubs in the Northeast schedule events only during the warmer months of the year, backcountry recreation is an active year round sport. Participation rates of 88% to 95% during the spring, summer and fall months drop to 61% during the winter months. While some roads and trails may be closed for use during the winter months, restricting available recreational areas, the drop in participation rates is primarily due to personal preference.

In addition, 59% of backcountry recreationists participate in other winter sports such as snow skiing, snow boarding, and snowmobiling.

Seasonal Backcountry Excursion Participation	
Spring	88%
Summer	95%
Fall	94%
Winter	61%

Year Round Backcountry Excursion Participation	
Once every 2 months	15%
Once per month	39%
2-3 times per month	43%
Once per week	3%
2-3 times per week	0%
Mean: 1-2 times per month Mode: 2-3 times per month Median: 1-2 times per month n=153	

- During the 2006 season, club members in the Northeast collectively participated in 127,744 single day excursions, averaging approximately 23 single day excursions per family per year.
- 54% of the participating families traveled more than 100 miles, round trip, to reach a legal recreation area.

Average miles traveled, round trip, by participants to arrive at recreational area	
1-5 miles	0%
5-10 miles	0%
10-30 miles	7%
30-60 miles	18%
60-100 miles	21%
More than 100 miles	54%
Average miles traveled to closest recreation area	46 miles
Average miles traveled to furthest recreation area	294 miles

Backcountry Excursion Participation Rates By State

The participation rates in various Northeast states depend, in part, on the number and quality of available recreational areas in a particular state. Since 54% of backcountry recreationists travel 100 miles or more, round trip, to arrive at a recreational area, it is reasonable to assume that trail availability, rather than distance to the area, is of greater weight when determining a vacation destination.

State of Massachusetts

- Members from all Northeast states have expressed a desire for greater trail availability in the state of Massachusetts.

- Currently, 4392 families travel to or in the state of Massachusetts one or more times per year for the purpose of backcountry recreation, representing 51% of the total population of backcountry recreationists.

- 71% of all backcountry recreationists in the Northeast would travel to the state of Massachusetts if more legal recreation areas were open to the public.

- If legal recreation areas were to become more widely available in the state of Massachusetts, 6303 families would travel to Massachusetts, representing a total of 32767 additional vacation days spent in Massachusetts per year.

Percent of Current Member Participation Rates In Massachusetts		
State of Residence	Current % of membership participation in Massachusetts	Number of Families Represented
Massachusetts	97%	2151
Connecticut	100%	832
New Hampshire	100%	370
New York	62%	334
New Jersey	47%	477
Ohio	0%	0
Pennsylvania	13%	120
Rhode Island	17%	15
Vermont	100%	93
Total		4392

State of Connecticut

- Members from all Northeast states have expressed a desire for greater trail availability in the state of Connecticut.
- Currently, 3101 families travel to or in the state of Connecticut for the purpose of four wheel drive recreation, representing 36% of the total population of backcountry recreationists.
- 69% of all backcountry recreationists in the Northeast would travel to the state of Connecticut if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in the state of Connecticut, 5442 families, representing a total of 23691 additional vacation days spent in Connecticut per year.

Percent of Current Member Participation Rates In Connecticut

State of Residence	Current % of membership participation	Number of Families Represented
Massachusetts	33%	654
Connecticut	100%	744
New Hampshire	66%	218
New York	58%	909
New Jersey	47%	426
Ohio	0%	0
Pennsylvania	13%	108
Rhode Island	0%	0
Vermont	50%	42
Total		3101

State of New Hampshire

- Members from all Northeast states have expressed a desire for greater trail availability in the state of New Hampshire.
- Currently, 3273 families travel to the state of New Hampshire for the purpose of backcountry recreation, representing 38% of the population of backcountry recreationists.
- 67% of all backcountry recreationists in the Northeast would travel to the state of New Hampshire if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in the state of New Hampshire, 5797 families, representing a total of 23736 additional vacation days spent in New Hampshire per year.

Percent of Current Member Participation Rates In New Hampshire

Travel From	Current % of membership participation	Number of Families Represented
Massachusetts	89%	1787
Connecticut	57%	429
New Hampshire	100%	335
New York	24%	381
New Jersey	18%	165
Ohio	0%	0
Pennsylvania	6%	49
Rhode Island	50%	43
Vermont	100%	84
Total		3273

State of Vermont

- Members from all Northeast states have expressed a desire for greater trail availability in the state of Connecticut.
- Currently, 2239 families travel to the state of Vermont for the purpose of backcountry recreation, representing 26% of the population of backcountry recreationists.
- 69% of all backcountry recreationists in the Northeast would travel to the state of Vermont if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in the state of Vermont, 5196 families, representing a total of 18686 vacation additional days spent in Vermont per year.

Percent of Current Member Participation Rates In Vermont		
Travel From	Current % of membership participation	Number of Families Represented
Massachusetts	31%	730
Connecticut	43%	380
New Hampshire	67%	264
New York	61%	522
New Jersey	6%	65
Ohio	3%	61
Pennsylvania	7%	68
Rhode Island	50%	50
Vermont	100%	99
Total		2239

State of New York

- Members from all Northeast states have expressed a desire for greater trail availability in the state of New York.
- Currently, 3703 families travel to the state of New York for the purpose of backcountry recreation, representing 43% of the population of backcountry recreationists.
- 73% of all backcountry recreationists in the Northeast would travel to the state of New York if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in the state of New York, 6723 families, representing a total of 24910 additional vacation days spent in New York per year.

Percent of Current Member Participation Rates In New York		
State of Residence	Current % of membership participation	Number of Families Represented
Massachusetts	22%	445
Connecticut	50%	380
New Hampshire	33%	111
New York	100%	1602
New Jersey	88%	816
Ohio	3%	53
Pennsylvania	20%	168
Rhode Island	100%	85
Vermont	50%	43
Total		3703

State of New Jersey

- Members from all Northeast states have expressed a desire for greater trail availability in the state of New Jersey.
- Currently, 2325 families travel to the state of New Jersey for the purpose of backcountry recreation, representing 27% of the population of backcountry recreationists.
- 53% of all backcountry recreationists in the Northeast would travel to the state of New Jersey if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in the state of New Jersey, 4313 families, representing a total of 18976 additional vacation days spent in New Jersey per year.

Percent of Current Member Participation Rates In New Jersey		
State of Residence	Current % of membership participation	Number of Families Represented
Massachusetts	6%	134
Connecticut	21%	177
New Hampshire	17%	63
New York	45%	799
New Jersey	88%	906
Ohio	3%	59
Pennsylvania	20%	187
Rhode Island	0%	0
Vermont	0%	0
Total		2325

State of Ohio

- Members from all Northeast states have expressed a desire for greater trail availability in the state of Ohio.
- Currently, 2411 families travel to the state of Ohio for the purpose of backcountry recreation, representing 28% of the population of backcountry recreationists.
- 47% of all backcountry recreationists in the Northeast would travel to the state of Ohio if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in the state of Ohio, 3348 families, representing a total of 15119 additional vacation days spent in Ohio per year.

Percent of Current Member Participation Rates In Ohio		
State of Residence	Current % of membership participation	Number of Families Represented
Massachusetts	0%	0
Connecticut	7%	57
New Hampshire	0%	0
New York	0%	0
New Jersey	0%	0
Ohio	94%	1805
Pennsylvania	60%	549
Rhode Island	0%	0
Vermont	0%	0
Total		2411

State of Pennsylvania

- Members from all Northeast states have expressed a desire for greater trail availability in the state of Pennsylvania.
- Currently, 3789 families travel to the state of Pennsylvania for the purpose of backcountry recreation, representing 44% of the population of backcountry recreationists.
- 76% of all backcountry recreationists in the Northeast would travel to the state of Pennsylvania if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in Pennsylvania, 6449 families, representing a total of 23517 additional vacation days spent in Pennsylvania per year.

Percent of Current Member Participation Rates In Pennsylvania		
State of Residence	Current % of membership participation	Number of Families Represented
Massachusetts	11%	247
Connecticut	43%	362
New Hampshire	17%	63
New York	48%	853
New Jersey	82%	843
Ohio	28%	550
Pennsylvania	93%	871
Rhode Island	0%	0
Vermont	0%	0
Total		3789

State of Rhode Island

- Members from all Northeast states have expressed a desire for greater trail availability in the state of Rhode Island.
- Currently, 344 families travel to the state of Rhode Island for the purpose of backcountry recreation, representing 4% of the population of backcountry recreationists.
- 42% of all backcountry recreationists in the Northeast would travel to the state of Rhode Island if more legal recreation areas were open to the public.
- If legal recreation areas were to become more widely available in Rhode Island, 2711 families, representing a total of 8216 additional vacation days spent in Rhode Island per year.

Percent of Current Member Participation Rates In Rhode Island		
State of Residence	Current % of membership participation	Number of Families Represented
Massachusetts	8%	130
Connecticut	7%	44
New Hampshire	0%	0
New York	7%	94
New Jersey	0%	0
Ohio	0%	0
Pennsylvania	0%	0
Rhode Island	100%	71
Vermont	0%	0
Total		339

Section 2

Economic Benefits of Motorized Backcountry Recreation in the Northeast

Introduction and Objectives of Study

Motorized backcountry recreationists pay their own way, and provide valuable services to local communities. The following report provides a better understanding of the positive economic impacts of motorized backcountry recreation in the Northeast, and in the individual states of the Northeast quadrant of the United States. Included in this report:

- A summary of the positive economic impacts of motorized backcountry recreation in the Northeast quadrant of the United States.
- State by state analysis. State analysis estimates total state revenues (e.g., gasoline tax, vehicle registration fee, property tax, excise tax, etc.) derived directly and indirectly from motorized backcountry recreationists.
- Estimates of the positive economic impact and value of volunteer activities undertaken by motorized backcountry recreationists.
- Examines and estimates potential positive economic impacts of increased tourism.
- Estimates the positive economic impact and value of future volunteer activities by motorized backcountry recreationists.
- Assesses the increased demand for motorized backcountry recreation.
- Examines the spending habits of motorized backcountry recreationists.
- Examines future increase in vacation habits and participation in other outdoor activities when combined with motorized backcountry recreation.

Methods

A survey was designed and mailed to a random sample of 2500 known recreationists. More than 250 surveys were returned; however, 8 surveys were not fully completed and were not used in this study. With an absolute error of +/- 5 percentage point at the 95% confidence level, the remaining 243 completed surveys more than doubled the number of surveys required to represent the known population of 8612 back country recreationists. Due to financial constraints, the survey was mailed only once. East Coast Four Wheel Drive Association did not receive any agency support, whether local, state or federal, nor did it receive any corporate sponsorship for the completion of this project.

All expenditure estimates included in this report are based on a known population of 8612 motorized backcountry recreationists in the Northeast quadrant of the United States. It is highly likely that the known population of 8612 is not truly representative of the actual number of motorized

backcountry recreationists in the Northeast. One hundred ninety eight (198) clubs in the Northeast were contacted and asked to disclose the number of members registered in their clubs. These 198 clubs were located through their internet based advertisements; registered members of clubs that are not advertised on the internet were not included in the population. Since there is no umbrella group or special registration process for backcountry recreationists, there is currently no method available within the financial scope of this project to accurately determine the true population of recreationists in the Northeast. For these reasons, it is believed that the estimates of expenditures contained within this document are highly conservative.

All expenditure estimates within this document are expressed as annual expenditures, unless otherwise noted. Durable goods and construction costs of structures were depreciated according to standard accounting practices, with regard to the life of the good(s) and the proportion of annual expenditure was recorded.

All expenditures, except where noted, were estimated by extrapolating the results from the sample to the total known population of motorized backcountry recreationists. The raw data obtained from the completed surveys provided for total expenditures per household, and did not incorporate data where two or more recreational vehicles were owned and operated by members of the same household.

Food and lodging expenditures were reported on a per trip basis and extrapolated to reflect annual expenditures per household. This was accomplished by first determining the expenditure per trip, than multiplying that number by the number of trips per year. The resulting number was then multiplied by the known population of backcountry recreationists.

A value of $10.00 per hour was applied to the total hours of volunteer service provided by backcountry recreationists. Hours of volunteer service were recorded for services that were of benefit to local communities; direct benefit may have been made to townships, state agencies, federal agencies, or to private landholders. Volunteer service hours for the sole purpose of promoting the clubs and/or associations, or for the construction and reconstruction of trails used by four wheel drive vehicles were thought to be self serving and not included in the total number of volunteer service hours.

- Backcountry recreationists spend in excess of $29.6 million dollars annually on non-durable goods associated with backcountry excursions.
- Backcountry recreationists spend more than $39.9 million dollars annually on durable goods associated with backcountry excursions.
- Recreationists spend more than $12.5 million annually for vehicle equipment and modifications alone.
- Backcountry recreationists donate more than a half million dollars, in both cash and product, to charitable organizations.
- Back country recreationists spend in excess of $10.4 million annually for the purpose of purchasing recreational vehicles

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists in the Northeast	
Fuel for recreational vehicle ($538.92)	$ 3271164.40
Fuel for Tow Vehicle ($1122.12)	$ 2309217.10
Dining ($858.60)	$ 5213515.30
Lodging ($435.24)	$ 2644267.60
Necessary Repairs/Maintenance ($1027.10)	$ 6230395.80
Club and Association Dues ($55.08)	$ 334616.40
Film & Developing ($112.24)	$ 66363.84
Registration Fees for recreational vehicle ($69.12)	$ 420828.48
Registration Fees for tow vehicle ($120.91)	$ 273829.68
Registration Fees for trailers ($30.25)	$ 63553.60
Inspection Fees for recreational vehicle ($17.28)	$ 106129.44
Inspection Fees for tow vehicle ($14.04)	$ 30877.20
Inspection Fees for trailers ($3.24)	$ 7366.09
Insurance for recreational vehicle ($804.60)	$ 4774809.60
Insurance for tow vehicle ($825.12)	$ 1703409.40
Insurance for trailers ($31.32)	$ 65695.32
Excise Tax for recreational vehicle ($38.88)	$ 235550.16
Excise Tax for tow vehicle ($66.69)	$ 137257.22
Excise Tax for trailer ($10.80)	$ 24111.00
Insurance for trailers ($31.85)	$ 65695.32
Safety Equipment ($78.84)	$ 482230.80
Donations to charity ($102.08)	$ 601333.20
Total Expenditures on Non-Durable Items	$29,062,216.95

Annual Household Expenditures on Durable Goods	
Recreational Vehicle ($1595.09)	$ 10448157.60
Tow Vehicle ($ 5,185.65)	$ 11548234.80
Trailer ($ 292.36)	$ 651076.92
Vehicle Equipment & Modifications ($ 1,918.46)	$ 12566308.68
Clothing ($ 67.64)	$ 443058.12
Cameras & Camcorders ($ 351.71)	$ 2303743.68
Camping Equipment ($299.72)	$ 1963218.60
Total Annual Expenditures on Durable Goods	$39,923,798.40

- Motorized backcountry recreationists in the north east spend more than $69 million dollars annually on the purchases of durable and non durable goods

Annual Household Combined Expenditures on Non-Durable and Durable Goods in the Northeast	
Total Annual Expenditures on Non-Durable Goods	$29062216.95
Total Annual Expenditures on Durable Goods	$39923798.40
Combined Annual Expenditures	$68,986,015.35

Construction Expenditures for Housing or Repairing Recreational Vehicles

Motorized back country recreationists were specifically asked if they had built or purchased a structure for the sole purpose of storing or performing maintenance and/or repairs to their vehicles that they otherwise would not have built or purchased if they did not participate in motorized back country recreation. Of those surveyed, 30% stated that they had built or purchased such a structure solely for this purpose. The mean (average) cost of building or purchasing a structure, such as a garage or carport, is $17311.56.

- Motorized backcountry recreationists in the north east spent a total of $21.3 million dollars in the initial construction of garages and carports solely for the purpose of housing or repairing their recreational vehicles

Annual Expenditures on Structures Built for the Purpose of Housing or Repairing Recreational Vehicle	
Construction of Structure	$ 708391.44
Increase In Property Taxes	$ 549916.56
Increase In Homeowners Insurance	$ 69996.22
Total Annual Expenditures	$1,328,304.22

In addition to consumer spending by backcountry recreationists during normal planned club excursions, many clubs also hold special events throughout the year. These events encompass both competitive (racing) and recreational (trail riding) activities and are geared toward a much larger audience and participant level than a normal excursion.

Generally, special four wheel drive events are based at a specific location which may be a designated fair ground, a hotel, a conference center, or a campground. The host club will purchase or rent a variety of local goods to include meeting rooms, banquet areas, catered meals, food vendors, manufacturer displays, portable toilets, awards and trophies, and a host of other items.

Most special events are hosted annually by the same club(s) with a venue that varies little from year to year. All clubs have reported significant increases in both participation rates and spectator rates at their yearly events. With the mounting success of these events, many clubs that have not previously held special events have recognized that these events fulfill a great recreational gap, and have initiated new events in various regions.

Depending on the specific event, a club sponsored event will draw between 300 and 2500 people for a period of 3 to 5 days to a given area to either participate in the event directly or to attend as a spectator. Attendees arrive from many different states, some traveling in excess of 1,000 miles, with the vast majority reserving hotel rooms or camp sites for their stay. Additional induced spending increases in accordance with the length of stay and/or the length of the event.

A recent event held in western Massachusetts brought 130 participants and more than $97,000.00 in gross revenue to local businesses over the course of a 3-day special event. Participants reported spending approximately $725 each for the weekend long event. A similar, but larger event recently held in southern Ohio draws a crowd in the thousands with gross revenues to local businesses well in excess of $500,000.00.

Just as with typical club excursions, special event locations are selected based primarily on the availability of recreational areas. Although many participants travel a great distance to attend special event, the recreation areas necessary for a successful event must be located relatively close to the event base. State agencies demonstrating a desire to work with recreationists in creating suitable recreation areas are likely to benefit by increased tourism as a result of both regular club excursions and special events.

Community Service Volunteer Hours

Survey data suggests that motorized back country recreationists in the Northeast quadrant of the United States collectively completed 209,346 hours of community service related labor, with each "average" member completing approximately 39 hours of volunteer service per year. Projects completed may include, but are not limited to, trash clean ups on town, state and federal forest lands, adopt-a-road programs, collection of canned goods for the needy, post-storm clearing of hiking trails, and the US Marine Corps Toys For Tots program. Volunteer hours for the construction or reconstruction of trails and roads used for recreational activities was not included in the total number of volunteer hours completed, as this is thought to be self-serving to those that participate in back country recreation and is not of direct value to charitable organizations or local communities.

When a conservative value of $10.00 per hour is applied to the volunteer hours completed, the representative value of the volunteer services of motorized backcountry recreationists in the Northeast is in excess of $2 million dollars annually.

In addition to labor hours, motorized backcountry recreationists in the Northeast donated $601,333.20 in cash or product to charitable organization.

Combined donations of cash, product, and volunteer labor to charitable organizations in the Northeast exceeds $2.5 million annually.

Some completed surveys included a note from the recreationist stating that more community service hours would have been completed; however, volunteer services were refused by some agencies due to personal bias of agency management. Since this question was not directly posed in the original survey, data does not currently exist to substantiate or disprove the validity of refusal of services by agency management as an ongoing or widespread occurrence. It is useful to note, however, that there are documented cases where personal bias of agency management has resulted in a net loss of volunteer labor and/or donations of cash and product to communities.

Expenditures of Back Country Recreationists by State of Residence

Caution is necessary in reviewing the expenditures by recreationists residing in specific states. The expenditures indicated in these tables are representative of expenditures made by state residents; however, these expenditures did not necessarily take place in their state of residence. It is reasonable to assume that a greater percentage of these expenditures would be made in a recreationist's state of residence if that particular state demonstrates a greater desire to promote motorized backcountry recreation, and subsequently draw greater tourism from within their own state. Expenditure statements for items such as excise taxes, state registration and inspection fees are directly relevant to state revenue sources. Current data does not provide for accurate estimation of leakages from a particular state economy.

All of those surveyed indicated that their preference in purchasing materials for the maintenance of their vehicles is that of local stores. Items not available in local stores are purchased either by mail or by private sale.

Expenditures on both durable and non-durable goods by residents of each state is indicative of potential tourism revenue for that particular state or for neighboring states that may entice participants to recreate in the neighboring state.

State of Massachusetts

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in Massachusetts	
Recreational Vehicle ($ 1870.56)	$ 2724330.24
Tow Vehicle ($ 5421.60)	$ 1095163.20
Trailer ($ 308.88)	$ 62393.76
Vehicle Equipment ($1912.68)	$ 2785964.76
Clothing ($49.66)	$ 72727.20
Camera & Camcorder ($118.80)	$ 173335.68
Camping Equipment ($48.60)	$ 70761.60
Total	$6,984,676.44

Annual Combined Expenditures on Durable and Non-durable Good by Massachusetts State Residents	
Durable Good	$ 6984676.44
Non Durable Goods	$ 5136621.00
Total	$ 12,121,297.44

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in Massachusetts	
Fuel for recreational vehicle ($570.24)	$ 831574.08
Fuel for Tow Vehicle ($800.28)	$ 161656.56
Dining ($122.04)	$ 178782.12
Lodging ($334.80)	$ 487686.96
Necessary Repairs/Maintenance ($992.52)	$ 1446201.00
Club and Association Dues ($51.84)	$ 76789.08
Film & Developing ($64.80)	$ 95003.28
Registration Fees - recreational vehicle ($84.24)	$ 123177.24
Registration Fees - tow vehicle ($39.96)	$ 59404.32
Registration Fees - trailers ($62.64)	$ 12653.28
Inspection Fees - recreational vehicle ($22.68)	$ 34201.44
Inspection Fees - tow vehicle ($15.00)	$ 3300.00
Inspection Fees - trailers ($0.00)	$0.00
Insurance - recreational vehicle ($763.56)	$ 1112485.32
Insurance - tow vehicle ($1015.20)	$ 205070.40
Insurance - trailers ($66.96)	$ 13525.92
Excise Tax - recreational vehicle ($81.00)	$ 125098.56
Excise Tax - tow vehicle ($294.84)	$ 59557.68
Excise Tax - trailer ($49.68)	$ 10166.04
Safety Equipment ($24.84)	$ 37607.76
Donations to charity ($42.12)	$ 62679.96
Total Expenditures on Non-Durable Items	$5,136,621.00

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in Connecticut	
Recreational Vehicle ($1807.92)	$ 987291.72
Tow Vehicle ($0.00)	$ 0.00
Trailer ($0.00)	$ 0.00
Vehicle Equipment ($1284.12)	$ 701592.84
Clothing ($71.28)	$ 39170.52
Camera & Camcorder ($57.24)	$ 31588.92
Camping Equipment ($60.48)	$ 33484.32
Total	$1,793,128.32

Annual Combined Expenditures on Durable and Non-durable Good by Connecticut State Residents	
Durable Good	$ 1793128.32
Non Durable Goods	$ 933017.11
Total	$ 2,726,145.43

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in Connecticut	
Fuel for recreational vehicle ($372.60)	$ 204022.80
Fuel for Tow Vehicle ($0.00)	$ 0.00
Dining ($117.72)	$ 64758.96
Lodging ($316.44)	$ 173332.04
Necessary Repairs/Maintenance ($246.24)	$ 134447.09
Club and Association Dues ($54.00)	$ 29693.52
Film & Developing ($157.68)	$ 86134.38
Registration Fees - recreational vehicle ($117.88)	$ 64821.60
Registration Fees - tow vehicle ($0.00)	$ 0.00
Registration Fees - trailers ($0.00)	$ 0.00
Inspection Fees - recreational vehicle ($15.12)	$ 8424.00
Inspection Fees - tow vehicle ($0.00)	$ 0.00
Inspection Fees - trailers ($0.00)	$ 0.00
Insurance - recreational vehicle ($739.80)	$ 40435.20
Insurance - tow vehicle ($0.00)	$ 0.00
Insurance - trailers ($0.00)	$ 0.00
Excise Tax - recreational vehicle ($127.44)	$ 70128.72
Excise Tax - tow vehicle ($0.00)	$ 0.00
Excise Tax - trailer ($0.00)	$ 0.00
Safety Equipment ($24.84)	$ 13857.48
Donations to charity ($77.76)	$ 42961.32
Total Expenditures on Non-Durable Items	$933,017.11

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in New Hampshire	
Recreational Vehicle ($953.64)	$ 231820.92
Tow Vehicle ($1890.00)	$ 304290.00
Trailer ($178.20)	$ 28690.20
Vehicle Equipment ($3093.12)	$ 751628.16
Clothing ($131.76)	$ 32148.36
Camera/Camcorder ($536.76)	$ 130489.92
Camping Equipment ($85.19)	$ 20702.52
Total	$1,499,770.08

Annual Combined Expenditures on Durable and Non-durable Good by New Hampshire State Residents	
Durable Good	$ 1499770.08
Non Durable Goods	$ 1698662.72
Total	$3,198,432.80

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in New Hampshire	
Fuel for recreational vehicle ($495.72)	$ 120503.16
Fuel for Tow Vehicle ($948.24)	$ 152796.24
Dining ($1692.36)	$ 333614.16
Lodging ($480.60)	$ 117003.96
Necessary Repairs/Maintenance ($1899.72)	$ 461675.16
Club and Association Dues ($78.66)	$ 19113.84
Film & Developing ($329.40)	$ 80044.20
Registration Fees - recreational vehicle ($114.32)	$ 27380.16
Registration Fees - tow vehicle ($168.48)	$ 27168.48
Registration Fees - trailers ($25.00)	$ 4347.00
Inspection Fees - recreational vehicle ($20.00)	$ 5248.80
Inspection Fees - tow vehicle ($20.00)	$ 69500.00
Inspection Fees - trailers ($0.00)	$0.00
Insurance - recreational vehicle ($548.64)	$ 133405.92
Insurance - tow vehicle ($513.00)	$ 82593.00
Insurance - trailers ($25.00)	$ 4347.00
Excise Tax - recreational vehicle ($ 0.00)	$0.00
Excise Tax - tow vehicle ($0.00)	$0.00
Excise Tax - trailer ($ 0.00)	$ 0.00
Safety Equipment ($33.48)	$ 8309.52
Donations to charity ($211.68)	$ 51612.12
Total Expenditures on Non-Durable Items	$1,698,662.72

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in New York	
Recreational Vehicle ($1899.72)	$ 2188863.00
Tow Vehicle ($7812.72)	$ 2204619.12
Trailer ($280.80)	$ 78062.40
Vehicle Equipment ($2394.36)	$ 2759417.28
Clothing ($91.80)	$ 106139.16
Camera & Camcorder ($162.00)	$ 187581.96
Camping Equipment ($62.64)	$ 72817.92
Total	$7,597,500.84

Annual Combined Expenditures on Durable and Non-durable Good by New York State Residents	
Durable Good	$ 7597500.84
Non Durable Goods	$ 6604888.58
Total	$14,202,389.42

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in New York	
Fuel for recreational vehicle ($625.40)	$ 1114309.27
Fuel for Tow Vehicle ($1248.44)	$ 216619.79
Dining ($801.22)	$ 239568.04
Lodging ($774.08)	$ 653500.53
Necessary Repairs/Maintenance ($1905.70)	$ 1937909.34
Club and Association Dues ($43.66)	$ 102897.37
Film & Developing ($100.30)	$ 128304.40
Registration Fees - recreational vehicle ($64.90)	$ 165057.50
Registration Fees - tow vehicle ($62.54)	$ 79601.79
Registration Fees - trailers ($13.91)	$ 16955.40
Inspection Fees - recreational vehicle ($15.20)	$ 45829.93
Inspection Fees - tow vehicle ($7.59)	$ 4422.00
Inspection Fees - trailers ($0.00)	$0.00
Insurance - recreational vehicle ($1262.60)	$ 1490730.33
Insurance - tow vehicle ($1196.52)	$ 274797.34
Insurance - trailers ($0.00)	$ 0.00
Excise Tax - recreational vehicle ($ 0.00)	$ 0.00
Excise Tax - tow vehicle ($0.00)	$ 0.00
Excise Tax - trailer ($ 0.00)	$ 0.00
Safety Equipment ($28.80)	$ 50394.40
Donations to charity ($97.94)	$ 83991.15
Total Expenditures on Non-Durable Items	$6,604,888.58

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in New Jersey	
Recreational Vehicle ($1992.60)	$ 132940.44
Tow Vehicle ($2599.56)	$ 722882.88
Trailer ($111.24)	$ 31138.56
Vehicle Equipment ($435.24)	$ 290567.52
Clothing ($58.32)	$ 42797.16
Camera & Camcorder ($71.28)	$ 48234.96
Camping Equipment ($77.76)	$ 52189.92
Total	$1,320,751.44

Annual Combined Expenditures on Durable and Non-durable Good by New Jersey State Residents	
Durable Good	$ 1320751.44
Non Durable Goods	$ 4143685.68
Total	$5,464,437.12

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in New Jersey	
Fuel for recreational vehicle ($572.40)	$ 382425.84
Fuel for Tow Vehicle ($1142.64)	$ 317824.56
Dining ($733.32)	$ 489505.68
Lodging ($708.48)	$ 472894.20
Necessary Repairs/Maintenance ($1744.20)	$ 1163529.36
Club and Association Dues ($41.04)	$ 25954.56
Film & Developing ($91.80)	$ 61653.96
Registration Fees - recreational vehicle ($59.40)	$ 40254.84
Registration Fees - tow vehicle ($57.24)	$ 16041.24
Registration Fees - trailers ($11.88)	$ 3538.08
Inspection Fees - recreational vehicle ($12.96)	$ 9279.36
Inspection Fees - tow vehicle ($6.94)	$ 1929.96
Inspection Fees - trailers ($0.00)	$ 0.00
Insurance - recreational vehicle ($1155.60)	$ 771208.56
Insurance - tow vehicle ($1095.12)	$ 304528.68
Insurance - trailers ($18.36)	$ 5361.12
Excise Tax - recreational vehicle ($0.00)	$0.00
Excise Tax - tow vehicle ($ 0.00)	$0.00
Excise Tax - trailer ($ 0.00)	$0.00
Safety Equipment ($26.36)	$ 17584.56
Donations to charity ($89.64)	$ 60171.12
Total Expenditures on Non-Durable Items	$4,143,685.68

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in Ohio	
Recreational Vehicle ($1397.52)	$ 1780792.56
Tow Vehicle ($6144.12)	$ 4651485.48
Trailer ($413.64)	$ 313899.84
Vehicle Equipment ($2087.64)	$ 2660426.64
Clothing ($65.87)	$ 82985.04
Camera & Camcorder ($117.15)	$ 149258.16
Camping Equipment ($226.80)	$ 289945.44
Total	$9,928,793.16

Annual Combined Expenditures on Durable and Non-durable Good by Ohio State Residents	
Durable Good	$ 9928793.16
Non Durable Goods	$ 5538916.84
Total	$15,467,710.00

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in Ohio	
Fuel for recreational vehicle ($448.20)	$ 571048.92
Fuel for Tow Vehicle ($1190.16)	$ 900952.12
Dining ($663.12)	$ 845544.96
Lodging ($529.20)	$ 674845.56
Necessary Repairs/Maintenance ($587.52)	$ 749725.20
Club and Association Dues ($64.80)	$ 82898.64
Film & Developing ($100.44)	$ 128991.96
Registration Fees - recreational vehicle ($36.00)	$ 42222.60
Registration Fees - tow vehicle ($167.40)	$127151.66
Registration Fees - trailers ($36.00)	$ 21729.31
Inspection Fees - recreational vehicle ($5.00)	$ 4299.48
Inspection Fees - tow vehicle ($5.00)	$ 1720.47
Inspection Fees - trailers ($0.00)	$0.00
Insurance - recreational vehicle ($495.72)	$ 631632.60
Insurance - tow vehicle ($483.84)	$ 366825.24
Insurance - trailers ($50.00)	$ 40878.00
Excise Tax - recreational vehicle ($12.96)	$ 17327.52
Excise Tax - tow vehicle ($23.76)	$ 18071.64
Excise Tax - trailer ($2.16)	$ 1291.68
Safety Equipment ($29.16)	$ 37006.20
Donations to charity ($200.00)	$ 274753.08
Total Expenditures on Non-Durable Items	$5,538,916.84

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in Pennsylvania	
Recreational Vehicle ($1589.76)	$ 964984.32
Tow Vehicle ($7344.00)	$ 207835.00
Trailer ($394.20)	$ 111854.56
Vehicle Equipment ($1797.12)	$ 1091185.56
Clothing ($85.32)	$ 52007.40
Camera & Camcorder ($84.24)	$ 51133.68
Camping Equipment ($179.03)	$ 108676.08
Total	$2,587,676.60

Annual Combined Expenditures on Durable and Non-durable Good by Pennsylvania State Residents	
Durable Good	$ 2587676.60
Non Durable Goods	$ 210558.28
Total	$ 2,798,234.88

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in Pennsylvania	
Fuel for recreational vehicle ($494.64)	$ 300595.32
Fuel for Tow Vehicle ($864.00)	$ 244730.16
Dining ($818.64)	$ 497395.08
Lodging ($247.32)	$ 150341.40
Necessary Repairs/Maintenance ($416.88)	$ 253067.76
Club and Association Dues ($29.16)	$ 17830.80
Film & Developing ($91.80)	$ 55940.76
Registration Fees - recreational vehicle ($37.80)	$ 23118.48
Registration Fees - tow vehicle ($70.20)	$ 20040.48
Registration Fees - trailers ($14.19)	$ 4016.52
Inspection Fees - recreational vehicle ($28.51)	$ 17305.92
Inspection Fees - tow vehicle ($38.88)	$ 11176.92
Inspection Fees - trailers ($3.90)	$ 1920.24
Insurance - recreational vehicle ($538.79)	$326687.04
Insurance - tow vehicle ($455.18)	$ 128805.12
Insurance - trailers ($11.11)	$ 3142.80
Excise Tax - recreational vehicle ($0.00)	$ 0.00
Excise Tax - tow vehicle ($0.00)	$ 0.00
Excise Tax - trailer ($0.00)	$ 0.00
Safety Equipment ($40.98)	$ 24707.16
Donations to charity ($40.75)	$ 24736.32
Total Expenditures on Non-Durable Items	$2,105,558.28

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in Rhode Island	
Recreational Vehicle ($130.60)	$ 6588.00
Tow Vehicle ($864.11)	$ 52704.12
Trailer ($ 100.00)	$ 6600.00
Vehicle Equipment ($1372.68)	$ 83733.48
Clothing ($86.40)	$ 5270.90
Camera & Camcorder ($80.13)	$ 4887.93
Camping Equipment ($47.07)	$2871.27
Total	$162,655.70

Annual Combined Expenditures on Durable and Non-durable Good by Rhode Island State Residents	
Durable Good	$ 162655.70
Non Durable Goods	$ 350070.80
Total	$512,726.50

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in Rhode Island	
Fuel for recreational vehicle ($870.80)	$51923.20
Fuel for Tow Vehicle ($862.43)	$54519.36
Dining ($1436.40)	$90865.60
Lodging ($378.00)	$23912.00
Necessary Repairs/Maintenance ($704.16)	$44544.64
Club and Association Dues ($30.00)	$1,830.00
Film & Developing ($55.00)	$3420.00
Registration Fees - recreational vehicle ($40.00)	$2,440.00
Registration Fees - tow vehicle ($35.00)	$2,135.00
Registration Fees - trailers ($20.00)	$1,220.00
Inspection Fees - recreational vehicle ($18.00)	$1,098.00
Inspection Fees - tow vehicle ($18.00)	$1,098.00
Inspection Fees - trailers ($0.00)	$0.00
Insurance - recreational vehicle ($500.00)	$30,500.00
Insurance - tow vehicle ($ 450.00)	$27,450.00
Insurance - trailers ($50.00)	$3,050.00
Excise Tax - recreational vehicle ($60.00)	$3,660.00
Excise Tax - tow vehicle ($ 30.00)	$1,830.00
Excise Tax - trailer ($ 0.00)	$0.00
Safety Equipment ($25.00)	$1,525.00
Donations to charity ($ 50.00)	$3,050.00
Total Expenditures on Non-Durable Items	$350,070.80

Annual Expenditures on Durable Goods of Backcountry Recreationists Residing in Vermont	
Recreational Vehicle ($1377.00)	$ 83997.00
Tow Vehicle ($6912.00)	$ 214272.00
Trailer ($291.60)	$ 9039.60
Vehicle Equipment ($2382.48)	$ 145344.24
Clothing ($56.16)	$ 3458.16
Camera & Camcorder ($9.03)	$ 548.62
Camping Equipment ($39.60)	$2414.80
Total	$459,074.42

Annual Combined Expenditures on Durable and Non-durable Good by Vermont State Residents	
Durable Good	$ 459074.42
Non Durable Goods	$ 209995.10
Total	$669,069.52

Annual Personal (Non-durable) Expenditures of Backcountry Recreationists Residing in Vermont	
Fuel for recreational vehicle ($307.80)	$ 18775.80
Fuel for Tow Vehicle ($615.60)	$ 19083.60
Dining ($820.80)	$ 50068.80
Lodging ($135.00)	$ 8235.00
Necessary Repairs/Maintenance ($529.20)	$ 32281.20
Club and Association Dues ($80.00)	$ 5829.84
Film & Developing ($64.80)	$ 3952.80
Registration Fees - recreational vehicle ($68.04)	$ 4150.44
Registration Fees - tow vehicle ($46.44)	$ 1439.64
Registration Fees - trailers ($25.00)	$ 837.00
Inspection Fees - recreational vehicle ($13.00)	$ 856.44
Inspection Fees - tow vehicle ($10.00)	$ 334.80
Inspection Fees - trailers ($0.00)	$0.00
Insurance - recreational vehicle ($399.84)	$ 42690.24
Insurance - tow vehicle ($ 648.00)	$ 20088.00
Insurance - trailers ($0.00)	$0.00
Excise Tax - recreational vehicle ($ 0.00)	$0.00
Excise Tax - tow vehicle ($ 0.00)	$0.00
Excise Tax - trailer ($ 0.00)	$0.00
Safety Equipment ($12.00)	$ 548.00
Donations to charity ($13.50)	$ 823.50
Total Expenditures on Non-Durable Items	$209,995.10

Projected Tourism in the Northeastern States

Motorized backcountry recreationists in the Northeast quadrant of the United States expressed a desire to visit several states within the Northeast if adequate recreational areas were made available to the general public or to clubs and associations. Recreationists were specifically asked how many times they would visit a particular state if legal trails and roads were available for recreational purposes.

Recreationists also indicated that they would be more likely to take an extended vacation in a particular state if they were able to incorporate motorized backcountry excursions with other activities of interest.

Other activities frequented by motorized back country recreationists	Percent of recreationists that are likely to take an extended vacation when this activity is combined with motorized backcountry recreation
Bicycling	50%
Boating	44%
Fishing	47%
Golfing	16%
Hiking	59%
Hunting	28%
Other Motor Sports	64%
Personal Water Craft	18%
Photography	42%
Rock Climbing	17%
Snowboarding/Snow Skiing	38%
Snowmobiling	12%
Water Skiing	12%

Methods

The annual expenditure for individual categories was divided by the number of average vacation days spent by participants in the pursuit of motorized recreational activities to determine the expenditure per trip in each category. The number of days recreationists would travel to a particular state was divided by the number of recreationists that would travel to that state to obtain the average number of single vacation days per recreationist. The number of recreationists that would travel to the state was determined by dividing the number of those in the sample that expressed a desire to visit the state by the total number of recreationists in the sample; this number was then extrapolated to reflect the number of recreationists in the Northeast that would travel to the state. The number of single vacation days, the expenditure per trip, and the extrapolated number of participants were multiplied to determine the annual expenditures in each category.

As demonstrated on page 3 of this report, a 42% increase in motorized back country recreationist participation is expected within the 5 year period ending in the year 2010. Using the same procedure described above, projected expenditures were calculated for the expected increase in participation.

The following tables display projected expenditures during the 2009 and year 2010 recreational seasons if adequate recreational areas become available; these results were extrapolated to demonstrate the potential increase in expenditures for the year 2011. The expenditures listed in these tables are the most basic expenditures necessary for the sport of motorized backcountry recreation. Several positive economic benefits to communities were not included in these calculations, including additional vacation days spent in an area to pursue other activities, induced spending, and any economic multiplier effects, such as employment multipliers, associated with these expenditures.

Annual Projected Expenditures by Back Country Recreationists In The State of Massachusetts		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 887626.38	$ 1313687.71
Fuel for tow vehicle	$ 1848061.84	$ 2735131.58
Lodging	$ 717584.22	$ 1062025.10
Dining	$ 1414815.58	$ 2093927.74
Total	$4,868,088.02	$7,204,772.13

Annual Projected Expenditures by Back Country Recreationists In The State of Connecticut		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 656843.72	$ 950232.76
Fuel for tow vehicle)	$ 1367565.08	$ 1978412.16
Lodging	$ 531011.84	$ 768197.28
Dining	$ 1046963.16	$ 1514607.50
Total	$3,602,383.80	$5,211,449.70

Annual Projected Expenditures by Back Country Recreationists In The State of New York		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 778151.48	$ 1151665.44
Fuel for tow vehicle	$ 1620134.80	$ 2397799.22
Lodging)	$ 629082.72	$ 931041.46
Dining	$ 1240321.72	$ 1835676.60
Total	$4,267,690.72	$6,316,182.72

Annual Projected Expenditures by Back Country Recreationists In The State of New Jersey		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 553287.39	$ 818865.34
Fuel for tow vehicle	$ 1151959.08	$ 1704899.46
Lodging)	$ 447094.66	$ 661996.09
Dining	$ 881902.54	$ 1305215.76
Total	$3,034,243.67	$4,490,976.65

Annual Projected Expenditures by Back Country Recreationists In The State of Ohio		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 634170.23	$ 916241.20
Fuel for tow vehicle	$ 1212361.70	$ 1917050.95
Lodging)	$ 514432.47	$ 756096.42
Dining	$ 987258.03	$ 1565406.00
Total	$3,348,222.43	$5,154,794.57

Annual Projected Expenditures by Back Country Recreationists In The State of Pennsylvania		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 609503.76	$ 902065.56
Fuel for tow vehicle	$ 1269002.88	$ 1878124.53
Lodging)	$ 492741.70	$ 729257.73
Dining	$ 971507.61	$ 1437831.27
Total	$3,342,755.95	$4,947,279.09

Annual Projected Expenditures by Back Country Recreationists In The State of Rhode Island		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 295875.62	$ 437895.91
Fuel for tow vehicle	$ 616020.91	$ 911710.93
Lodging)	$ 239194.74	$ 654008.61
Dining	$ 471604.72	$ 697976.35
Total	$1,622,695.99	$2,701,591.80

Annual Projected Expenditures by Back Country Recreationists In The State of New Hampshire		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 642050.07	$ 752464.89
Fuel for tow vehicle	$ 1336765.37	$ 1658448.68
Lodging	$ 519053.15	$ 727472.82
Dining	$ 1023384.06	$ 1139984.75
Total	$3,521,252.65	$4,278,371.14

Annual Projected Expenditures by Back Country Recreationists In The State of Vermont		
	Projected 2009-2010 Expenditures If Adequate Recreational Areas Become Available	Projected Participation Rates For Year 2011 Expenditures If Adequate Recreational Areas Become Available
Fuel for recreational vehicle	$ 560203.49	$ 921223.51
Fuel for tow vehicle	$ 1353474.93	$ 1918011.89
Lodging)	$ 525541.32	$ 744745.60
Dining	$ 1036176.36	$ 1468367.73
Total	$3,475,396.10	$5,052,348.73

Conclusions

Four wheel drive recreation contributes to the overall economic health of the communities in which recreationists visit. Recreationists provide many benefits to the local communities in which they recreate, and have consistently demonstrated a willingness to provide volunteer labor and, where appropriate, cash and product donations to communities or to agencies that provide services to the needy.

Four wheel drive recreationists have indicated a desire to visit states where they may plan a vacation that combines off-road vehicle use with other activities. As more recreation areas are developed, the various states in the Northeast quadrant of the United States can expect increased tourism both related and unrelated to four wheel drive recreation. Additional induced spending related to recreational pursuits is also expected.

Four wheel drive recreationists demonstrate an overall appreciation and respect for the environment by participating in many environmental cleanups and by continually educating members as to environmentally sound passage of vehicles through difficult terrain.

As SUV sales in the United States continues to increase, membership in clubs and associations continues to increase each year as well, creating a greater demand for legal recreation areas on public lands. The increased demand for adequate recreation areas has not been adequately addressed by public land managers.

EAST COAST FOUR WHEEL DRIVE ASSOCIATION, INC.

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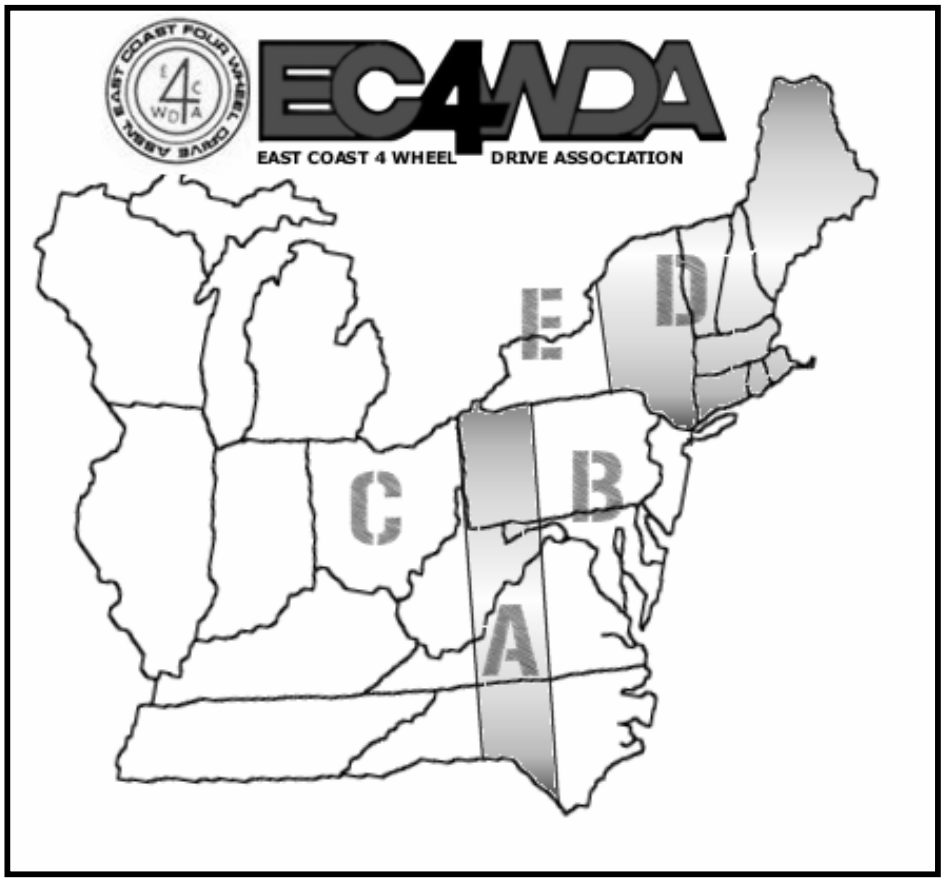
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