MOTORIZED SCOOTERS/GO-PEDS®

FINAL REPORT

MARCH, 2005

Submitted by

Dr. Janice Daniel New Jersey Institute of Technology



NJDOT Research Project Manager Edward S. Kondrath

In cooperation with

New Jersey
Department of Transportation
Division of Research and Technology
and

U.S. Department of Transportation Federal Highway Administration

DISCLAIMER STATEMENT

The contents of this report reflects the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the New Jersey Department of Transportation, New Jersey Motor Vehicle Commission or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

1. Report No.	2. Government Acces	sion No. 3. F	Recipient's Catalog	No.			
FHWA-NJ-2004-026							
4. Title and Subtitle			Report Date				
Motorized Scooters/Go-Peds®			rch, 2005 erforming Organizat	tion Codo			
		0. F	errorming Organizat	non code			
7. Author(s)		8. F	erforming Organiza	tion Report No.			
Janice Daniel, Steven Chien, Doris Fleisch	er and Rachel Liu.						
9. Performing Organization Name and Addres	ss	10.	10. Work Unit No.				
New Jersey Institute of Technology		11	Contract or Grant N	No.			
		11.	Contract of Grant P	١٥.			
		13.	Type of Report and	Period Covered			
12. Sponsoring Agency Name and Address		Fin	al Report				
New Jersey Department of Transportation PO 600	Federal Highway Ac U.S. Department of	Fransportation —					
Trenton, NJ 08625	Washington, D.C.	14.	Sponsoring Agency	Code			
15. Supplementary Notes							
16. Abstract							
State and local governing agencies have er	nacted laws and regu	lations governing the use of	of motorized scoot	ers in the U.S. as			
well as abroad. These restrictions vary fro							
the use of motorized scooters on public roa							
required to have a driver's license. Althou impossible to inspect and register these ve							
bumpers, lights and horns are not provided		ction stickers cannot be iss	ded because safety	reatures such as			
This research provides a survey of laws, re abroad, to determine best practices regardi							
scooters on motor vehicle crashes, the rese							
crashes. The research results will enable th	ne development of re	gulations that will ensure s					
scooters, but also to motor vehicles, pedes	trians and the genera	l public.					
17. Key Words	_	18. Distribution Statement					
Motorized Scooter, Motorized Skateboard	1						
19. Security Classif (of this report)	20. Security Class	f. (of this page)	21. No of Pages	22. Price			

Unclassified

Unclassified

76

Acknowledgements

The research presented in this report was performed with the assistance Drs. Steven Chien, Doris Fleischer and Rachel Liu.

Table of Contents

List of Figures	V
List of Tables	vi
EXECUTIVE SUMMARY	vii
INTRODUCTION	1
Overview	
Background	
Research Problem	
Research Objectives	
Organization	
FINDINGS AND RECOMMENDATIONS	5
Overview	
Operation on Public Roadways/Sidewalks	
Municipal Regulation	
Minimum Age	
Helmet Use	
Registration	
Fine Structure	
LITED ATLIDE DEVIEW	_
LITERATURE REVIEW	
Journal Review	
Local Newspaper Review	
International Newspaper Review	10
SAFETY STATISTICS	11
Overview	11
FARS Database	11
NJDOT Crash Database	
Emergency Room Data	
Bicycle Crashes	13
MOTORIZED SCOOTER DEFINITION	17
Overview	
Existing and Proposed Motor Vehicle Definitions	
State Review of Motorized Scooter Definitions	
Brake Horsepower	22
Piston Displacement	
Number of Wheels	
Maximum Speed	25
Presence of Seat	
Presence of Handlebars	26

Proposed Definition	26
Amended Motorized Scooter Definition	
Motorized Wheelchair Definition	
REVIEW OF EXISTING AND PROPOSED LEGISLATION	33
Overview	
Existing Motor Vehicle Laws	
Operation on Public Roadway	
Municipal Regulations	
Registration	
Liability Insurance	
License	
Age of Operator	
Helmet Use	
Fine Schedule for Violations	
ADOPTING MOTORIZED BICYCLE REGULATIONS	42
Overview	
Operation on Public Highways	
Violations and Suspensions	
Rules of the Road	
Compulsory Liability Insurance Coverage	
Accident Reports	
Operation by Person Under Influence	
Registration	
Form for sale of motorized bicycles	
License Plate	
Make and model numbers	
Helmet	
Dealer Licensed as Motor Vehicle Dealer	
Education Program for Safe Operation	
Review of Other State Laws	
Summary	
Appendix II. Definitions of Motorized Scooters/Motor-Driven Cycles by State	51
Appendix III. Summary of Proposed and Existing Legislation by State	57
Appendix IV. Existing NJ Motorized Bicycle Regulations	70
References	75

List of Figures

Figure 1. Frequency of Injury Cases for Motorized Scooters by Age Figure 2. Vehicle Types

List of Tables

- Table 1. Fatal Crashes Involving Motor-Driven Cycles
- Table 2. Fatal Bicyclist Crashes in NJ for 1997 2001
- Table 3. Percent of Fatal Bicycle Crashes by Roadway Functional Classification for 1997 2001
- Table 4. Percent of Fatal Bicycle Crashes by Speed Limit for 1997 2001
- Table 5. NJDOT Bicycle Injury Crashes for 1997 2000
- Table 6. Low-Speed Motorized Vehicle Typical Specifications
- Table 7. Existing and Proposed New Jersey Motor Vehicle Laws
- Table 8. Existing Definitions of Motorized Vehicles
- Table 9. Recommended Features in Motorized Scooter Definition

EXECUTIVE SUMMARY

Introduction

The report documents work performed to determine best practices regarding the use of motorized scooters. According to the U.S. Consumer Product Safety Commission (CPSC), emergency room-treated injuries related to scooters have increased sixteenfold from May to September 2000. New Jersey, like other States, is considering the enactment of legislation regulating the use of motorized scooters. Senate Bill No. 1510, introduced on April 29, 2004 and amended on October 4, 2004, is one such attempt. In this bill, motorized scooters are defined as a "... miniature motor vehicle and includes, but is not limited to, pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer. This term shall not include: electric personal assistive mobility devices, motorized bicycles or low-speed vehicles; or motorized wheelchairs, mobility scooters or similar mobility assisting devices used by persons with physical disabilities, or persons whose ambulatory mobility has been impaired by age or illness."

Crash Analysis

One of the objectives of this research was to explore the relationship between motorized scooters and motor vehicle or pedestrian crashes. Few studies have been performed on the safety impacts of motorized scooters and skateboards. One study investigated the impact of the scooter-45, a two-wheeled motor vehicle, on motor vehicle crashes. The study showed that the annual incident rate for mopeds and the scooter-45s increased significantly during the study period.

Existing crash databases are limited in their ability to identify the impact of motorized scooters on roadway safety. An analysis of fatal crashes in New Jersey from 2000 to 2002 showed there were no crashes involving "Other motor cycle type (minibikes, motor scooters)" in the State of New Jersey. In 2000 across the U.S., there were 29 fatal crashes involving "Other motor cycle type" with an increase to 36 crashes in 2002. Motorized scooters are not explicitly categorized in the New Jersey Department of Transportation (NJDOT) crash database. For this reason, the NJDOT accident database, which includes all motor vehicle crashes, cannot be used to identify safety statistics for motorized scooters.

Vehicle Specifications and Legislation

Motorized scooters are, in general, designed with and without a seat, weigh between 15 and 25 pounds, can be either gas or electric powered and can attain a maximum speed

of between 15 and 35 mph or more, depending on the weight of the rider and if it is being ridden on a flat surface. Motorized skateboards are similar to motorized scooters, but do not include a handle or seat. Miniature motorcycles have similar engine sizes to motorized scooters. Maximum speeds that can be reached in these devices fall between 25 and 40 mph.

Motorized scooters and motorized skateboards are regulated identically in the proposed legislation. Although a title or inspection is not proposed for motorized scooters/skateboards, the proposed legislation calls for the need for liability insurance. Operators of these vehicles must be at least 12 years old and no license is required. Motorized scooters and motorized skateboards are not allowed on public roadways or sidewalks. The proposed legislation covers a variety of low speed vehicles including "...pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer".

To identify potential conflicts of the proposed motorized scooter legislation with existing motor vehicle laws, a review of existing New Jersey motor vehicle law was performed. Under existing legislation, mopeds and motorcycles have similar regulations with a few exceptions. Operators of both vehicles must have the vehicle inspected, a title must be issued and liability insurance is needed. A motorcycle operator must be at least 17 years old with a valid motorcycle license. To operate a moped, the operator must be at least 15 years old with a moped license. Both mopeds and motorcycles are allowed on public roadways, however, mopeds are not allowed on divided highways, interstates, tollways, roadways with speed limits greater than 50 mph. Neither vehicle is allowed on sidewalks.

Motorized Scooter Definition

The definition of a motorized scooter varies from State to State. A review of State Statutes, administrative codes and driver manuals, identified 29 States have existing legislation or proposed legislation under which motorized scooters are classified. In 15 States a definition of a motorized scooter is provided. In the remaining States, motorized scooters are classified under a variety of vehicle types including motorcycle, motorized foot scooter, motor assisted scooter, scooter, and motorized skateboard. Features included in the definition of a motorized scooter include, but are not limited to presence of floor pad, brake horsepower, type of transmission, piston displacement, weight, power source, number of wheels, wheel size, maximum speed, presence of a seat or saddle, the presence of a handle bar and whether the device is gas or electric.

The proposed definition of motorized scooters provided in Senate Bill No. 1510 does not include much of the details used by other State definitions of motorized scooters and instead requires motorized scooters and "pocket bikes" be manufactured in compliance

with Federal Motor Vehicle Safety Standards. This approach for defining motorized scooter implies that motorized scooters and motorcycles are motor vehicles, and as such, are entitled to all of the privileges and duties of motor vehicles. Based on the review of State motorized scooter definitions, the definition proposed for motorized scooter should include:

- A maximum piston displacement of 50 cc;
- Not more than three wheels;
- A maximum speed of 25 mph;
- No seat or saddle should be present; and
- The presence of handlebars.

Three optional definitions are recommended: Option A modifies the current definition provided in Senate Bill No. 1510 to include engine size, maximum speed, the number of wheels and the use of a handlebar. Option B is based on the Florida definition of a motorized scooter and Option B is based on the California definition of a motorized scooter.

Adopting Motorized Bicycle Regulations

One approach for regulating motorized scooters is to modify the existing motorized bicycle ("moped") regulations and incorporate motorized scooters into these existing regulations. One of the major advantages for this approach is that motorized scooters/skateboards would be required to be registered and may, as a result, ensure that motorized scooters/skateboards are properly equipped with safety devices. The primary disadvantage is that differences in average speeds of motorized bicycles and motorized scooters/skateboards, require their operation on roadways of differing speed limits. This difference in operating speeds suggests that regulations for motorized bicycles and motorized scooters cannot be identical.

Recommendations

Operation on Public Roadways/Sidewalks: The highest safety to motorized scooter/skateboard operators is to prohibit the use of this device on public roadways and on sidewalks. Restricting the use of motorized scooters to roadways of a designated speed limit or access control would provide some level of safety.

<u>Municipal Regulation:</u> The proposed legislation would allow municipalities and counties to regulate the use of motorized scooters in designated areas other than streets, highways and sidewalks. This approach to municipal/county regulation differs from all other States reviewed. Allowing municipalities to regulate the use of motorized scooters on streets of certain characteristics deemed appropriate for its use should be considered.

Minimum Age: The proposed bill has the lowest minimum age of 12 for use of a motorized scooter than all States reviewed. This minimum age may not provide the highest safety and a higher age, comparable to motorized bicycles, may be warranted.

<u>Helmet Use:</u> The proposed legislation requires all operators of motorized scooters/skateboards to use a helmet. As proposed, this legislation would provide the highest level of safety. Consideration may be given to requiring helmet use by age.

Registration: The proposed legislation requires that motorized scooters operated on designated municipal or county property be registered with the municipal or county. This legislation will require municipalities to either perform an inspection of each motorized scooter/skateboard requesting registration or maintain a list of approved motorized scooter/skateboard manufactures and model numbers with the desired safety features. The types of safety features currently inspected on other motorized vehicles such as motorcycles and the equipment required on motorized bicycles are, however, not found on motorized scooters/skateboards. As a result, requiring registration of these vehicles may not be possible.

<u>Fine Structure</u>: The proposed fine structure includes a fee and dictates that the motorized scooter/skateboard is seized and for second and subsequent offenses that community service be performed. Compared to other low-speed motor vehicle law violations within the State, the proposed fine structure appears to have stiffer penalties. Although the proposed approach may minimize violations, the fining structure does not appear to be comparable to similar violations for other low-speed vehicles.

Chapter I

INTRODUCTION

Overview

This report summarizes the results of the work performed under the project *Motorized* Scooters/Go-Peds. The focus of this research was to survey laws, regulations and practices of States in the U.S., municipalities within New Jersey, and abroad, to determine best practices regarding the use of motorized scooters. According to the U.S. Consumer Product Safety Commission (CPSC), emergency room-treated injuries related to scooters have increased sixteen-fold from May to September 2000¹. In 2000, there were 40,500 emergency room-treated injuries reported and 5 deaths between 2000 and 2001. About 85 percent of the injuries are children under the age of 15. For this reason. State and local governing agencies have enacted laws and regulations governing the use of motorized scooters in the U.S. as well as abroad. These restrictions vary from State to State and by municipalities within each State. Many agencies prohibit the use of motorized scooters on public roadways. In some States, scooter riders must be at least 16 years old and may be required to have a driver's license. Although some States classify motorized scooters as motor vehicles, it becomes impossible to inspect and register these vehicles as valid inspection stickers cannot be issued because safety features such as bumpers, lights and horns are not provided on scooters.

Background

New Jersey, like other States, is considering the enactment of legislation regulating the use of motorized scooters. Senate Bill No. 1510, introduced on April 29, 2004 and amended on October 4, 2004, is one such attempt. In this bill, motorized scooters are defined as

"...miniature motor vehicle and includes, but is not limited to, pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer. This term shall not include: electric personal assistive mobility devices, motorized bicycles or low-speed vehicles; or motorized wheelchairs, mobility scooters or similar mobility assisting devices used by persons with physical disabilities, or persons whose ambulatory mobility has been impaired by age or illness."

Under the provisions of the bill, it would be unlawful to operate motorized scooters on public lands, highways, streets and sidewalks of this State. Violators are subject to a

fine of not less than \$100 nor more than \$200, and seizure of the motorized scooter for the first offense. For the second offense, the fine is not less than \$200 nor more than \$500, seizure of the motorized scooter and the court shall order the violator to perform community service for a period of not greater than 25 hours. For the third or subsequent offense, the fine is not less than \$500 nor more than \$750, seizure and forfeiture of the motorized scooter, and the court shall order the violator to perform community service for a period of not greater than 50 hours. This legislation differs from other State's legislation, in that the bill permits municipalities to designate, by ordinance, municipal property (other than municipal streets and sidewalks) where motorized scooters and motorized skateboards may be operated.

Research Problem

The ambiguity existing in State and local legislation regarding the operation of motorized scooters warrants further study to determine how motorized scooters should be regulated in New Jersey. Motorized scooters are currently not regulated in New Jersey, although some municipalities have interpreted existing legislation to classify motorized scooters as motorcycles. This interpretation is based on the municipality's understanding of the definition of motorcycles given in N.J.S. 39:1-1 which states that motorcycles include "....motor bikes, bicycles with motor attached and all motor-operated vehicles of the bicycle or tricycle type, except motorized bicycles as defined in this section, whether the motive power be a part thereof or attached thereto and having a saddle or seat with driver sitting astride or upon it or a platform on which the driver stands". In some municipalities, the use of motorized scooters on roadways, sidewalks, or other public property can result in the operator being cited for operating an unregistered and uninsured vehicle, and can also lead to the vehicle being impounded.

Research Objectives

The objectives of work performed under Task Order No. TO-55, Motorized Scooters/Go-Peds®, are to:

- Summarize the practices of State motor vehicle agencies and municipalities as a basis for regulations in New Jersey;
- Explore the relationship between Go-Peds® and motor vehicle or pedestrian accidents;
- Review the status of small motorized vehicles on public property, and recommend alternatives;
- Determine if data from other States can be utilized for analyses in New Jersey; and determine if new guidelines for registration, licensing and insurance can be introduced.

The tasks identified in the original proposal to achieve these objectives include:

- Survey the other States regarding current practices and regulations concerning motorized scooters to be utilized on this project. The survey will ask for definitions of motor scooter, license requirements, maximum speed, registration, insurance, compliance with vehicle code, night provision, proper necessary equipment, rules of the road, overtaking and passing another vehicle.
- <u>Task 2.</u> The analysis should review the status of small-motorized vehicles on public property and recommend alternatives for use on public access roads and sidewalks.
- <u>Task 3.</u> Prepare recommendations for regulations based on the literature search, survey and related documentation for consideration by the MVC.
- <u>Task 4.</u> Prepare quarterly progress and final report to summarize the work performed and the findings and recommendations with appropriate tables, graphs, charts, maps and diagrams. Deliver final report in hard copy version, and prepare a CD ROM with a PDF file version for use on NJDOT research web site.

At the Project "Kick-off" meeting, these tasks were further refined to reflect changes in the time schedule for the work. Recommendations were provided to the research team on the timeline, rapid transfer of information, prioritization, results and specific results of the research. Recommendations provided to the research team are stated in Appendix I, with the specific results to be determined in the research stated as follows:

- 1) Safety statistics (NJ data and all other states that have this available).
- 2) A recommended definition (that will conceivably include all the different kinds of go-peds/minibikes) as well as different options for definitions.
- 3) A legislative recommendation (review existing proposed legislation, existing law and court decisions and other states' legislation)
 - A critique of existing state legislation (and legal decisions), as well as proposed amendments to these state's legislations that will address problems.
 - b. Proposed alternate legislation to S-1510.

- 4) A review of existing motor vehicle law (especially, but not exclusively, moped/motorcycle/senior assistance vehicles) to see how they would be affected by any new legislation
 - a. A determination as to whether we could simply modify the moped law to include go-peds?
 - b. An analysis of the advantages and disadvantages of modifying existing law and incorporating these "go-peds" into moped law.
- 5) A discussion of all other MV related questions including insurance, registration, licensing and other.
 - a. Example: Are riders generally covered by their existing health insurance?
- 6) A discussion of the penalty and violation process
 - a. Who would be ticketed for improper use (the user (child) or the parent (owner))?
 - b. What types of penalties would apply?

Each of these items was addressed in the research and formed the basis for the approach taken in performing the research.

Organization

This report is organized into seven chapters. Chapter I provides an introduction to the research, stating the research objectives and the tasks performed to accomplish these objectives. Chapter II provides the findings of the research and recommendations on the definitions and legislation of motorized scooters. Chapter III provides a literature review and Chapter IV attempts to provide safety impact of motor scooters on motor vehicle crashes. Definitions of motorized scooters used by other States are reviewed in Chapter V and the basis for the proposed definition is provided. Chapter VI provides a a review of existing motor vehicle law and a critique of the existing legislation on motorized scooters. Finally, Chapter V provides a discussion on the advantages and disadvantages of adopting the motorized bicycle ("moped") regulations for use by motorized scooters/skateboards.

Chapter II

FINDINGS AND RECOMMENDATIONS

Overview

The focus of this research was to survey laws, regulations and practices of States in the U.S., municipalities within New Jersey, and abroad, to determine best practices regarding the use of motorized scooters. In total, 29 States have existing legislation or proposed legislation under which motorized scooters are classified. A review of existing New Jersey legislation and legislation from other States was also performed and compared with the proposed legislation in Senate Bill 1510. The comparison focused on six areas including: use on public roadways/sidewalks; municipal regulations; registration; age of operator; helmet use; and fine schedule. The following summarizes the recommendations for these areas.

Operation on Public Roadways/Sidewalks

The highest safety to motorized scooter/skateboard operators is to prohibit the use of this device on public roadways and on sidewalks. Restricting the use of motorized scooters to roadways of a designated speed limit or access control would provide some level of safety.

Municipal Regulation

The proposed legislation would allow municipalities to regulate the use of motorized scooters in designated areas other than streets, highways and sidewalks. This approach to municipal regulation differs from all other States reviewed. Allowing municipalities to regulate the use of motorized scooters on streets of certain characteristics deemed appropriate for its use should be considered.

Minimum Age

The proposed bill has the lowest minimum age of 12 for use of a motorized scooter than all States reviewed. This minimum age may not provide the highest safety and a higher age, comparable to motorized bicycles, may be warranted.

Helmet Use

The proposed legislation requires all operators of motorized scooters/skateboards to use a helmet. As proposed, this legislation would provide the highest level of safety. Consideration may be given to requiring helmet use by age.

Registration

Registering of motorized scooters does not necessarily promote safety of these devices, but may deter some from purchasing them. Registration does not appear to be a critical need for enhancing safety.

Fine Structure

The proposed fine structure includes a fee and dictates that the motorized scooter/skateboard is seized and community service be performed for second and subsequent offenses. Compared to other low-speed motor vehicle law violations within the State, the proposed fine structure appears to have stiffer penalties. Although the proposed approach may minimize violations, the fining structure does not appear to be comparable to similar violations for other low-speed vehicles.

Chapter III

LITERATURE REVIEW

Journal Review

A review of the literature identified few journal articles on motorized scooters and skateboards. One of the studies found was a study performed by Barsi et. al² to determine the impact of the introduction of the scooter-45, a two-wheeled motor vehicle, on motor vehicle crashes. The scooter-45 differs from the motorized scooters under study in this report in that these vehicles have a seat with engine sizes that range from 50 cc to 200cc. The scooter-45 was introduced in Denmark in 1994. Motor vehicle crashes with two wheeled motor vehicles and resulting in injuries treated at the Odense University Hospital from 1996 to 2000 were included in the study. The study showed that the annual incident rate for mopeds and the scooter-45s increased significantly during the study period with single vehicle accidents the most common accident.

Local Newspaper Review

Much of what is being reported on motorized scooters can be gathered from newspaper articles around the country which provides a review of some of the current laws, bills and practices related to the regulation of motorized scooters. In Palm Beach Florida, police issued citations and impounded the scooters of scooter drivers ranging in age from 13 to 20³. The parents of the drivers were billed \$40 in towing fees and \$10.60 a day storage to get them back. Not all scooters were impounded as the parents of some of the scooter drivers were present when the violation occurred. Scooter laws have been confusing. They are illegal to operate on public streets, but legal on private roadways. Under the law, they must have license plates, however it is impossible to get a license plate for them through the Motor Vehicle Department. One part of the legal code calls scooters a motor vehicle, another part does not. The police are responding in various ways including: issuing citations, requiring riders to walk their scooters home, issuing warnings, talking to parents, and sending information on the scooter's limitations to homeowners associations. Traffic violations being issued include not having a driver's license, running stop signs, operating on the sidewalk, and operating on the wrong side of the road.

In Baton Rouge, Louisiana⁴, motorized scooters are outlawed on streets and sidewalks. The State Police, however, tried to make the case that scooters were not street-legal because they could not meet State registration and annual inspection requirements that apply to motor vehicles. The Louisiana Municipal Association, in turn, sought to classify motorized scooters as vehicles to be regulated by municipalities and prohibiting their use on sidewalks. Even if a scooter owner sought to get the scooter register, inspection stations are not set up to register these vehicles. Some argue that motorized scooters should be treated as bicycles with the same regulations and requirements of bicycles.

The problem is that scooter users fail to use common sense, ignoring stop signs and riding on busy roads.

Recently, police in Brusly, Louisiana began confiscating scooters⁵. This action occurred after the State's Attorney General issued a legal opinion stating that motorized scooters cannot be ridden on roadways without a driver's license and without passing a safety inspection. The opinion means that scooters must pass vehicle inspections, have an inspection tag, and meet laws for lighting, brakes and safety equipment to operate. Brusly police officers often escort children using scooters illegally back to their homes and then notify parents of the law. In some cases a misdemeanor citation could be issued for the offense. In Denham Springs, Louisiana, after the first offense, the children are taken home and their parents notified. The third time, the officer can issue a summons to the parents to appear in court and confiscate the scooter.

Three bills were introduced in Louisiana to regulate the operation of scooters⁶. One bill would legalize the operation of scooters powered by engines with less than five horsepower on sidewalks but ban them from streets. Scooter operators would be required to yield to pedestrians on the sidewalk. Another bill was introduced to redefine scooters as motorized bicycles than can be ridden on public streets. The bill would not require scooter riders to wear safety helmets, but mandates an operator's license for drivers. The third bill required scooter operators to wear helmets. The bill would make it illegal to buy a scooter if the purchaser does not show proof at the time of an "age-and size-appropriate safety helmet".

The Department of Public Safety in Mississippi do not view scooters as "street legal" because they do not fit the definition of a motorized vehicle, which are allowed on public roads, streets and highways⁷. Public officials in Mississippi state that scooters should be equipped with turn signals, horns and rear view mirrors, if they are to be considered under the legal definition of a vehicle. Officials see the scooters as being designed as recreational purposes, to be operated away from regular traffic and should be treated the same as a 4-wheeler or a go-cart.

Motorized scooters meet the legal definition of a vehicles as defined by the Vehicle Code in California ⁸. According to the California vehicle codes, a scooter operator must be 16 and have a valid driver's license and must wear a helmet. Scooters are allowed in marked bike lanes if they are riding on a street with a speed limit of 25 mph, but are prohibited from being ridden on paseos or a bike lane or sidewalks leading to a paseo or even sidewalks. On these roadways, the speed limit is 15 mph and no passengers are allowed. Illegal scooter operators are subject to citations and can mean having to appear in Juvenile Court.

The New York State Vehicle and Traffic Law requires drivers of "gopeds" to have a driver's license, registration and insurance⁹. These vehicles may not be operated on any public streets, highways or sidewalks.

The Pennsylvania Department of Transportation classifies motorized scooters as motor vehicles because they have a motor¹⁰. These vehicles, however, are not to be ridden on public streets, sidewalks or parking lots. In fact, the State restricts the use of small, two-cycle gasoline engine- or electric motor-and-battery-powered scooters to private property. Under State law, anyone driving a scooter on public property can face as much as \$600 in fines and penalties and have the scooter impounded. Most police departments give parents warnings for the first offense, but a second offense can result in a citation or impoundment of the scooter. Although the law classifies motorized scooters as motor vehicles, PennDot acknowledges the motor vehicle codes were not designed for motorized scooters. For example, someone purchasing a scooter does not receive a title, so the vehicle cannot be registered in the State. Even if the vehicle could be registered there is no place to carry a license plate or a valid inspection sticker and inspection stickers could not be issued because safety features such as bumpers. lights and horns are not provided on scooters. PennDot does believe that scooters should be insured and drivers have a valid license to use scooters on the street. one municipality in Pennsylvania, Elizabeth Township, ordinances restrict the use of scooters on private property and within 300 feet of a residence. Additional ordinances restrict the amount of dust raised by the scooter and the noise level.

In Missouri and Illinois, motorized scooters are illegal for use by children under 16 except on private property¹¹. The Tucson City Council voted unanimously to ban motor scooters from city streets¹². A final ordinance would result in motorized skateboards being legal only on private property with written permission of the property owner. In Wisconsin, scooters are legal to purchase, but illegal to use¹³. The State does not register motorized scooters for use on public roads because they do not comply with federal safety rules. The scooters are also restricted from use on sidewalks in many communities.

Arizona State law classifies motorized skateboards (Go-Peds) as "motor vehicles". As such, these vehicles are allowed on public roads and must obey all traffic laws and local ordinances that apply to motor vehicles. Motorized skateboards are not required to be registered or have a license. Although the operator of a motorized skateboard is not required to have a driver's license, State regulations suggests that operator's study the Driver's License Guide from the Motor Vehicle Department to be aware of traffic laws. Parents are ultimately responsible for the safety and actions of children operating motorized skateboards. Violations of the laws and ordinances can result in a citation being issued and fines imposed For minors found to be in violation, both parents and the minor are jointly and severally liable for payment.

Local ordinances for Mesa City, Arizona prohibits children under the age of fourteen from operating a motorized skateboard. Motorized skateboards are not to be operated on sidewalks or on any public roadway having a speed limit greater than 30 mph. These vehicles are to be operated during daylight and not before 7:00 AM or after 8:00 PM.

International Newspaper Review

A 13 year old boy in Plymouth (England) received six points on his license for riding his go-ped without a license and insurance¹⁴. His penalty was a 25 pound fine. The six points will remain on a DVLA-created "driving record" for the boy for the next three years. According to the Plymouth Road Safety Officer, "Go-peds are actually classed as mopeds, which means that the riders on public highways have to be 16, properly licensed, vehicles insured and registered, and if they are over three years olds, they have to have a MoT.(Ministry of Transport) inspection.

Chapter IV

SAFETY STATISTICS

Overview

One of the objectives of this research is to explore the relationship between motorized scooters and motor vehicle or pedestrian crashes. Motor vehicle crash data are available for the State in New Jersey in two databases including the National Highway Traffic Safety Administration's (NHTSA's) Fatality Analysis Reporting System (FARS) database and the New Jersey Department of Transportation (NJDOT) accident database. The FARS database contains data on all motor vehicle crashes in the United States that occur on a public roadway and involve a fatality in the crash. The database is searchable, allowing queries to be performed to obtain specific types of fatal crashes by State or for all States. NJDOT's accident database includes all accidents including fatal, injury or property damage for all counties within the State. These databases are limited in their ability to identify the impact of motorized scooters on roadway safety.

FARS Database

In the FARS database, motorcycles are categorized as motorcycle, moped (motorized bicycle), three-wheel motorcycle or moped (not all-terrain vehicle), off-road motorcycle (2-wheel), other motor cycle type (minibikes, motor scooters), and an unknown motored cycle type. Although no formal definitions of these vehicles are provided, "motorscooters" appear to be the most similar vehicle type to the motorized scooters/motorized skateboards under study.

Using the FARS database an analysis of fatal crashes in New Jersey was performed for motor-driven cycles. The number of fatal crashes by motor-driven cycle is shown in Table 1. As the table shows, from 2000 to 2002 there were no crashes involving "Other motor cycle type (minibikes, motor scooters)" in the State of New Jersey. Across the U.S., in 2000 there were 29 fatal crashes involving "Other motor cycle type". These fatalities increased to 36 in 2002 showing an increasing trend in these types of crashes.

NJDOT Crash Database

Motorcycles and mopeds are the only two motor-driven cycles included as vehicle types in the NJDOT accident database. Motorized scooters are not explicitly categorized as one of these vehicle types. For this reason, the NJDOT accident database cannot be used to identify safety statistics for motorized scooters. .

Table 1. Fatal Crashes Involving Motor-Driven Cycles

Vehicle Type		US		NJ			
	2000	2001	2002	2000	2001	2002	
Motorcycle	2738	3026	3077	52	71	41	
Moped (motorized bicycle)	28	36	34	0	0	0	
Three-wheel Motorcycle or Moped - not All-	2	6	5	0	0	0	
Terrain Vehicle							
Off-road Motorcycle (2-wheel)	47	47	42	2	0	0	
Other motored cycle type(minibikes,	29	23	36	0	0	0	
Motorscooters)							
Unknown motored cycle type	7	7	7	0	0	0	
ATV (All-Terrain Vehicle; includes	206	220	245	4	4	3	
dune/swamp buggy – 3 or 4 wheels)							
Total	3,057	3,365	3446	58	75	44	

Source: NHTSA, FARS Database

Emergency Room Data

Another approach that can be taken to better understand crashes involving motorized scooters is through the use of the National Electronic Injury Surveillance System (NEISS) data operated by the U.S. Consumer Product Safety Commission (CPSC). NEISS data are sample data gathered from the emergency departments of 100 hospitals and used to identify injuries associated with specific consumer products. Web access to NEISS allows the following estimates to be retrieved on-line: date, product, sex, age, diagnosis, disposition, locale, and body part. Using product code 5042, which describes "Motorized Vehicles, not elsewhere classified - scooters(skateboards) powered", a query was performed to gather injury data for motorized scooters for 2002. The query identified 137 cases where a motorized scooter was involved in an injury. For these cases, the age ranged from 6 to 94, with the average age of 37 years. Figure 1 shows the distribution of cases by age. The figure demonstrates that although a large percentage of injuries are related to younger users, over half of the cases are for motorized scooter users over the age of 30. The data suggests that motor scooters used for mobility assistance, rather than as a recreational vehicle, is included in the product code used.

Based on the narrative provided for each injury, of the 137 cases, 19 injuries involved a motorized scooter being operated in a street. Of these 19 cases, 7 involved the person on the motorized scooter being hit by a "car". Hitting the curb of the street and running into parked cars were also additional crash types that occurred. The impact of motorized scooters on pedestrians seems to be negligible as in none of the 137 cases was a pedestrian injured by a motorized scooters.

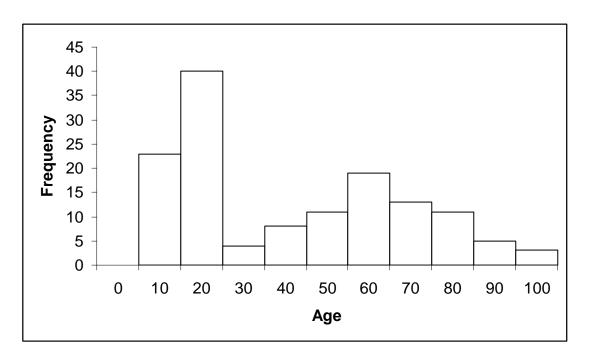


Figure 1. Frequency of Injury Cases for Motorized Scooters by Age

Bicycle Crashes

Available databases cannot be used to determine relationships between motorized scooters and motor vehicle or pedestrian crashes. Although motorized scooters and motorized skateboards have different characteristics than that of bicycles, the lower speeds, recreational use and visibility of motorized scooters and bicycles are similar. For this reason, a review of crash data for bicycles in New Jersey may offer some guidance in the characteristics of crashes associated with motorized scooters and skateboards. It should be noted that bicycles are allowed on public roadways and do not travel as fast as motorized scooters/skateboards. As a result, the data presented on bicycle crash data may underestimate the severity and number of projected crashes with motorized scooters/skateboards.

Crash data from 1997 to 2001 were collected from the National Highway Traffic Safety Administration's (NHTSA's) Fatality Analysis Reporting System (FARS) database. Table 2 shows the number of fatal bicycle crashes for 1997 to 2001 for New Jersey. On average, there were 21 fatal crashes per year involving bicycles within the time period analyzed. The majority of fatal bicycle crashes occur on urban roadways. Table 3 shows the functional classification of roadway on which fatal pedestrian and bicycle crashes occurred. Almost 90 percent of these crashes occurred on roadways with an urban

Table 2. Fatal Bicyclist Crashes in NJ for 1997 – 2001

Bicyclists
23
18
25
14
26

Table 3. Percent of Fatal Bicycle Crashes by Roadway Functional Classification for 1997 - 2001

Roadway Functional Classification	Bicycles
Rural Principal Arterial-Interstate	0.0%
Rural Principal Arterial-Other	1.7%
Rural Minor Arterial	1.7%
Rural Major Collector	5.2%
Rural Minor Collector	0.0%
Rural Local Road or Street	2.6%
Urban Principal Arterial-Interstate	3.5%
Urban Principal Arterial-Other Freeways	0.9%
Urban Other Principal Arterial	35.7%
Urban Minor Arterial	20.9%
Urban Collector	7.0%
Urban Local Road or Street	20.9%
Unknown Urban	0.0%

Table 4. Percent of Fatal Bicycle Crashes by Speed Limit for 1997 - 2001

Speed Limit (mph)	Bicycles
25	31.9%
30	2.7%
35	14.2%
40	9.7%
45	12.4%
50	23.9%
55	5.3%
65	0.0%

classification with the largest percentage occurring on "Urban Other Principal Arterial" which represents 35.7 percent of these crashes. Urban minor arterials are the second highest locations for fatal bicycle crashes. The majority of fatal bicycle crashes occurred on dry, level roadways with two lanes. Eighty-two percent of fatal bicycle crashes occurred on roadways with two travel lanes.

Fatal bicycle crashes occurred on roadways with a variety of speed limits. As shown in Table 4, the highest percent of these crashes occurred on roadways with a speed limit of 25 mph. The next highest percent of fatal bicycle crashes occurred on roadways with a speed limit of 50 mph. Twenty-four percent of fatal bicycle crashes occurred on these roadways.

Injury Crashes

A subset of bicycle crash data from 1997 to 2000 were obtained from the New Jersey Department of Transportation (NJDOT) crash database. The crash data including 930 urban and 116 rural crashes occurring on roadways from all counties within the state and covering all roadway functional classifications. Table 5 shows characteristics of bicycle crashes in New Jersey. The severity levels for the majority of the crashes are moderate injury and complaint of pain type crashes.

Twenty-five and 35 mph roadways had the highest percent of bicycle crashes with 34 and 33.4 percent of crashes, respectively. Over 75 percent of crashes occurred on urban principal and urban minor arterial roadways. Like fatal bicycle crashes, the majority of injury crashes occur on straight, level and dry roadways and occur during daylight conditions and clear weather conditions.

Table 5. NJDOT Bicycle Injury Crashes for 1997 - 2000

Variable	Description	Percent (%)
Injury Severity	Killed	0.9
,,	Incapacitated	5.4
	Moderate Injury	34.0
	Complaint of Pain	44.3
	Property Damage Only	15.4
Speed Limit	15	0.0
(mph)	25	33.4
(1 /	30	13.0
	35	34.0
	40	8.7
	45	3.9
	50	4.2
	55	2.7
Road Category	Urban Principal Arterial	57.8
	Urban Minor Arterial	19.6
	Urban Collector	3.3
	Urban Local	0.0
	Rural Principal Arterial	4.8
	Rural Minor Arterial	2.4
	Rural Major Collector	11.7
	Rural Minor Collector	0.3
Road System	State Highway/State Authority	40.7
	County Road/Municipal	59.3
Road Character	Straight and Level/	95.5
	Straight and Grade/	
	Straight and Hillcrest	
	Curve and Level/	4.5
	Curve and Grade/	
	Curve and Hillcrest	
Road Surface	Dry	88.0
Condition	Other (Wet, Snowy, Icy)	12.0
Weather	Clear	89.5
	Other (Rain, Snow, Fog)	10.5
Light Condition	Daylight	73.2
	Other (dawn or dusk/	26.7
	Dark with street light on/	
	Dark with street light off/	
	Dark without street light)	
Road Divided	None	87.3
Ву	Other (guide rail/ concrete bar/	12.7
	concrete isle/ grass median)	

Chapter V

MOTORIZED SCOOTER DEFINITION

Overview

The proposed legislation regulations motorized scooters ("Go-Peds"), motorized skateboards and other miniature motor vehicles. Figure 2 provides a diagram of three of these vehicle types. Table 6 also provides a summary of the specifications for example motorized scooters/skateboards and miniature motorcycles.

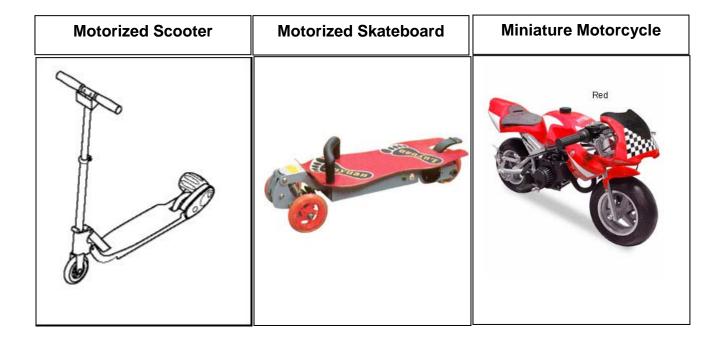


Figure 2. Vehicle Types

Motorized scooters, in general, are designed with and without a seat, weigh between 15 and 25 pounds, can be either gas or electric powered and can attain a maximum speed of between 15 and 35 mph or more, depending on the weight of the rider and if it is being ridden on a flat surface. The engine size, or piston displacement, is generally below 50 cubic centimeters (cc). Under 50 cc, in most States, motorized scooter riders are not required to obtain a license, making this device attractive to younger users.

Motorized skateboards are similar to motorized scooters, but do not include a handle or seat. These devices can get up to speeds of 30 mph and because of the operator must

Table 6. Low-Speed Motorized Vehicle Typical Specifications

	Motorized Skateboard	Moto	orized Scooter ("C	Miniature Motorcycle ("Pocket Bike")			
Product	Skaterx (Monster Motor Scooter)	XTR-S 450 Watt Electric Scooter	RazorBack G- Scooter	49cc Magnum Gas Scooter by ScooterX	47cc Pocket Bike GMAI-008	GMAI-016, X1 Super Pocket Bike - 49cc	
Motor Type:	Gas/ 43 cc high compression single-cyclinder two-stroke	Electric DC Earth Magnet/ 450 Watts	Gas	Gas	Gas/ Single Cyclinder Air- cooled 2 Strokes	Gas/ 49cc 2 Stroke Forced Air Cool	
Engine Size					47 cc	49 cc	
Max. Speed	30 mph	16 mph	25 mph	35 + mph	40 mph	25 - 30 mph	
Max. Range	14 miles	8.2 miles	-	-	-	45 mi	
Max. Load	300 lbs	270 lbs	300 lbs	350 lbs	250 lbs	300 lbs	
Fuel Capacity	1 liter	-	1 Liter	1 Liter	1 Liter	0.5 Gallons	
Starting System	Pull Start	-	Pull Start	Pull Start	Manual Hand pulled	Both Electric and Manual Start	
Braking System	Hand brake	Hand-activated disc/caliper brake	Rear drum brake	Front and read disc brakes	Front disc brake/ Rear drum brake	Front and Rear Disc	
Drive System:	Chain Drive	Chain	Chain drive	Chain drive	Chain drive	-	
Cooling System	-	-	Air Cooled	Air Cooled	-	-	
Fuel: Oil Ratio	25:1	-	25:1	25:1	50:1	25:1	
Throttle Type	-	-	Motorycle-style twist throttle	Motorycle-style twist throttle	-	-	
Ground Clearance	-	-	5.5"	5.5" -		-	
Net Weight	-	52 lbs - 41.5 ll		41.5 lbs	-		
Tire Size:	9 ' x 3.5" pneumatic	10" Kenda 4- ply slick pneumatic	8.5" x 2" pneumatic	9" x 3.5" pneumatic	10" tubeless	-	
Frame:	Steel and fiberglass	High-tensile steel	-	-	-	Steel & Plastic Injected	
Dimensions	37 " L x 11" W	41"H x 16" W x 42" L	-	-	22.5" H x 14" W x 40" H	33.5"(H)x22.8"(W) x50.8"(L)	

balance themselves without the use of a handlebar as found on a motorized scooter, these devices are inherently more dangerous than motorized scooters.

Miniature motorcycles have similar engine sizes to motorized scooters. Maximum speeds that can be reached in these devices fall between 25 and 40 mph. The biggest difference between motorized scooters and miniature motorcycles are the dimensions. While operators of motorized scooters generally stand on these devices and therefore provide the operator with greater visibility of the roadway and a greater likelihood of being seen by other road users, miniature motorcycle operators are much lower to the ground. The height of a miniature motorcycle can be as low as 22 to 33 inches, compared to the height of a motorized scooter at 41 inches.

Existing and Proposed Motor Vehicle Definitions

In the existing New Jersey legislation, motorized bicycles ("mopeds"), motorcycles and motorized wheelchairs are defined as follows:

"Motorized bicycle" means a pedal bicycle having a helper motor characterized in that either the maximum piston displacement is less than 50 cc. or said motor is rated at no more than 1.5 brake horsepower and said bicycle is capable of a maximum speed of no more than 25 miles per hour on a flat surface (N.J.S. 39:1-1).

"Motorcycle" includes motorcycles, motor bikes, bicycles with motor attached and all motor-operated vehicles of the bicycle or tricycle type, except motorized bicycles as defined in this section, whether the motive power be a part thereof or attached thereto and having a saddle or seat with driver sitting astride or upon it or a platform on which the driver (N.J.S. 39:1-1).

"Motorized wheelchair" means any motor-driven wheelchair, including a demonstrator, and all accompanying power accessories utilized to operate the wheelchair, that a consumer purchases or accepts transfer of in this State for the purpose of increasing independent mobility, in the activities of daily living, of an individual who has limited or no ambulation abilities, and includes motorized power scooters designed primarily for indoor use and retrofit power units designed to motorize power wheelchairs (N.J.S. 56:12-75).

Senate Bill No. 1510 defines motorized bicycles, motorized scooters, motorized skateboards, motorcycles and motorized wheelchairs as follows:

"Motorized bicycle" means a pedal bicycle having a helper motor characterized in that either the maximum piston displacement is less than 50 cc. or said motor is rated at no more than 1.5 brake horsepower or is powered by an electric drive motor and said bicycle is capable of a maximum speed of no more than 25 miles per hour on a flat surface.

"Motorized scooter" means a miniature motor vehicle and includes, but is not limited to, pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer. This term shall not include: electric personal assistive mobility devices, motorized bicycles or low-speed vehicles; or motorized wheelchairs, mobility scooters or similar mobility assisting devices used by persons with physical disabilities, or persons whose ambulatory mobility has been impaired by age or illness.

"Motorized skateboard" means a skateboard that is propelled otherwise than by muscular power.

"Motorcycle" includes motorcycles, motor bikes, bicycles with motor attached and all motor-operated vehicles of the bicycle or tricycle type, except motorized bicycles as defined in this section, whether the motive power be a part thereof or attached thereto and having a saddle or seat with driver sitting astride or upon it or a platform on which the driver stands.

"Motorized wheelchair" means any motor-driven wheelchair utilized to increase the independent mobility, in the activities of daily living, of an individual who has limited or no ambulation abilities, and includes mobility scooters manufactured specifically for such purposes and designed primarily for indoor use.

Table 7 summarizes the features of the existing and proposed legislation. Under existing legislation, mopeds and motorcycles have similar regulations with a few exceptions. Operators of both vehicles must have the vehicle inspected, a title must be issued and liability insurance is needed. A motorcycle operator must be at least 17 years old with a valid motorcycle license. To operate a moped, the operator must be at least 15 years old with a moped license. Both mopeds and motorcycles are allowed on public roadways, however, mopeds are not allowed on divided highways, interstates, tollways, roadways with speed limits greater than 50 mph. Neither vehicle is allowed on sidewalks.

Motorized scooters and motorized skateboards are regulated identically in the proposed legislation. Although a title or inspection is not proposed for motorized scooters/skateboards, the proposed legislation calls for the need for liability insurance. Operators of these vehicles must be at least 12 years old and no license is required. Motorized scooters and motorized skateboards are not allowed on public roadways or sidewalks. Miniature motor vehicles, include miniature motorcycles ("pocket bikes") are included in the definition of motorized scooters in the proposed legislation. These

Table 7. Existing and Proposed New Jersey Motor Vehicle Laws

			ng Legislation			Proposed Legislation
	Bicycle	Motorized Bicycle ("Moped")	Motorcycle	EPAMD	Motorized Wheelchair	Motorized Scooter
Vehicle Inspection	No	No	Yes	No		No
Title and Registration	No	Yes	Yes	No		No
Veh. Inspection	No	No	Yes	No		No
Insurance Needed	No	Yes/Liability	Yes/Liability	No	on	Yes/Liability
License ⁽¹⁾	No License	Moped License	Motorcycle License	No License	No Existing Legislation	No License
Min. Age	None	15	17	16	ĵ _e -	12
Helmet	Required	Required	Required	Required	g L	Required
Violation for No Helmet	Warning for Initial violators ⁽¹⁾ .	None	None	None	cistin	None
Violations for other Offenses	None	< \$200	> \$50 and < \$100	Warning for the first offense ⁽²⁾ .	No E)	>100 and < \$250 for first offense and seizure of scooter (5)
Allowed on public roadways	Yes	Yes ⁽³⁾	Yes	Yes		No
Allowed on Sidewalks	No	No	No	Yes		No

For minors, the parent may be fined a max. \$25 for the 1st offense and \$100 for subsequent offense(s), if lack of parental supervision contributed to the offense.

⁽²⁾ Fined \$10 for second offense. Device impounded for subsequent violations for not more than 30 days.

Not allowed on divided highways, interstates, tollways, roadways with speed limits > 50 mph.

Not to exceed \$200.00 or imprisonment for a term not exceeding 15 days or both.

For the second offense, a fine of not less than \$200 nor more than \$500, and seizure of the motorized scooter. The court shall order the violator to perform community service for a period of not greater than 25 hours. For the third or subsequent offense, a fine of not less than \$500 nor more than \$750, seizure and forfeiture of the motorized scooter, and the court shall order the violator to perform community service for a period of not greater than 50 hours.

vehicles may differ from motorized scooters in that they can achieve higher speeds and because of their lower visibility have a greater safety concern

State Review of Motorized Scooter Definitions

The definition of a motorized scooter varies from State to State. A review of State Statutes, administrative codes and driver manuals, identified the definitions under which motorized scooters are classified. In total, 29 States have existing legislation or proposed legislation under which motorized scooters are classified. In 15 States a definition of a motorized scooter is provided. These States include Arizona, California, Colorado, Delaware, Florida, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Missouri, New York, Oregon, Texas and Washington. In fourteen States, motorized scooters are not specifically defined, but are classified using the general terminology "motor-driven cycles". In the remaining States, motorized scooters are classified under a variety of vehicle types including motorcycle, motorized foot scooter, motor assisted scooter, scooter, and motorized skateboard.

Features included in the definition of a motorized scooter include, but are not limited to presence of floor pad, brake horsepower, type of transmission, piston displacement, weight, power source, number of wheels, wheel size, maximum speed, presence of a seat or saddle, the presence of a handle bar and whether the device is gas or electric. Table 8 summarizes these features and states the vehicle type used for classifying motorized scooters. Appendix II also provides the definitions of motorized scooters and motorized skateboard used by various States. The following provides a discussion of some of the key features included in definitions of motorized scooters.

Brake Horsepower

Two States include brake horsepower in the definition of a motorized scooter. Colorado uses a maximum brake horsepower of 6 and Maryland 2.7 hp. The existing New Jersey legislation defines motorized bicycles as either having a maximum piston displacement of less than 50 cc or a brake power of no more than 1.5 brake horsepower. The proposed definition of a motorized scooter does not include a maximum piston displacement or a maximum brake horsepower.

Piston Displacement

The engine displacement describes the volume of combustible air/fuel mixture ingested during one cycle of all the cylinders of an engine. For this reason, the engine displacement describes the engine power, with a larger displacement engine more powerful than a smaller one. Four States use a maximum piston displacement in the definition of motorized scooter. These States include Illinois, Maine, Maryland and Texas. The piston displacements used include 25 cc for Illinois and Maine, 50 cc for Maryland and 40 cc for Texas. The proposed New Jersey definition does not include a

Table 8. Existing Definitions of Motorized Vehicles

State	Vehicle Type ⁽¹⁾	Floor Pad (Y/N)	Horse power (hp)	Trans mission	Engine Displace- ment (cc)	Weight (lbs)	Self (S) Human(H)	Number of Wheels	Wheel Size (inch)	Max Speed (mph)	Seat (Y/N)	Saddle (Y/N)	Handle Bar (Y/N)	Gas (G) Elec (E) Motor
Alabama	MDC		≤5		<150	200								
Alaska	MDC				<50									
Arizona	MDC		≤5											
California	MZS						S/H				Yes	Yes	Yes	G or E
Connecticut	Bicycle		<2	Auto	<50		S/H	2		<30				
Delaware	Minibike				<45				≤10		Yes			
Florida	MZS							≤3		≤30	No	No		
Georgia	MDC							≤3				Yes		
Idaho	MC				<150			≤3			Yes	Yes		
Indiana	MS	Yes						2			Yes	No		G or E
Iowa	MC							<3			Yes	Yes		
Kansas	MDC		≤5											
Maine	Scooter	Yes					S/H	2					Yes	
Maryland	MS		≤2.7	Auto	<50		S	2	≥10		Yes			
Massachusetts	MZS	Yes					S/H	2			Yes	Yes	Yes	G or E
Missouri	MS	Yes						2		<25	Yes	Yes	Yes	G or E
Montana	MDC		≤ 5											
New Hampshire	MDC		≤ 5											_
New York	MZS						S/H	2			Yes	Yes	Yes	G or E
Oregon	MAS						S/H	2		<24	Yes			G or E
Pennsylvania	MDC		≤ 5											_
	MP		≤1.5	Auto	<50		S/H			<25				
South Carolina	MDC		≤5		-							-		
Tennessee	MDC		≤5		<125									

Table 8. Existing Definitions of Motorized Vehicles

State	Vehicle Type ⁽¹⁾	Floor Pad (Y/N)	Horse power i (hp)	Trans mission	Engine Displace- ment (cc)	Weight (lbs)	Self (S) Human(H)	Number of Wheels	Wheel Size (inch)	Max Speed (mph)	Seat (Y/N)	Saddle (Y/N)	Handle Bar (Y/N)	Gas (G) Elec (E) Motor
Texas	MAS	Yes			≤40		S/H	≥2			Yes	Yes		G or E
Utah	MDC		≤5		<150									
Washington	MFS	Yes					S/H	≤2	≤10		Yes	Yes	Yes	G or E
	MDC		≤ 5											
West Virginia	Moped	Yes	≤2		<50			2~3		≤30				
· ·	MDC				<250			≤3			Yes			
Wisconsin	MDC		≤5		<150									
Wyoming	MC							≤3			Yes	Yes		

⁽¹⁾ MDC: Motor-Driven Cycle, MZS: Motorized Scooter, MS: Motor Scooter, MC: Motorcycle, MAS: Motor Assisted Scooter, MFS: Motorized Foot Scooter, MP: Motor Pedalcycle

maximum piston displacement. Typical specifications of motorized scooters, as shown in Table 6, show that the maximum piston displacement of a motorized scooter can vary from 36 cc to 49 cc. Although the proposed definition does not include an engine displacement, it is recommended that a maximum piston displacement of less than 50 cc be used in the definition. This engine size would be comparable with other States' definitions, and similar to the engine displacements used by a motorized bicycle.

Number of Wheels

The number of wheels seems to be the one defining feature used by most of the States with a motorized scooter definition. States using the number of wheels in the definition either state that "Not more than 3", "At least 2" or "2-wheel" to define a motorized scooter. The specification of the number of wheels seems to be an attempt to help distinguish motorized scooters from other low-speed vehicles. Under existing legislation in New Jersey, all-terrain vehicles, bicycles and dirt bikes are the only vehicles that specify the number of wheels in their definitions as stated in the following:

- "......'all-terrain vehicle' means a motor vehicle, designed to travel over any terrain, of a type possessing between three and six rubber tires and powered by a gasoline engine not exceeding 600 cubic centimeters, but shall not include golf carts.....".[N.J.S. Title 39:3C-1]
- "....'bicycle' means a vehicle with two wheels propelled solely by human power and having pedals, handle bars and a saddle-like seat." [N.J.S. Title 39:10-4.1]
- "..'dirt bike' means a motor powered vehicle possessing two or more tires, designed to travel over any terrain and capable of travelling off of paved roads, whether or not such vehicle is subject to registration with the Division of Motor Vehicles." [N.J.S. Title 2A:42A-2]

The proposed definition of a motorized scooter does not include the number of wheels. As the number of wheels will assist in distinguishing motorized scooters from other low-speed vehicles, it is recommended that the number of wheels be included in the definition. Many motorized scooters have between two and three wheels. Specifying two wheels in the definition may unnecessarily limit some brands of motorized scooters from being street legal in New Jersey. To capture both two and three-wheeled motorized scooters, it is recommended that the proposed motorized scooter definition be modified to include that a motorized scooter has not more than three wheels.

Maximum Speed

Five States specify a maximum speed in the definition of the motorized scooter. Florida specifies that a motorized scooter not be "..capable of propelling the vehicle at a speed greater than 30 miles per hour on level ground. Illinois, Maine and Missouri specifies

that a motorized vehicle be capable of a maximum speed of no more than 25 miles per hour on a flat surface. Oregon uses a maximum speed of 24 mph. The proposed New Jersey motorized scooter definition does not include a maximum speed in the definition. It is recommended, however, that a maximum speed be used with wording similar to what is used by Maine which specifies that a motorized scooter "is capable of a maximum speed of not more than 25 miles per hour on a flat surface..". This specification should be included in the definition as exceeding this maximum speed can significantly impact the safety of users of motorized scooters and pedestrians that may come into contact with these devices.

Presence of Seat

In four States the presence of a seat is included in the definition of the motorized scooter. In Indiana, Maryland and Oregon, a seat is required on motorized scooters. In Florida, the presence of a seat is prohibited on motorized scooters. The proposed definition does not specify the presence of a seat or saddle. There is no research on the impact of a seat on safety for two- or three-wheeled vehicles. A seat does have the impact of reducing the ability of other road users to see a motorized scooter and it also reduces the visibility of the motorized scooter operator to see the roadway. In addition to these reasons, prohibiting the presence of a seat or saddle would also distinguish motorized scooters from motorized bicycles, which typically have a seat or saddle although this is not a requirement in the definition. There is some justification for prohibiting the seat in the definition of a motorized scooter, however, there is no substantial proof of the safety impact of a seat on motorized scooters.

Presence of Handlebars

After the number of wheels, the feature included the most in the definition of a motorized scooter is the presence of handlebars. Seven States including California, Delaware, Illinois, Massachusetts, Missouri, New York and Washington, include handlebars in the definition of either existing or proposed legislation on motorized scooters. As handlebars are a safety device on motorized scooters, the recommendation is that the proposed definition of motorized scooters be modified to include the presence of handlebars. This modification would also help in distinguishing between motorized scooters and motorized skateboards.

Proposed Definition

The following summarizes the discussion on key features of existing State motorized scooters:

- <u>Brake Horsepower</u>: Few States include brake power in the definition of a motorized scooter. A brake horsepower is not recommended for the proposed definition.
- <u>Piston Displacement:</u> The maximum piston displacement of 50 cc is recommended for use in the definition of a motorized scooter.
- <u>Number of Wheels:</u> Used by over half of the States defining motorized scooters. It is recommended that the proposed motorized scooter definition be modified to include that a motorized scooter has not more than three wheels.
- <u>Maximum Speed:</u> The maximum speed has direct safety impacts. The
 proposed definition does not include a maximum speed, however a maximum
 speed of 25 mph is recommended for inclusion in the definition of a motorized
 scooter.
- Presence of Seat: Although only one State prohibits the use of a seat, this
 prohibition is recommended as a seat will compromise the operator's ability to
 see and be seen, and the presence of a seat will allow motorized scooters to be
 distinguished from motorized bicycles and motorized skateboards. Therefore, it
 is recommended that the proposed definition be modified to include that no seat
 or saddle be present.
- <u>Presence of Handlebars</u>: A handlebar is a safety device on motorized scooters, and therefore it is recommended that the proposed definition be modified to include the presence of handlebars on motorized scooters.

Based on the above review, three options are recommended for use in the definition of motorized scooters. Option A modifies the current definition to include engine size, maximum speed, the number of wheels and the use of a handlebar. Option B is based on the Florida definition of a motorized scooter and Option B is based on the California definition of a motorized scooter. The following provides recommended definitions for motorized scooters:

Option A:

"Motorized scooter" means a scooter with not more than three wheels that is powered by a motor having a maximum piston displacement of less than 50 cc. or an electric drive motor, is capable of a maximum speed of no more than 25 miles per hour on a flat surface, and has a handlebar. Motorized scooters shall also include miniature motor vehicles and include, but is not limited to, pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer. This term shall not include:

electric personal assistive mobility devices, motorized bicycles or low-speed vehicles; or motorized wheelchairs, mobility scooters or similar mobility assisting devices used by persons with physical disabilities, or persons whose ambulatory mobility has been impaired by age or illness.

Option B:

"Motorized scooter" means a scooter with not more than three wheels that is powered by a motor having a maximum piston displacement of less than 50 cc. or an electric drive motor, is capable of a maximum speed of no more than 30 miles per hour on a flat surface, without a seat or a saddle. "Motorized scooters" shall include miniature motor vehicles and include, but is not limited to, pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer. This term shall not include: electric personal assistive mobility devices, motorized bicycles or low-speed vehicles; or motorized wheelchairs, mobility scooters or similar mobility assisting devices used by persons with physical disabilities, or persons whose ambulatory mobility has been impaired by age or illness.

Option C:

"Motorized scooter" means a two-wheeled device that has handlebars, is designed to be stood or sat upon by the operator, that is powered by a motor having a maximum piston displacement of less than 50 cc. or an electric drive motor, is capable of a maximum speed of no more than 25 miles per hour on a flat surface. "Motorized scooters" shall include miniature motor vehicles and include, but is not limited to, pocket bikes, super pocket bikes, scooters, mini-scooters, sport scooters, mini choppers, mini motorcycles, motorized skateboards and other vehicles with motors not manufactured in compliance with Federal Motor Vehicle Safety Standards and which have no permanent Federal Safety Certification stickers affixed to the vehicle by the original manufacturer. This term shall not include: electric personal assistive mobility devices, motorized bicycles or low-speed vehicles; or motorized wheelchairs, mobility scooters or similar mobility assisting devices used by persons with physical disabilities, or persons whose ambulatory mobility has been impaired by age or illness.

Table 9 summarizes the key features of these three optional definitions for motorized scooters. For comparison purposes, the Table also includes a summary of the key features in the definition of States with motor scooter definitions.

Table 9. Recommended Features in Motorized Scooter Definition

State	Vehicle Type	Brake Horsepower	Piston Displacement (cc)	Number of Wheels	Max Speed (mph)	Seat (Y/ N)	Handle Bar (Y/N)
Existing NJ Def.	Motorized Bicycle	1.5	< 50		< 25		` ,
Existing NJ Def.	Motorcycle					Yes	
Proposed NJ Def.	Motorized Scooter						
Option A	Motorized Scooter		< 50	Not more than 3	< 25		Yes
Option B	Motorized Scooter		< 50	Not more than 3	< 30	No	Yes
Option C	Motorized Scooter		< 50	2	< 25	Yes	Yes
Arizona	Motorized Skateboard			At least 2			
California	Motorized Scooter			2			Yes
Colorado	Motorscooter/	< 6		Not more than 3			
	motorbicycle						
Delaware	Motorized			At least 2			Yes
	Skateboard/Scooter						
Florida	Motorized Scooter			Not more than 3	< 30	No	
Illinois	Motorized Scooter		< 25	2	< 25		Yes
Indiana	Motor Scooter			2		Yes	
Kansas	Motorized Skateboard			At least 2			
Maine	Motorized Scooter		< 25	_	< 25		
Maryland	Motor Scooter	2.7	< 50	2		Yes	
Massachusetts	Motorized Scooter			2 2			Yes
Missouri	Motor Scooter			2	< 25		Yes
New York	Motorized Scooter						Yes
Oregon	Motor-Assisted Scooter		40	No more than 2	< 24	Yes	
Texas	Motor Assisted Scooter		< 40	At least 2			
Washington	Motorized Foot Scooter			No more than 2			Yes
Wisconsin	Motorized Skateboard			At least 2			

Amended Motorized Scooter Definition

The original definition of motorized scooters was amended on October 4, 2004, to incorporate miniature motorcycles and other low-speed vehicles. A review of State legislation on pocket bikes identified few States with existing legislation on the operation of these vehicles. A bill was introduced in the California legislature requiring retailers selling "pocket bikes" to inform purchasers that operation of these vehicles on highways are illegal because: (1) The motorized vehicle does not have the required safety equipment for operation on a highway; and (2) The Department of Motor Vehicles will not register the motorized vehicle. The bill is still under review.

A legal decision for the State of Connecticut was issued by James Fazzalaro in August, 2004 on how Connecticut motor vehicle registration laws relate to "pocket bikes" and motorized scooters. The decision stated that although Connecticut law requires any motor vehicle operating on a highway to be registered with the Department of Motor Vehicles (DMV), the law does not explicitly limit the use of public roads only to registered motor vehicles. By law, in Connecticut a motor vehicle cannot be registered unless it has a vehicle identification number and pocket bikes and motor scooters do not have vehicle identification numbers. For this reason, pocket bikes and motorized scooters fall into an uncertain area of law because they are not generally considered motor vehicles yet are not explicitly banned from public roads.

The proposed New Jersey definition of motorized scooters removed much of the details provided in the original definition proposed in the April 29, 2004 version of the Senate bill. Engine size and maximum speed were removed, in lieu of terminology used for motorized scooters such as "pocket bikes, scooters, mini-scooters, mini choppers, mini motorcycles, motorized skateboards..." . A requirement that motorized scooters and "pocket bikes" be manufactured in compliance with Federal Motor Vehicle Safety Standards was also added to the definition.

This approach for defining motorized scooter differs from all States reviewed. A review of definitions showed that most States include in the definition a description of key features such as brake horsepower, piston displacement, weight, number of wheels, maximum speed, presence of a seat or saddle, the presence of a handle bar and whether the device is gas or electric. In addition, the use of Federal Motor Vehicle Safety Standards to define motorized scooters and motorcycles, may imply that motorized scooters and motorcycles are motor vehicles, and as such, are entitled to all of the privileges and duties of motor vehicles. For these reasons, it is the recommendation that the amended definitions of motorized scooters and motorcycles be modified to include specific features and a separate definition be provided for miniature motorcycles.

Motorized Wheelchair Definition

Although the focus of this research is on motorized scooters, the proposed legislation includes revisions to definitions of other motorized vehicles including motorized bicycles, motorcycles and motorized wheelchairs. Two concerns were identified with the definition of motorized wheelchairs. A review showed that "motorized scooters" is the term commonly used for devices employed by people who need them because of ambulatory impairments. The review also showed that in both existing and proposed legislation, motorized wheelchairs are defined as ".....designed primarily for indoor use....". The following provides a discussion of these two findings, indicating that the proposed legislation should be careful when using the term "motorized scooter" as if it applied only to recreational vehicles.

In the United States, there are approximately 100,000 full-time power wheelchair users, 60,000 full-time motor scooter users, and several million part-time or temporary motorized mobility users ¹⁵. These part-time motorized mobility users are people who can manage to maneuver in the limited area of indoor spaces (sometimes leaning on furniture), but cannot manage in the longer distances of the out-of-doors without mobility devices. This population includes younger people with a great variety of disabilities. An increasing number are older people for whom these mobility devices mean regaining the independence of their younger days when they could walk out-of-doors for considerable distances.

Advertisements by companies manufacturing such mobility devices (common brands being Amigo, Jazzy, and Pride) often target older people—though this population is certainly not the exclusive market to which these companies appeal. The Scooter Store, a company that sells a variety of scooters, advertises its services with the statement: "Since 1991, more than 85,000 doctors have confidently relied on The Scooter Store to help power 160,000 of their patients regain their independence with a new scooter or power chair." The advertisement goes on to describe how the Store will "work directly with your doctor" and "handle the Medicare and insurance paper work from beginning to end." Furthermore, the scooter is described as "perfect for out-of-home use."

"Motorized mobility is separated into two types: power wheelchairs and scooters....Scooters, particularly the four-wheeled model, were considered preferable for outdoor use because of their ability to negotiate uneven surfaces and their relative portability. However, as manufacturers seek to improve their chair designs, the distinction of when and why to use a scooter or power wheelchair has become blurred" Now both power wheelchairs and motorized scooters are being used out of doors as well as indoors. "As both medicine and technology continue to advance, we will see new motorized mobility options" For example, there is a model stair- climber wheelchair and a rumored similar type of advanced scooter. In fact, now motorized scooters as mobility devices are advertised as being for "long distance, heavy duty travel," and motorized wheelchairs are advertised as "designed for outdoor and heavy terrain use" (http://www.1800wheelchair.com).

The fact that motorized wheelchairs and scooters have been meant for out-of-door use for approximately thirty years is evident from the federal legislation passed to ensure accessibility for people in such vehicles to transportation and all forms of public facilities. Such legislation includes the implementing regulations to Section 504 of the Rehabilitation Act of 1973 and the 1990 Americans with Disabilities Act. In addition, there are many state and local laws requiring such accessibility for people using devices for those with ambulatory impairments. Furthermore, the technology employed—lifts on buses, bridge plates for trains, ramps on sidewalks and buildings—confirms the fact that such out-of-door use of mobility devices are commonplace. For further discussion of these laws and this technology, Fleischer and Zames¹⁶.

Chapter VI

REVIEW OF EXISTING AND PROPOSED LEGISLATION

Overview

To identify potential conflicts of the proposed motorized scooter legislation with existing motor vehicle laws, a review of existing New Jersey motor vehicle law was performed. Motor vehicle laws were reviewed for motorized bicycles ("mopeds"), motorcycles, motorized wheelchairs and electric personal assistive mobility devices (EPAMD). A review of legislation from other States was also performed and compared with the proposed legislation in Senate Bill 1510. The comparison focused on six areas including:use on public roadways/sidewalks; municipal regulations; registration; age of operator; helmet use; and fine schedule.

Existing Motor Vehicle Laws

Table 7, provided in Chapter V, summarized the existing and proposed laws for motorized bicycles ("mopeds"), motorcycles, motorized wheelchairs, electric personal assistive mobility devices (EPAMD), motorized scooters/skateboards and miniature motorcycles. Electric personal assistive mobility devices are defined as a:

"...self-balancing non-tandem two wheeled device designed to transport one person which uses an electric propulsion system with average power of 750 watts (one horsepower), whose maximum speed on a paved level surface, when powered solely by such a propulsion system while operated by a person weighing 170 pounds is less than 20 miles per hour. The device shall not be considered a motorized wheelchair, motorized bicycle, motorcycle, motorized scooter, motorized skateboard, vehicle or motor vehicle" (N.J.S. 39:4-14.10)

The regulations for motorized scooter/skateboards are proposed legislation taken from Senate Bill 1510. The following provides a discussion of key elements of the motor vehicle law, also providing a review of other State legislation.

Operation on Public Roadway

The proposed motorized scooter legislation prohibits the operation of motorized scooters or motorized skateboard on any public street, highway or sidewalk regardless of the posted speed limit on the roadway. Existing regulations prohibit motorized bicycle from operation on interstate highways or on divided highways with posted speed limits in excess of 50 miles per hour (N.J.S.39:4-14.3a). Regulations can also be implemented which either prohibit the operation of motorized bicycles on public roadways with a speed limit in excess of 40 miles per hour.

EPAMDs can be operated on any public highways, sidewalks and bicycle paths of the State (N.J.S. 39:4-14.10b). Operators of EPAMDs are granted all of the rights and be subject to all of the duties applicable to bicyclists and are subject to the safety and equipment requirements applicable to bicycles. A municipality can, by ordinance, regulate the operation of these devices on roadways and public properties under municipal jurisdiction. The State or the governing body of any county or municipality may prohibit or regulate the operation of these devices on any public highway under its jurisdiction.

It is interesting to note that bicycles, roller skaters and skateboards operators are granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by chapter four of Title 39 of the Revised Statutes ((N.J.S. 39:4-10.10, N.J.S. 39:4-14.1). Current legislation also allows municipalities to regulate the operation of skateboards and roller skates on roadways and public properties under municipal jurisdiction (N.J.S.39:4-10.10a). The only motor vehicle allowed on public sidewalks are electric personal assistive mobility devices (EPAMD)(N.J.S. 39:4-14.10b). All other motor vehicles are prohibited from using sidewalks.

Delaware is the only State found to currently prohibit the use of motorized scooters/skateboard on all public roadways and sidewalks. Both Illinois and Kansas have pending bills that would also prohibit the use of motorized scooters/skateboards on public roadways and sidewalks. In a bill which died in both the Florida House and Senate, motorized scooters would have been prohibited from riding on sidewalks. Other restrictions used by States include prohibiting the use of motorized scooters on roadways of certain speeds or access control. Indiana restricts the use of a motor scooter on interstate highways or sidewalks, and at speeds greater than 25 miles per hour. In Maryland, motor scooters are prohibited on roadways where the speed limit is 50 mph or more, or on any expressway. In New York, pending bills prohibit the use of motorized scooters on public highways with a speed limit greater than 35 mph or on sidewalks. In Massachusetts and Minnesota, motorized scooters are given the same privileges as bicycles. Under this stipulation, motorized scooters are given the same right to use all public ways as bicycles. In Washington, motorized scooters are prohibited from fully controlled limited access highways and on sidewalks.

The highest safety to motorized scooter/skateboard operators is to prohibit the use of this device on public roadways and on sidewalks. Restricting the use of motorized scooters to roadways of a designated speed limit or access control would provide some level of safety.

Municipal Regulations

The proposed legislation provides that the governing body of any municipality may, by ordinance, permit the operation of motorized scooters upon designated municipal property, other than the streets, highways and sidewalks under municipal jurisdiction. The governing body of any county may, by resolution, permit the operator of motorized scooters upon designated county property, other than the streets, highways and sidewalks under county jurisdiction. Such an ordinance or resolution permitting the operation of motorized scooters upon designated municipal or county property shall include, but not be limited to, the following provisions: (Section 4)

- A designation of the municipal or county property upon which motorized scooters may be operated;
- b. The days and hours of the day during which motorized scooters may be operated upon that municipal or county property;

Several States allow municipal governments to regulate the use of motorized scooters/skateboards. California, Illinois, Missouri, Texas and Washington in Statutes and pending bills do not prevent a city or county from regulating the parking and operation of operation of motorized scooters on local streets or highways. Certain stipulations must be met such as the regulations are not in conflict with the Vehicle Code. Other stipulations include that the characteristics of the road where motorized scooters are allowed be appropriate for the use of these vehicles. Some of these characteristics include the volume, speed, pedestrian traffic, to determine whether motorized scooters may safely travel on the roadway or sidewalk.

The proposed legislation would allow municipalities and counties to regulate the use of motorized scooters in designated areas other than streets, highways and sidewalks. This approach to municipal regulation differs from all other States reviewed. Allowing municipalities to regulate the use of motorized scooters on streets of certain characteristics deemed appropriate for its use should be considered.

Registration

The proposed legislation requires each motorized scooter operated upon the designated municipal or county property be registered with the municipality or county and receive a certificate of registration from the municipality or county. As a condition for such registration, the owner or operator shall produce or display appropriate proof that a policy of liability insurance is in effect for that motorized scooter. The municipality or county may impose a reasonable fee to cover the costs of registration.

Under existing legislation, motorized bicycles and motorcycles require vehicle title and registration. Motorized bicycles and motorcycles are only allowed on public highways or on public lands if they are registered by the owner. The Director of the Division of Motor

Vehicles in the Department of Law and Public Safety is authorized to grant a registration to the owner of a motorized bicycle who is at least 15 years of age, provided that the application for registration has been properly made, the registration fee has been paid, and the motorized bicycle is of a type approved by the director (N.J.S. 39:4-14.3i). A motorized bicycle (moped) is exempt from inspection requirements. Motorized wheelchairs and electric personal assistance mobility devices (EPAMD) are classified as "Non-Conventional Vehicles" and as a result are exempt from titling and registering.

For motorcycles, the Motor Vehicle Commission website states the following (http://www.state.nj.us/mvc/cit_registration/v_reg_motorcycle.html):

"Motorcycles (more than 90cc) must be titled and registered. All three-wheeled vehicles (trikes) in New Jersey are classified as motorcycles and must meet motorcycle requirements and standards. Small motorcycles (less than 90cc without pedals) must be registered but are not titled."

Few States require that motorized scooters be registered. However, implicit in many motor vehicle legislation is that all vehicles allowed on public roadways be registered and therefore motorized scooters, if allowed on public roadways, should also be registered. This was the argument mage in a legal opinion issued by the Florida Attorney General Charlie Crist. In that decision, the case was made that legislature required all vehicles operating on State roadways to be registered. Legislature providing the taxes for registration, however, did not contain a classification for motorized scooters or go-peds, and therefore these vehicles could not be registered and for this reason could not be operated on State roadways. An Indiana House Bill proposed to require a title for off-road vehicles, motor scooters, or motorized bicycles. In a New York Bill, motorized scooters are required to be registered by owners before they can be operated or driven on public highways.

Registration Process

Currently, State legislation calls for no automobile or motorcycle to be driven unless the vehicle is registered (N.J.S. 39:3-4). The registration process includes:

- A written application containing the name, street address of the residence or the business of the owner, age of the owner, description of the character of the automobile or motorcycle, including the name of the maker and the vehicle identification number, or the manufacturer's number or the number assigned by the chief administrator if the vehicle does not have a vehicle identification number, the name of the insurer of the vehicle and the policy number
- Registration is provided to the owner of any motor vehicle, if over 17 years of age, application for the registration having been properly made and the fee paid, and the vehicle being of a type that complies with the requirements of this title.

Unregistered vehicles are not permitted to be parked on public roadways. Violators of these regulations are subject to a fine not to exceed \$100.

The equipment needed on a motorized bicycle for registration includes:

- A white front headlamp and red rear taillight
- A bell or horn
- Enough braking power to make the wheels skid on dry, clean, level pavement.

Motorcycles can be registered to the owner of any motor vehicle, if over 17 years of age, application for the registration having been properly made and the fee paid. The motorcycle must be equipped with the following:

- A displayed identification mark or marks containing the number of the registration certificate of the vehicle
- At least one brake adequate to control the movement of and to stop such vehicle
- Handle bar grips that are lower than the shoulder height of the operator when seated
- A muffler system designed especially for motorcycles and of a type approved by the director
- A permanent attached seat
- If designed to carry more than one person, then adequate footrests shall be provided for each passenger.

During a motorcycle inspection, the following items are checked:

- License plates with current decal, current registration, insurance I.D., and current motorcycle driver license
- Steering, suspension, and wheel alignment
- Handle bars or grip no more than 15 inches higher than the seat or saddle for operator
- Horn
- Red rear light and reflector
- Stop light
- Head light
- Rear view mirror
- Exhaust system
- Tires
- Seat, hand holds, and foot rests
- Adequate brakes (Note: all 1974 and later motorcycles require brakes on front and rear wheels.)

Requiring motorized scooters/skateboards to be registered will require municipalities and counties to either perform an inspection of each motorized scooter/skateboard requesting registration or maintain a list of approved motorized scooter/skateboard manufactures and model numbers with the desired safety features. The types of safety

features currently inspected for motorcycles and the equipment required on motorized bicycles are not found on motorized scooters/skateboards. As a result, requiring registration of these vehicles may not be possible, as safety features used on other vehicles currently registered cannot be found on motorized scooters/skateboards.

Liability Insurance

All vehicles registered in New Jersey require three types of mandatory insurance (Source: NJMVC http://www.state.nj.us/mvc/cit_insurance/v_insurance.html):

- Liability insurance pays others for damages that you cause if you are responsible for an accident. It does not cover medical expenses.
- Personal injury protection (PIP) pays medical expenses if you or other persons covered under your policy are injured in an automobile accident. Often called No Fault coverage, it pays your medical expenses if you were or were not at fault.
- Uninsured motorist coverage protects you if you are in an accident with someone who lacks the minimum level of insurance required by law.

For motorized bicycles ("mopeds"), the owner of the vehicle is responsible for maintaining liability insurance coverage (N.J.S. 39:4-14.3e). The coverage includes: bodily injury (up to \$15,000); death (up to \$30,000); and property damage (up to \$5,000).

Motorized bicycle regulations call for liability insurance coverage for owners and rental companies of motorized bicycles. The coverage provides insurance against loss resulting from liability imposed by law for bodily injury, death and property damage sustained by any person arising out of the ownership, operation or use of a motorized bicycle (N.J.S. 39:4-14.3e). The operator of an EPAMD is not required to furnish proof of having liability insurance for the device or other proof of financial responsibility (N.J.S. 39:4-14.10c).

Health benefits plans do not include automobile medical payment insurance or personal injury protection insurance (N.J.S.2A:53A-32.) as required for automobile insurance. Therefore, health plans cannot be used as a substitute for coverage of motorized scooters/skateboards.

License

In the proposed legislation for motorized scooters/skateboards, no license is required for operators of these vehicles. A license is required to operate a motorcycle and a motorized bicycle in the State of New Jersey. According to the New Jersey *Motorcycle Manual*, every resident who operates a motorcycle in this state must have a New Jersey motorcycle driver license or a motorcycle endorsement on their existing NJ basic or commercial license. The *Manual* also states that New Jersey requires a license for

driving any motorized vehicle with less than four wheels — motor bikes and scooters included. Although stated in the *Manual*, this does not correctly represent current legislation and may represent an earlier legislation. To obtain a motorcycle license, the applicant must be at least 17 years old and pass a vision, written and road test. An applicant may receive a road test waiver if they have successfully completed a Motorcycle Safety Education Riding and Street Skills course. To obtain a moped license, the applicant must be at least 15 years old and pass a vision, written and road test. The operator of an EPAMD is not required to obtain a driver's license

Age of Operator

The proposed legislation requires that no person under the age of 12 years be permitted to operate a motorized scooter or motorized skateboard upon the designated municipal property; (Section 4(e)). The minimum age for operators of motor vehicles has a wide range from 12, for motorized scooters/skateboards to a minimum age of 17 for motorcycles. Motorized bicycles have a minimum operator age of 15 and EPAMDs have a minimum age of 16. The minimum age of 12 for motorized scooter/skateboard operators is the lowest age for all of the motor vehicles reviewed. As previously stated, the *NJ Motorcycle Manual* states that New Jersey requires a license for driving any motorized vehicle with less than four wheels — motor bikes and scooters included. This does not represent current legislation and may represent earlier legislation.

California requires that a motorized scooter operator be over 16 years old. An existing bill would require motorized scooter riders to hold a class C driver's license or instruction permit. Delaware allows the operation of a motorized skateboard by a person under 12 if that person is under the direct supervision of a person who is at least 18 years of age or the person is on land owned by or under the control of the person's parent or legal guardian. Operators 12 years old may operate a motorized skateboard or scooter without adult supervision. In Massachusetts a House Bill proposes that a motorized scooter shall not be operated by someone under the age of sixteen. In Minnesota and Mississippi, the minimum age for a motorized scooter operator is 15 years old. In New York, the current bill proposes that the operator of a motorized scooter hold a New York State Class D or DJ Driver License or a valid Driver License from another State or from Canada.

The proposed bill has the lowest minimum age of 12 for use of a motorized scooter than all States reviewed. This minimum age may not provide the highest safety and a higher age, comparable to motorized bicycles, may be warranted.

Helmet Use

The proposed legislation requires that every operator of a motorized scooter or motorized skateboard wear a properly fitted and fastened helmet which meets the standards of the American National Standards Institute (ANSI Z90.4 bicycle helmet), the Snell Memorial Foundation's 1990 Standard for Protective Headgear for Use in

Bicycling, the American Society for Testing and Materials (ASTM) standard or such other standard, as appropriate; (Section 4(e)).

Existing legislation require the use of an approved helmet by operators for most motor vehicles with less than four wheels. Motorcycles require a securely fitted protective helmet of a size proper for that person and of a type approved by the director (N.J.S. 39:3-76.7). The helmet should also be equipped with either a neck or chin strap and be reflectorized on both sides.

State legislation require that motorized bicycle operators use a protective helmet of a type approved by the director (N.J.S.39:4-14.3q). EPAMD operators also require the use of a helmet (N.J.S. 39:4-14.10e). No specific requirements are placed on the type of helmet used. For motorized scooters/skateboards, the proposed legislation also requires that every operator of a motorized scooter/skateboard wear a properly fitted and fastened helmet. The proposed legislation goes a step further and specifies the approved helmets.

Almost all States reviewed require that motorized scooter operators wear an approved helmet. Some States specify helmet use by age. In Delaware and Mississippi, a person under 16 years of age cannot operate a motorized skateboard or scooter, unless that person is wearing a helmet. In Indiana, Minnesota, and in a proposed bill in Louisiana, a person less than 18 years of age must wear protective headgear. In Missouri, the age limit requiring helmet use is any person under seventeen. Massachusetts and New York do not specify an age limit for use of a protective helmet.

The proposed legislation requires all operators of motorized scooters/skateboards to use a helmet. As proposed, this legislation would provide the highest level of safety. Consideration may be given to requiring helmet use by age.

Fine Schedule for Violations

In the proposed legislation the penalty for violation of the motorized scooter/skateboard regulations includes the following penalties:

- For the first offense, to a fine of not less than \$100 nor more than \$200, and seizure of the motorized scooter. The seized scooter may only be retrieved from the police by the operator of the scooter or if the operator is under 18 years of age by the operator accompanied by the operator's parent or guardian.
- For the second offense, to a fine of not less than \$200 nor more than \$500, and seizure of the motorized scooter. The seized scooter may only be retrieved from the police by the operator of the scooter or if the operator is under 18 years of age by the operator accompanied by the operator's parent or guardian, provided that the court adjudicating the matter approves the return of the scooter. In

addition to the fine and seizure provided for in this subsection, the court shall order the violator to perform community service for a period of not greater than 25 hours.

• For the third or subsequent offense, to a fine of not less than \$500 nor more than \$750, and seizure and forfeiture of the motorized scooter. In addition to the fine, and seizure and forfeiture provided in this subsection, the court shall order the violator to perform community service for a period of not greater than 50 hours.

Violations vary for each of the motor vehicles studied. For EPAMDs violators of the regulations receive a warning for the first offense (N.J.S. 39:4-14.11(3)). For a second offense, the operator is fined \$10. For a subsequent offense, the device is impounded for not more than 30 days. A person who fails to comply with the requirements governing warning notices is fined not more than \$100 for each violation.

Motorcycles have fines for various offenses. In the case that regulations regarding registration of a motorcycle are violated, a fine not exceeding \$100 will be issued.

Delaware currently fines violations for improper operation of motorized scooters/skateboard by increasing the fine penalties for each subsequent offense. For the first offense, the fine ranges between \$25 and \$115. For a second or subsequent offense, committed within 24 months after commission of the first offense, the operator is fined between \$57.50 and \$230 and the motorized skateboard or scooter may be ordered to be forfeited by the court. Fines used in a House Bill in Massachusetts include not more than twenty-five dollars for the first offense, between \$25 and \$50 for a second offense, and between \$50 and \$100 for subsequent offenses. A Missouri Senate Bill classifies any violations of the motorized scooter laws as a class C misdemeanor.

The fining structure proposed in Senate Bill 1510 includes not only a monetary fee, but also dictates that the motorized scooter/skateboard is seized and for the second and subsequent offenses that community service be performed. Compared to other low-speed motor vehicle law violations within the State, the proposed fine structure appears to have stiffer penalties. Only in the case of an EPAMD is the vehicle impounded and this occurs after the second offense, with a warning given for the first offense. In no case is community service mandated. Although this approach may minimize violations, the fining structure does not appear to be comparable to similar violations for other low-speed vehicles.

Chapter VII

ADOPTING MOTORIZED BICYCLE REGULATIONS

Overview

One approach for regulating motorized scooters is to modify the existing motorized bicycle ("moped") regulations and incorporate motorized scooters into these existing regulations. N.J.S. 39:4-14.3 provides the regulations for motorized bicycles. These regulations are provided in Appendix III. The following summarize existing motorized bicycle regulations and provides a discussion on the advantages and disadvantages of modifying the regulations.

Operation on Public Highways

Existing regulations prohibit motorized bicycle from operation on many roadways with speed limits greater than 50 mph. The proposed motorized scooter legislation prohibits the operation of motorized scooters or motorized skateboard on any public street, highway or sidewalk regardless of the posted speed limit on the roadway. Incorporating motorized scooters in the existing motorized bicycle regulations significantly alters the proposed legislation and authorizes the operation of motorized scooters on roadways that may not be safe for operation.

What makes motorized scooters/skateboards safe or unsafe in the operation on public roadways is the speed differential between these vehicles and other vehicles on the roadway. The wide difference between the average operating speed of motorized scooters/skateboards and motorized bicycles will make it difficult to have one set of regulations that can accommodate both types of vehicles.

Violations and Suspensions

Violations under the existing regulations for motorized bicycles appear to be less severe than the violations stated in the proposed legislation. In the proposed motorized scooter legislation, violations incur a fine of less than \$100 and not more \$200 for the first offense, the motorized scooter/skateboard is seized and community service is performed for second and subsequent offenses.

Adopting the violation and suspension structure in the existing motorized bicycle regulations for motorized scooter/skateboard regulations would pose no serious disadvantages, and have the advantage of being equally fair for both types of vehicles.

Rules of the Road

The motorized bicycle regulations state that only the operator shall be carried on a motorized bicycle. This regulation is equally important for a motorized scooter and can be adopted for use by motorized scooters/skateboards.

Compulsory Liability Insurance Coverage

The motorized bicycle regulations call for liability insurance coverage for owners and rental companies of motorized bicycles. The coverage provides insurance against loss resulting from liability imposed by law for bodily injury, death and property damage sustained by any person arising out of the ownership, operation or use of a motorized bicycle.

Requiring liability insurance for motorized scooters/skateboards will require that these vehicles also have some form of inspection or there be approved list of manufacturers or model numbers. In addition, certain safety devices such as horns, brakes, head/taillights may also be required. If these features are not available through the manufacturer, this regulation may, in essence, prohibit the use of motorized scooters/skateboards on public roadways.

Accident Reports

Accidents involving motorized bicycles are to be reported to the Division of Motor Vehicles. This regulation is supported by including the vehicle type "moped" on the New Jersey Police Accident Report (NJTR-1). Adopting this regulation for motorized scooter/skateboards would require modifications in the accident report form to include a vehicle type for motorized scooter/skateboard. The lack of safety statistics associated with these devices is directly as a result of not including this vehicle type in the accident report. There are several advantages for adopting this regulation for motorized scooters/skateboards. Accident information associated with motorized scooters/skateboards would be beneficial for use in improving the safety of these devices. The disadvantage of adopting this regulation, however, is the cost associated with updating the vehicle types on the accident record forms. Also, It is not clear if there are sufficient of these accidents involving motorized scooters with motor vehicles to warrant their inclusion on the accident record.

Operation by Person Under Influence

Motorized bicycle regulations prohibit the operation of this vehicle under the influence of intoxicating liquor, or a narcotic, hallucinogenic or habit-producing drug. Penalties for violation of the regulation are the same as for operating a motor vehicle while under the influence of any such substance. This regulation has similar benefits for motorized

scooters/skateboards as exist for motorized bicycles. The advantage of adopting this regulation is that it give law enforcement clear guidance in handling motorized scooter/skateboard operators who are operating these vehicles under the influence of a drug or narcotic.

Registration

Motorized bicycles are only allowed on public highways or on public lands if they are registered by the owner. Adopting this regulation for motorized scooter/skateboards can provide the advantage of ensuring that these vehicles are properly equipped with safety devices. The disadvantage to this regulation is that currently many motorized scooters/skateboards are not equipped with the types of safety devices that would allow them to be registered. Adopting this regulation would, in fact, in essence, prohibit the use of motorized scooters/skateboards on public roadways.

Form for sale of motorized bicycles

At the time of original sale of a motorized bicycle in this State, a motorized bicycle dealer shall complete a form, of a kind to be approved by the director (39:4-14.3j).

License Plate

Motorized bicycles must display a license plate to be attached to registerd motorized bicycles. Each plate shall contain a clearly visible license number to be assigned by the director and shall bear the insignia "MOPED" in clear lettering. The license plate number shall be contained on the certificate of registration

License plates have the advantage of being able to identify a responsible party without the operator being present. This is especially helpful under conditions when vehicles are left unattended or the operator escapes law enforcement in the case that a violation occurs. Neither of these conditions are likely to occur for motorized scooters/skateboards. In addition, requiring motorized scooters/skateboards to display a license plate may not be feasible as there is not a good position on these vehicles for the license plate to be mounted.

Make and model numbers

Motorized bicycle regulations require manufacturers or distributors to certify the make and model numbers of motorized bicycles which they sell or distribute in this State. The director shall compile and maintain a list of approved motorized bicycles and shall only permit approved makes and models of motorized bicycles which are sold or distributed in this State. A registrant can establish with reasonable specificity that a motorized

bicycle not included on the list conforms to the definition of and requirements of motorized bicycles.

This regulation can be adopted for use in the motorized scooter regulations and provides advantages in terms of safety for motorized scooter operators.

<u>Helmet</u>

No person shall operate a motorized bicycle unless he wears a protective helmet of a type approved by the director. The proposed legislation also requires that every operator of a motorized scooter/skateboard wear a properly fitted and fastened helmet. The proposed legislation also goes a step further and specifies the approved helmets. As a result of this specific detail, the proposed legislation offers an advantage over the motorized bicycle regulations regarding helmet use. Adoption of the motorized bicycle regulations, however, will not compromise the safety of motorized scooter operators.

Dealer Licensed as Motor Vehicle Dealer

Motorized bicycle regulations require a motorized bicycle dealer to be licensed as a motor vehicle dealer. This regulation does not appear to be appropriate for motorized scooters/skateboards

Education Program for Safe Operation

Under the motorized bicycle regulations, a fund not to exceed \$50,000.00 per year is established for the purpose of providing an educational program for the safe operation of motorized bicycles. A portion of these funds is also for the purpose of providing an educational program for the safe operation of bicycles.

This regulation provides advantages for motorized scooters if the education program can be expanded to include motorized scooters/skateboard.

Review of Other State Laws

A review of existing State motorized scooter regulations or pending bills was performed to identify States that regulate motorized scooters similar to motorized bicycles. In two States regulations found where motorized scooters were included in existing regulations. A Senate bill introduced in Florida seeks to apply certain bicycle safety regulations to motorized scooters. The State of Florida regulates motorized scooters similarly to bicycles. A bill was introduced in the Ohio House of Representatives that permitted scooters meeting a specified definition be operated in the same manner and

in the same locations as motorized bicycles. All other motorized scooters would then be prohibited from being operated on the public streets. The bill prohibits any person from operating a motorized scooter upon a highway or any public or private property used by the public for purposes of vehicular travel or parking, unless all of the following conditions are met:

- The person is 14 or 15 years old and holds a valid probationary motorized scooter license, or the person is at least 16 years old and holds either a valid driver's or commercial driver's license or a valid motorized scooter license.
- The motorized scooter is equipped in accordance with the rules adopted by the Director of Public Safety and is in proper working order;
- The person, if less than 18 years of age, is wearing a protective helmet on the head with the chin strap properly fastened. The motorized scooter also must be equipped with a rear-view mirror.
- The person operates the motorized scooter when practicable within three feet of the right edge of the roadway, obeying all traffic rules applicable to vehicles.
- The bill prohibits any person who operates a motorized scooter from carrying another person on it.
- Violators will be guilty of a minor misdemeanor, which is punishable by a fine of not more than \$100.
- The bill sets the motorized scooter registration tax at \$10 and the motorized scooter operating license fee at \$2.50, the same as for moped registrations and moped licenses.

Summary

The following summarizes the advantages and disadvantages of adopting the motorized bicycle regulations for use by motorized scooters. The advantages for this approach include:

- <u>Violations:</u> The fee structure for violations would be equally fair for both types of vehicles. The motorized bicycle regulations include a structure for second violations which do not currently appear in the proposed motorized scooter regulations.
- Operator only on bicycle: Adopting this regulation provides a measure of safety to operators.

- Compulsory Liability Insurance Coverage: Provides a measure of safety to operators and safeguards pedestrians and motor vehicles in the event of collision.
- Accident Reports: Accident information associated with motorized scooters/skateboards would be beneficial for use in improving the safety of these devices.
- Operation by person under influence: Provides law enforcement with clear guidance in handling motorized scooter/skateboard operators under the influence of a drug or narcotic.
- Registration: Can ensure that motorized scooters/skateboards are properly equipped with safety devices.
- <u>Education Program for Safe Operation:</u> Will provide safety education for motorized scooter operators.

The disadvantages for this approach include:

- Operation on Public Highways: Differences in average speeds of motorized bicycles and motorized scooters would require their operation on roadways of differing speed limits
- <u>Violations:</u> Motorized bicycle regulations are slightly less severe than the proposed legislation.
- Compulsory Liability Insurance Coverage: Will also require vehicles be registered.
- <u>Accident Reports:</u> Accident forms will need to be updated to include motorized scooters/skateboards. It is not clear if there are sufficient of these accidents involving motorized scooters with motor vehicles to warrant their inclusion on the accident record.
- <u>Registration:</u> Currently many motorized scooters/skateboards are not equipped with the types of safety devices that would allow them to be registered. Adopting this regulation would, in fact, in essence, prohibit the use of motorized scooters/skateboards on public roadways.
- <u>License Plate:</u> Motorized scooters/skateboards are generally not left unattended and therefore a license plate for identification purposes may not be warranted. There is not a good position on these vehicles for the license plate to be mounted.

- <u>Helmet:</u> Does not provide as much details on approved helmets for use by motorized scooters.
- <u>Education Program for Safe Operation</u>: May take away existing resources from bicycles and motorized bicycles.

Appendix I: Kick-Off Meeting Research Proposal Suggestions

Timeline:

The most important change that should take place in the research project is expediting the timeline for all stages (it should be started earlier) of the project as well as shortening (and therefore, presumably intensifying) the project itself. As the legislation will almost certainly be introduced and quickly advanced in the September 2004 legislative session, it will not be useful for the results to be made available to the MVC after the bill has already been heard, discussed and voted on. Currently, the estimated completion time is four months after start (roughly December).

Rapid transfer of information:

The project can be shortened by overlapping each of the portions of the research plan. Rather than waiting to complete information as each entire program is fulfilled, the writing and reporting phase can be completed hand-in-hand with the research portions of the project and the information can then be transferred to MVC to be utilized during the legislative process.

Further, instead of creating one final document or product, it would be much more helpful to the Commission if the research group provided updates at to the information they had found periodically through the program. Again, it is important to emphasize that, though the product will not be as polished as the formative stages, it will be of little use to the Commission after the legislation is passed without our ability to influence the process.

Prioritizing

Important pieces of information and information and portions of the research project that respond to the proposed legislation should be prioritized. In this way, the MVC will be able to respond to legislators and to assist in the legislative process as it unfolds in September. Less important go-ped related issues can be resolved as time allows later in the project. With this in mind, it is most important for the Commission to have guidance from other states as to what they are doing, to get an idea of the possible definitions of the different apparatus, to critique the current proposed legislation (S-1510) and its preceding legislative efforts, to get a rough survey of the safety issues and ways that it can be addressed, and to discuss MVC specific issues (licensing, registration, insurance, titles, etc).

Results

A better-define, more specific result, such as a paper recommending a definition, as well as extensive information about safety issues, other issues and various legislative opinions (other than that already proposed in S-1510) in dealing with the go-peds proposal would be much more useful than a traditional research project with somewhat vague or ambiguous outcome. While this traditional approach would have been helpful in deciding what path to take with go-peds, impending legislation has changed the political landscape and thus the needs for the project. In other words, the research results should not only enable the development of regulations that ensure safety, but should also propose some of those regulations based upon the issues studied.

It would be useful to see how the proposed legislation in NJ compares to other states and to get an informal survey of problems that this legislation could cause as well as to have options to this legislation.

Specific Results:

The MVC will need more specific results and is looking for at least the following information:

- 7) Safety statistics (NJ data and all other states that have this available).
- 8) A recommended definition (that will conceivably include all the different kinds of go-peds/minibikes) as well as different options for definitions.
- 9) A legislative recommendation (review existing proposed legislation, existing law and court decisions and other states' legislation)
 - A critique of existing state legislation (and legal decisions), as well as proposed amendments to these state's legislations that will address problems.
 - b. Proposed alternate legislation to S-1510.
- 10) A review of existing motor vehicle law (especially, but not exclusively, moped/motorcycle/senior assistance vehicles) to see how they would be affected by any new legislation
 - a. A determination as to whether we could simply modify the moped law to include godeds?
 - b. An analysis of the advantages and disadvantages of modifying existing law and incorporating these "go-peds" into moped law.
- 11) A discussion of all other MV related questions including insurance, registration, licensing and other.
- a. Example: Are riders generally covered by their existing health insurance?12)A discussion of the penalty and violation process
 - a. Who would be ticketed for improper use (the user (child) or the parent (owner))?
 - b. What types of penalties would apply?

Motorized Scooter Definition State Alabama Motor-Driven Cycle. Every motorcycle, including every motor scooter, with a motor which produces not to exceed five brake horsepower nor to exceed 150 cubic centimeter engine displacement, and weighs less than 200 pounds fully equipped, and every bicycle with motor attached (32-1-1.1). Alaska Motor-Driven Cycle means a motorcycle, motor scooter, motorized bicycle, or similar conveyance with a motor attached and having an engine with 50 or less cubic centimeters of displacement (28.40.100). Arizona Motor-Driven Cycle means a motorcycle, including every motor scooter, with a motor that produces not more than five horsepower (28-101).California (a) A motorized scooter is any two-wheeled device that has handlebars, is designed to be stood or sat upon by the operator, and is powered by an electric motor that is capable of propelling the device with or without human propulsion. For purposes of this section, an electric personal assistive mobility device, as defined in Section 313, a motorcycle, as defined in Section 400, a motor-driven cycle, as defined in Section 405, a motorized bicycle or moped, as defined in Section 406, or a toy, as defined in Section 108550 of the Health and Safety Code, is not a motorized scooter (407.5.) (b) A device meeting the definition in subdivision (a) that is powered by a source other than electrical power is also a motorized scooter. Connecticut "Bicycle" includes all vehicles propelled by the person riding the same by foot or hand power or a helper motor; and "helper motor" means a motor having a capacity of less than fifty cubic centimeters piston displacement, rated not more than two brake horsepower. capable of a maximum speed of no more than thirty miles per hour and equipped with automatic transmission (Sec. 14-286). Delaware "Minibike" means any motor-driven cycle which has a wheel rim size less than 10 inches, or is less than 40 inches long from hub to hub, or has an engine of less than 45 cubic centimeter displacement, or has a seat less than 25 inches above the ground.

Motorized Scooter. Any vehicle not having a seat or saddle for the use of the rider, designed to travel on not more than three wheels,

Florida

<u>State</u>	Motorized Scooter Definition			
	and not capable of propelling the vehicle at a speed greater than 30 miles per hour on level ground (316.03).			
Georgia	Every motor vehicle having a saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, but excluding a tractor and moped, are defined as motorcycles. Georgia law places all types of motorcycles (including scooters, motorbikes and minibikes) into one classification. All are considered motor-driven cycles.			
Idaho	Motorcycle means every motor vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, but excluding a tractor. A motorcycle also is every motor scooter or motorized bicycle having an engine with less than one hundred fifty (150) cubic centimeters displacement or with five (5) brake horsepower or less (63-3622HH).			
Indiana	Motor scooter means a vehicle that has the following: (1) Motive power; (2) A seat, but not a saddle, for the driver; (3) Two wheels; and (4) A floor pad for the driver's feet; but does not include an off-road vehicle (IC 9-13-2-104, IC 9-13-2-104).			
lowa	Motorcycle means every motor vehicle having a saddle or seat for the use of the rider and designed to travel on not more than three wheels in contact with the ground including a motor scooter but excluding a tractor and a motorized bicycle.			
Kansas	Motor-driven cycle means every motorcycle, including every motor scooter, with a motor which produces not to exceed five brake horsepower, and every bicycle with motor attached, except a motorized bicycle or an electric-assisted bicycle (8-1439)			
Maine	A scooter means a device upon which a person may ride consisting of a footboard between 2 end wheels, controlled by an upright steering handle attached to the front wheel and that is propelled by human power or a motor. Scooter does not include an electric personal assistive mobility device (Sec. 11. 29-A MRSA §101).			
Maryland	"Motor Scooter" means a non-pedal vehicle that: (1) Has a seat for the operation; (2) has two wheels, of which one is 10 inches or more in diameter; (3) has a step-through chassis; (4) has a motor with a rating of 2.7 brake power or less or 23 if the motor is an internal			

State

Motorized Scooter Definition

combustion engine, with a capacity of 50 cubic centimeters piston displacement or less; and (5) is equipped with an automatic transmission.

"Motor scooter" does not include a vehicle that has been manufactured for off-road use, including a motorcycle and an all-terrain vehicle. (House Bill Chapter Number: 557)

Massachusetts

Motorized Scooter. Any two wheeled device that has handlebars, designed to be stood or sat upon by the operator, powered by an electric or "gas powered" motor that is capable of propelling the device with or without human propulsion. A "motorcycle" or "motorized bicycle" as defined in this section are not "motorized scooters." (HOUSE, No. 1544. SECTION 1. Chapter 90:1)

Missouri

A motor scooter is a device with two tandem wheels, one which has a brake, that has handlebars which is designed to be stood or sat upon by the operator and is powered by an electric motor or internal combustion engine that is capable of propelling the device with or without human propulsion at a speed no greater than twenty-five miles per hour on a level road (SB 1270)

Montana

Motor-Driven Cycle means every motorcycle, including every motor scooter, with a motor which produces not to exceed 5 horsepower. The term does not include a bicycle as defined in 61-1-123 (61-1-106).

New Hampshire

Motor-driven cycle shall mean any motorcycle or motor scooter with a motor which produces not to exceed 5 horse-power, and any bicycle with motor attached, but not including mopeds (259:65).

New York

Motorized Scooter. Any two-wheeled device that has handlebars, is designed to be stood or sat upon by the operator, and is powered by an electric motor or powered by a gas motor that is capable of propelling the device without human propulsion and is not primarily designed to be propelled by human propulsion. For the purpose of registration a motorized scooter shall be considered a limited use vehicle (Bill A01588).

Ohio

Motorcycle means every motor vehicle, other than a tractor, having a saddle for the use of the operator and designed to travel on not more than three wheels in contact with the ground, including, but not

State

Motorized Scooter Definition

limited to, motor vehicles known as motor-driven cycle, "motor scooter" or "motorcycle" without regard to weight or brake horsepower (4511.01 (C))

Oregon

Motor assisted scooter means a vehicle that:

- (1) Is designed to be operated on the ground on wheels;
- (2) Has a seat or foot platform for use of the rider;
- (3) Is designed to travel with not more than two wheels in contact with the ground;
- (4) Can be propelled by electric motor, gas motor or human propulsion; and
- (5) Is equipped with a motor that is incapable of propelling the vehicle at a speed of greater than 24 miles per hour on level ground.[801.348]

Pennsylvania

Motor-driven cycle. A motorcycle, including a motor scooter, with a motor which produces not to exceed five brake horsepower.

Motorized pedalcycle. A motor-driven cycle equipped with operable pedals, a motor rated not more than 1.5 brake horsepower, a cylinder capacity not exceeding 50 cubic centimeters, an automatic transmission, and a maximum design speed of no more than 25 miles per hour or an electric motor-driven cycle equipped with operable pedals and an automatic transmission powered by an electric battery or battery pack-powered electric motor with a maximum design speed of no more than 25 miles per hour.

South Carolina

Motor-Driven Cycle means every motorcycle, including every motor scooter, with a motor which produces not to exceed five horsepower (SC ST SEC 56-3-20).

Tennessee

Motor-driven cycle means every motorcycle, including every motor scooter, with a motor which produces not to exceed five (5) brake horsepower, or with a motor with a cylinder capacity not exceeding one hundred twenty-five cubic centimeters (125cc) (55-8-101).

Texas

Motor assisted scooter means a self-propelled device with: (A) at least two wheels in contact with the ground during operation; (B) a braking system capable of stopping the device under typical operating conditions; (C) a gas or electric motor not exceeding 40 cubic centimeters; (D) a deck designed to allow a person to stand or sit while operating the device; and (E) the ability to be propelled by human power alone (§ 551.301).

State

Motorized Scooter Definition

Utah

Motor-driven cycle means every motorcycle and motor scooter, personal motorized mobility device, moped, electric assisted bicycle, motor assisted scooter, and every motorized bicycle having an engine with less than 150 cubic centimeters displacement or having a motor which produces not more than five horsepower (41-6-1).

Washington

Motorized foot scooter means a device with no more than two teninch or smaller diameter wheels that has handlebars, is designed to be stood or sat upon by the operator, and is powered by an internal combustion engine or electric motor that is capable of propelling the device with or without human propulsion.

Motor-driven cycle means every motorcycle, including every motor scooter, with a motor that produces not to exceed five brake horsepower (developed by a prime mover, as measured by a brake applied to the driving shaft). A motor-driven cycle does not include a moped, a motorized foot scooter, or an electric personal assistive mobility device (Senate Bill 5770)

West Virginia

Moped: Motorcycle or motor driven-type cycle which is equipped with two or three wheels, footpedals to permit peddling and an independent power source providing a maximum of two horsepower. The maximum engine displacement is 50 cc and the maximum speed is 30 m.p.h.

Motorcycle: Motor vehicle having a seat for the use of the rider and designed to travel on not more than three wheels in contact with the ground, but excluding a tractor.

Motor Driven Cycle: Motorcycles, including every motor scooter with a motor that does not exceed 250 cubic centimeters, excluding mopeds.

Wisconsin

Motor-driven cycle means any motorcycle, including motor scooters and motorized bicycles having an engine with less than one hundred fifty (150) cubic centimeters displacement or with five brake horsepower or less but does not include motorized skateboards.

Motorized skateboard means a self-propelled device which has a motor or engine, a deck on which a person may ride and at least two (2) wheels in contact with the ground and which is not otherwise

State

Motorized Scooter Definition

defined in this act as a "motor vehicle", "motorcycle", "motor-driven cycle" or "pedestrian vehicle" (31-5-102).

Wyoming

Motorcycle. A motor vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground but which may have a sidecar to transport a single passenger. For the purpose of registration and titling, "motorcycle" includes motorized bicycles, scooters and recreational vehicles primarily designed for off-road use and designed to be ridden astride upon a seat or saddle and to travel on four wheels, but excludes mopeds and off-road three-wheel recreational vehicles.

Appendix III. Summary of Proposed and Existing Legislation by State

Proposed Bill Section 2(a), (b), (c)

- 2. a. No person shall operate a motorized scooter upon any public street, highway or sidewalk.
- b. Except as otherwise provided in section 4 of P.L.,
- c. (C.)(now pending before the Legislature as this bill), no person shall operate a motorized scooter upon any public property or lands.
- c. No person shall operate a motorized scooter on the property of another without the consent of the owner of that property or the person who has a contractual right to the use of that property.

Existing Legislation

Delaware Title 21: 4198N

- (a) Upon public highways, streets, sidewalks or rights-of-way; penalties for violation. --Motorized skateboards or scooters shall not be operated upon a public highway or street or sidewalk or right-of-way thereof located within this State except under the following conditions:
- (1) A motorized skateboard or scooter may be pushed across or along such public way provided such motorized skateboard or scooter is in neutral or that the power train is otherwise disengaged, and further provided that such use shall be in conformance with Chapter 41 of this title.
- (2) A motorized skateboard or scooter may be operated on a street or highway located within this State for a special event of limited duration, conducted according to a prearranged schedule only under permit from the governmental unit having jurisdiction.

Illinois Senate Bill 2104:

Except as otherwise provided in this Section, it is unlawful for any person to drive or operate any motorized scooter upon any street, highway, roadway, or sidewalk in this State.

Indiana State Code Sec. 12.5.:

A motor scooter may not be operated under any of the following circumstances:

- (1) On an interstate highway or a sidewalk.
- (2) At a speed greater than twenty-five (25) miles per hour.

Kansas House Bill 2709:

It shall be unlawful for any person to operate a motorized skateboard on any street, road or highway in this state.

Maryland State Code:

- § 21-1205.1. Bicycles, motor scooters, and EPAMDs prohibited on certain roadways and highways; speed limit.
- (a) In general.- Notwithstanding any other provision of this title, a person may not ride a bicycle or a motor scooter:
- (1) On any roadway where the posted maximum speed limit is more than 50 miles an hour: or
- (2) On any expressway, except on an adjacent bicycle path or way approved by the State Highway Administration, or on any other controlled access highway signed in accordance with § 21-313 of this title.

Massachusetts House Bill No. 1544:

Every person operating a motorized bicycle and/or motorized scooter upon a way shall have the right to use all public ways in the commonwealth except limited access or express state highways where signs specifically prohibiting bicycles and/or scooters have been posted, and shall be subject to traffic laws and regulations of the commonwealth and the regulations contained in the section, except that (1) the motorized bicycle and/or scooter operator may keep to the right when passing a motor vehicle which is moving in the travel lane of the way, and (2) the motorized bicycle and/or scooter shall signal by either hand his intention to stop or turn. Motorized bicycles and/or scooters may be operated on bicycle lanes adjacent to the various ways, but shall be excluded from off-street recreational bicycle paths.

Minnesota S.F. 2566:

Every person operating a motorized scooter shall have all rights and duties applicable to the operator of a bicycle, except in respect to those provisions relating expressly to motorized scooters and in respect to those provisions of law that by their nature cannot reasonably be applied to motorized scooters.

- Subd. 2. [SIDEWALK AND PASSENGER PROHIBITION.] No person shall operate a motorized scooter upon a sidewalk, except when necessary to enter or leave adjacent property. No person shall operate a motorized scooter that is carrying any person other than the operator.
- Subd. 6. [OPERATION REQUIREMENTS AND PROHIBITIONS.] (a) A person operating a motorized scooter on a roadway shall ride as close as practicable to the right-hand curb or edge of the roadway, except in the following situations: (1) when overtaking and passing another vehicle proceeding in the same direction; (2) when preparing for a left turn, in which case the operator shall stop and dismount at the right-hand curb or right edge of the roadway, and shall complete the turn by crossing the roadway on foot, subject to restrictions placed by law on

pedestrians; or (3) when reasonably necessary to avoid impediments or conditions that make it unsafe to continue along the right-hand curb or edge, including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or

narrow lanes. (b) A person may operate a motorized scooter on a bicycle path, bicycle lane, bicycle trail, or bikeway that is not reserved for the exclusive use of nonmotorized traffic, unless the local authority or governing body having jurisdiction over that path, lane, trail, or bikeway prohibits operation by law.

Missouri Senate Bill 1270:

307.241. Every person operating a motor scooter, upon a highway, roadway or alleyway shall ride as near to the right side of the highway, roadway or alleyway as practicable and shall exercise due care when passing a standing vehicle or one proceeding in the same direction.

New York Assembly Bill 6782:

A motorized scooter shall not be operated on a public highway with a speed limit in excess of thirty-five miles per hour.

S 1278. Restrictions. 1. No person shall operate a motorized scooter on any public highway: (a) with a speed limit in excess of thirty-five miles per hour, provided that the provisions of this paragraph shall not prohibit the crossing of a public highway with a speed limit in excess of thirty-five miles per hour where such highway intersects with a highway with a speed limit of thirty-five miles per hour or less; or (b)which, in the interest of public safety, a local authority or the department of transportation has prohibited motorized scooters. 2. No person shall operate a motorized scooter on or across a sidewalk, except that such vehicle may be driven in such manner as not to interfere with the safety and passage of pedestrians who shall have the right of way, and when to do so is reasonable and necessary to gain access to a public highway, private way or lands or buildings adjacent to such highway or way.

Texas Code § 551.302:

- (a) A neighborhood electric vehicle or motor assisted scooter may be operated only on a street or highway for which the posted speed limit is 35 miles per hour or less. The vehicle may cross a road or street at an intersection where the road or street has a posted speed limit of more than 35 miles per hour.
- (b) A person may operate a motor assisted scooter on a path set aside for the exclusive operation of bicycles or on a sidewalk. Except as otherwise provided by this section, a provision of this
- title applicable to the operation of a bicycle applies to the operation of a motor assisted scooter.
- (c) A county or municipality may prohibit the operation of a neighborhood electric vehicle or motor assisted scooter on any street or highway if the governing body of the county or municipality determines that the prohibition is necessary in the interest of safety.
- (d) The department may prohibit the operation of a neighborhood electric vehicle or motor assisted scooter on a highway if it determines that the prohibition is necessary in the interest of safety.
- (e) A provision of this title applicable to a motor vehicle does not apply to a motor assisted scooter.

Washington House Bill 3049:

(3) Operation of a moped, electric personal assistive mobility device, motorized foot scooter, or an electric-assisted bicycle on a fully controlled limited access highway is unlawful. Operation of a moped, motorized foot scooter, or an electric-assisted bicycle on a sidewalk is unlawful.

Proposed Bill Section (3)

- 3. A person violating the provisions of section 2 of this 15 act shall be subject:
- a. For the first offense, to a fine of not less than \$100 nor more than \$200, and seizure of the motorized scooter. The seized scooter may only be retrieved from the police by the operator of the scooter or if the operator is under 18 years of age by the operator accompanied by the operator's parent or guardian.
- b. For the second offense, to a fine of not less than \$200 nor more than \$500, and seizure of the motorized scooter. The seized scooter may only be retrieved from the police by the operator of the scooter or if the operator is under 18 years of age by the operator accompanied by the operator's parent or guardian, provided that the court adjudicating the matter approves the return of the scooter. In addition to the fine and seizure provided for in this subsection, the court shall order the violator to perform community service for a period of not greater than 25 hours.
- c. For the third or subsequent offense, to a fine of not less than \$500 nor more than \$750, and seizure and forfeiture of the motorized scooter. In addition to the fine, and seizure and forfeiture provided in this subsection, the court shall order the violator to perform community service for a period of not greater than 50 hours.

Existing Legislation

Delaware Title 21: 4198N

- (a) Upon public highways, streets, sidewalks or rights-of-way; penalties for violation. --Motorized skateboards or scooters shall not be operated upon a public highway or street or sidewalk or right-of-way thereof located within this State except under the following conditions:
- (1) A motorized skateboard or scooter may be pushed across or along such public way provided such motorized skateboard or scooter is in neutral or that the power train is otherwise disengaged, and further provided that such use shall be in conformance with Chapter 41 of this title.

- (2) A motorized skateboard or scooter may be operated on a street or highway located within this State for a special event of limited duration, conducted according to a prearranged schedule only under permit from the governmental unit having jurisdiction.
- (3) A person who violates this subsection shall be subject to the following penalties:
- a. For the first offense, a fine of not less than \$25 nor more than \$115.
- b. For a second or subsequent offense, committed within 24 months after commission of the first offense, the operator shall be fined not less than \$57.50 nor more than \$230 and the motorized skateboard or scooter may be ordered to be forfeited by the court.
- (b) Upon other property; penalty for violation. -- A person shall not operate a motorized skateboard or scooter upon any property in either public or private ownership without the express permission of the person in control of the property or knowingly in violation of any restrictions imposed on such use by the person in control of the property.
- (1) A person who violates this subsection shall be subject to the following penalties:
- a. For the first offense, a fine of not less than \$25 nor more than \$115.
- b. For a second or subsequent offense, committed within 24 months after commission of the first offense, the operator shall be fined not less than \$57.50 nor more than \$230 and the motorized skateboard or scooter may be ordered to be forfeited by the court.
- d. In addition, restitution shall be made for value of any damage to real or personal property that results from a violation of this subsection.

Massachusetts House Bill 1544:

A person convicted of violation of this section shall be punished by a fine of not more than twenty-five dollars for the first offense, not less that twenty-five nor more than fifty dollars for a second offense, and not less than fifty nor more than one hundred dollars for subsequent offenses committed.

Missouri Senate Bill 1270:

307.243. Any violation of the provisions of sections 307.225 to 307.243 shall be deemed a class C misdemeanor.

Proposed Bill Section (4)

4. (New section) The governing body of any municipality may, by ordinance, permit the operation of motorized scooters upon designated municipal property, other than the streets, highways and sidewalks under municipal jurisdiction. Such an ordinance

permitting the operation of motorized scooters upon designated municipal property shall include, but not be limited to, the following provisions:

Existing Legislation

California Assembly Bill 1878:

Existing law specifies that the statutes governing motorized scooters do not prevent a city or county, by ordinance, from regulating, among other things, the parking and operation of motorized scooters on pedestrian or bicycle facilities if that regulation is not in conflict with

the Vehicle Code. This bill would additionally specify that those statutes do not prevent a city or county from adopting an ordinance that regulates the operation of these scooters on local streets and highways if that regulation is not in conflict with the Vehicle Code.

Illinois Senate Bill 2104

A municipality, township, county, or other unit of local government may authorize, by ordinance or resolution, the operation of motorized scooters on roadways and sidewalks under their respective jurisdictions. The Department may authorize the operation of motorized scooters on the roadways and under its jurisdiction.

Before permitting the operation of motorized scooters on its roadway or sidewalk, a municipality, township, county, or other unit of local government, or the Department with regard to a roadway, must consider the volume, speed, and character of vehicular traffic on the roadway or the volume of pedestrian traffic on the sidewalk and determine whether motorized scooters may safely travel on the roadway or sidewalk. Upon determining that motorized scooters may

safely operate on a roadway or sidewalk, and upon the adoption of an ordinance or resolution by a municipality, township, county, or other unit of local government, or upon authorization by the Department with regard to a roadway, appropriate signs must be posted. If a roadway or sidewalk is under the jurisdiction of more than one unit of government, motorized scooters may not be operated on the roadway or sidewalk unless each unit of government agrees and takes action as provided in this subsection (c).

Missouri Senate Bill 1270:

307.240. Any municipality or county shall have the authority to impose additional regulations on the operation of motor scooters which are consistent with the provisions of sections 307.225 to 307.243, however no county or municipality may ban or prohibit the operation of motor scooters in their entirety.

Texas Code § 551.302:

(c) A county or municipality may prohibit the operation of a neighborhood electric vehicle or motor assisted scooter on any street or highway if the governing body of the

county or municipality determines that the prohibition is necessary in the interest of safety.

(d) The department may prohibit the operation of a neighborhood electric vehicle or motor assisted scooter on a highway if it determines that the prohibition is necessary in the interest of safety.

Washington House Bill 3049:

- (8) The use of an EPAMD or motorized foot scooter may be regulated in the following circumstances:
- (a) A municipality and the department of transportation may prohibit the operation of an EPAMD on public highways within their respective jurisdictions where the speed limit is greater than twenty-five miles per hour;
- (b) A municipality may restrict the speed of an EPAMD in locations with congested pedestrian or nonmotorized traffic and where there is significant speed differential between pedestrians or nonmotorized traffic and EPAMD operators. The areas in this subsection must be designated by the city engineer or designee of the municipality. Municipalities shall not restrict the speed of an EPAMD in the entire community or in areas in which there is infrequent pedestrian traffic;
- (c) A state agency or local government may regulate the operation of an EPAMD within the boundaries of any area used for recreation, open space, habitat, trails, or conservation purposes.

Proposed Bill Section 4(a)

a. A designation of the municipal or county property upon which motorized scooters may be operated;

Proposed Bill Section 4(b)

b. The days and hours of the day during which motorized scooters may be operated upon that municipal or county property;

Proposed Bill Section 4(c)

c. A requirement that each motorized scooter operated upon the designated municipal property be registered with the municipality or county and receive a certificate of registration from the municipality or county. As a condition for such registration, the owner or operator shall produce or display appropriate proof that a policy of liability insurance is in effect for that motorized scooter. The municipality or county may impose a reasonable fee to cover the costs of registration;

Existing Legislation

Indiana House Bill No. 1170:

Synopsis: Certificates of title. Requires a person to acquire a certificate of title for an offroad vehicle, motor scooter, or motorized bicycle that will be operated within the state.

New York House Bill 9197:

S 1270. Registration required, pursuant to the provisions for registration in section twenty-two hundred sixty-eight of this chapter, motorized scooters, as defined in section one hundred twenty-four of this chapter, are required to be registered by owners before being operated or driven upon the public highways of this state.

Proposed Bill Section 4(d)

d. A requirement that no person under the age of 12 years or older if so determined by the municipality or county be permitted to operate a motorized scooter upon the designated municipal or county property;

Existing Legislation

California Assembly Bill 1878:

Under existing law, a person may not operate a motorized scooter when the operator is under the age of 16 years. This bill instead would prohibit a person from operating a motorized scooter unless that person holds a valid class C driver's license or instruction permit.

Delaware Title 21

- (1) A person less than 12 years of age may operate a motorized skateboard or scooter only if:
- a. The person is under the direct supervision of a person who is at least 18 years of age: or
- b. The person is on land owned by or under the control of the person's parent or legal guardian.
- (2) Persons 12 years of age and older may operate a motorized skateboard or scooter without adult supervision provided such use is in compliance with all other provisions of this chapter.
- (3) A parent or legal guardian shall not permit a child under the age of 12 to operate a motorized skateboard or scooter except under the direct supervision of an adult.
- (4) The owner of a motorized skateboard or scooter shall not permit:
- a. The device to be operated by a person under the age of 12 except under direct adult supervision.

b. The device to be operated by a person who is incompetent to operate such vehicle because of mental or physical disability or because of being under the influence of alcohol, any drug, or with a prohibited alcohol content as defined in § 4177 of this title.

Massachusetts House Bill No. 1544:

Section 1B. A motorized bicycle and/or motorized scooter shall not be operated upon any way, as defined in section one within the commonwealth by any person under sixteen years of age, nor at a speed in excess of twenty-five miles per hour.

Minnesota S.F. 2566:

Subd. 3. [MINIMUM AGE FOR OPERATOR.] No person under the age of 15 years may operate a motorized scooter.

Mississippi House Bill No. 809:

No person under sixteen (16) years of age may operate or ride upon any motorcycle, motor scooter or all-terrain vehicle upon any public or private property in this state unless such person is wearing on his or her head a crash helmet that complies with minimum guidelines established by the National Highway Traffic Safety Administration pursuant to the National Traffic and Motor Vehicle Safety Act of 1966 for helmets designed for use by motorcyclists.

New York Assembly Bill 6782:

S. 1273. Licensed Operator. No person shall operate a motorized scooter on a public highway unless such operation holds a valid New York State Class D or DJ Driver License or a valid Driver License from another State or from Canada.

Proposed Bill Section 4(e)

e. A requirement that every operator of a motorized scooter wear a properly fitted and fastened helmet which meets the standards of the American National Standards Institute (ANSI Z90.4 bicycle helmet), the Snell Memorial Foundation's 1990 Standard for Protective Headgear for Use in Bicycling, the American Society for Testing and Materials (ASTM) standard or such other standard, as appropriate;

Existing Legislation

Delaware Title 21:

- (h) Helmet requirements. --
- (1) A person under 16 years of age shall not operate, ride upon or ride as a passenger any motorized skateboard or scooter, unless that person is wearing a properly fitted and fastened helmet which meets or exceeds the standard of the American National Standards Institute (ANSI Z90.4 bicycle helmet standard or subsequent standard) or the

Snell Memorial Foundation's 1984 Standard (or subsequent standard) for Protective Headgear for Use in Bicycling.

- (2) Any parent or legal guardian who fails to cause that parent or legal guardian's child to wear a helmet, as provided in this subsection, shall be fined for the 1st offense \$25, and for each subsequent offense, \$50.
- (3) The court may dismiss all charges pursuant to this subsection upon presentation of evidence that a violator hereof has purchased or obtained a helmet that meets or exceeds the standards set forth in this subsection subsequent to the violation.
- (4) The requirements of this subsection shall apply at all times while a motorized skateboard or scooter is being operated on any property open to the public or used by the public for pedestrian and vehicular purposes.
- (5) Failure to wear a helmet as herein described shall not be considered evidence of either comparative or contributory negligence in any civil suit arising out of any accident in which a person under 16 years of age is injured, nor shall failure to wear a helmet be admissible as evidence in the trial of any civil action.
- (i) Any person or business selling a new, unused motorized scooter, as defined in § 101(83) of this title, must obtain a signed, witnessed statement from the purchaser stating that the purchaser is aware that motorized scooters cannot be operated on Delaware public highways or sidewalks, as set forth in this section. The seller must retain the document for a period of not less than 3 years from the date of sale.
- (j) Enforcement of section. -- Any law-enforcement, peace, police or environmental protection officer, acting in the lawful performance of duty, shall be empowered to enforce this section. Whenever any motorized skateboard or scooter is used in violation of this section, it may forthwith be seized and taken into custody by the peace officer or officers having knowledge of the facts of such use. Any costs associated with any such seizure shall be paid by the operator or owner of such motorized skateboard or scooter unless the operator or owner is found not guilty of the offense charged.
- (k) Penalties when not otherwise specified in this section. -- Any person convicted of violation of any provision of this section shall be fined not less than \$25 nor more than \$300. The penalties set forth in this subsection shall apply unless a specific penalty for an offense specified in a provision of this section is otherwise provided in this section.

Indiana Code:

Sec. 13. A person less than eighteen (18) years of age who operates or rides a motorized bicycle or motor scooter on a street or highway shall do the following:

(1) Wear protective headgear meeting the minimum standards set by the bureau or a helmet that meets the standards established by the United States Department of Transportation under 49 CFR

571.218 in effect January 1, 1979.

(2) Wear protective glasses, goggles, or a transparent face shield.

Louisiana House Bill 581:

- (1) No person under the age of eighteen years shall operate or ride upon any motorcycle, motor-driven cycle, or motorized bicycle unless the person is equipped with and is wearing on the head a safety helmet of the type and design manufactured for use by operators of such vehicles, which shall be secured properly with a chin strap while the vehicle is in motion. All such safety helmets shall consist of lining, padding, visor, and chin strap and shall meet such other specifications as shall be established by the commissioner.
- (2) Any person eighteen years of age or older who chooses not to wear a helmet as provided for in Paragraph (1) shall be covered by a health insurance policy with medical benefits of at least ten thousand dollars for bodily injuries and shall furnish proof of such policy to any law enforcement officer upon the request of such officer.
- (3)(a) No person shall operate or ride upon any motor-driven cycle, including any motor scooter with a motor of five horsepower or less, unless the person is wearing on his head a safety helmet of the type and design manufactured for use by operators of such vehicles, which shall be secured properly with a chin strap while the vehicle is in motion. All such safety helmets shall consist of lining, padding, visor, and chin strap and shall meet other specifications as established by the commissioner.
- (b) It shall be unlawful to purchase a motor-driven cycle, including any motor scooter with a motor of five horsepower or less, if the purchaser does not present proof, at the time of sale, that the intended operator or rider owns or possesses an age and size-appropriate safety helmet.

Massachusetts House Bill No. 1544

Every person operating a motorized bicycle, riding as a passenger on a motorized bicycle or operating a motorized scooter shall wear protective headgear conforming with such minimum standards of construction and performance as the registrar may prescribe, and no person operating a motorized scooter shall permit any other person to ride as a passenger on such scooter. Furthermore, no person shall operate a motorized scooter during hours of darkness (before sunrise or after sunset.)

A person convicted of violation of this section shall be punished by a fine of not more than twenty-five dollars for the first offense, not less that twenty-five nor more than fifty dollars for a second offense, and not less than fifty nor more than one hundred dollars for subsequent offenses committed

Minnesota S.F. 2566:

Subd. 4. [PROTECTIVE HEADGEAR.] No person under the age of 18 years may operate a motorized scooter without wearing properly fitted and fastened protective headgear that complies

with standards established by the commissioner of public safety.

Mississippi House Bill No. 809:

- (1) No person under sixteen (16) years of age may operate or ride upon any motorcycle, motor scooter or all-terrain vehicle upon any public or private property in this state unless such person is wearing on his or her head a crash helmet that complies with minimum guidelines established by the National Highway Traffic Safety Administration pursuant to the National Traffic and Motor Vehicle Safety Act of 1966 for helmets designed for use by motorcyclists.
- (2) No person who is at least sixteen (16) years of age but who is under eighteen (18) years of age may operate or ride upon any motorcycle or motor scooter upon the public roads or highways of this state unless such person is wearing on his or her head a crash helmet that complies with minimum guidelines established by the National Highway Traffic Safety Administration pursuant to the National Traffic and Motor Vehicle Safety Act of 1966 for helmets designed for use by motorcyclists.

Missouri Senate Bill 1270:

307.237. No person under seventeen years of age shall operate or be a passenger on a motor scooter unless the operator or passenger wears protective headgear which properly fits and is fastened securely upon the head of the operator or passenger. The headgear shall meet or exceed the impact standard for protective bicycle helmets set by the U.S. Consumer Products Safety Commission, the American National Standards Institute (ANSI), the Snell Memorial Foundation or the American Society of Testing and Materials (ASTM).

New York Assembly Bill 6782:

Operators must wear protective head gear while driving a motorized scooter; violation may subject the owner and/or operator to penalties including fines and seizure of such motorized scooter.

S. 1276. Protective Head Gear. 1. No person shall operate a motorized scooter without wearing protective head gear meeting standards established by the Commissioner. The court shall waive any fine for which a person who violates the provisions of this section would be liable if such person supplies the court with proof that between the date of violation and the appearance date for such violation such person purchased or rented a helmet, which meets the regulatory requirements as determined by the commission. Such waiver of fine shall not apply to a second or subsequent conviction. 2. The failure of any person to comply with the provisions of this section shall not constitute contributory negligence or assumption of risk, and shall not in any way bar, preclude or foreclose an action for personal injury or wrongful death by or on behalf of such person, nor in any way diminish or reduce the damages recoverable in any such action.

Proposed Bill Section 4(f)

f. A requirement that each motorized scooter operated upon the designated municipal and county property be equipped with a brake that will enable the operator to stop the scooter in a safe and effective manner;

Proposed Bill Section 4(g)

g. A requirement that prior to operating a motorized scooter upon the designated municipal or county property, the prospective operator demonstrate, in a manner prescribed by a designated local authority, a capability to safely operate the scooter; and

Proposed Bill Section 4(h)

- h. A schedule setting forth the penalties for violating the provisions of the ordinance. The schedule shall be prominently posted upon the designated municipal or county property, along with a warning that operators may also be subject to applicable provisions and penalties set forth in chapter 4 of Title 39 of the Revised Statutes.
- 5. This act shall take effect immediately.

Appendix IV. Existing NJ Motorized Bicycle Regulations

Operation on Public Highways	Motorized bicycles shall not be operated upon interstate highways or upon public highways divided by a grass or concrete median or highways with posted speed limits in excess of 50 miles per hour or upon the railroad or right-of-way of an operating railroad within the State of New Jersey or upon any public land where expressly prohibited by the governing body, department or agency having jurisdiction thereof.
	The commissioner is authorized to adopt regulations either prohibiting the operation of motorized bicycles on any public road or highway with a speed limit in excess of 40 miles per hour, which in his discretion are hazardous for the operation of motorized bicycles or permitting the operation of motorized bicycles on any public road or highway, upon which the operation of motorized bicycles is otherwise prohibited by the provisions of this section, which in his discretion are safe for the operation of motorized bicycles. In no case, however, shall the commissioner adopt a regulation permitting motorized bicycles to be operated on any highway with a posted speed in excess of 50 miles per hour (39:4-14.3a).
Violations	Except as otherwise provided by this act, any person who violates any of the provisions of this act shall be subject to a fine not exceeding \$200.00 or imprisonment for a term not exceeding 15 days or both (39:4-14.3b).
	Except as otherwise provided by this act, a person who violates any of the provisions of this act or any rule or regulation promulgated pursuant to this act shall be subject to a fine of not more than \$100.00 for each offense (39:4-14.3t).
	An operator of a motorized bicycle who is convicted of a violation of R.S.39:4-66 concerning the operation of a vehicle when emerging from an alley, driveway, garage, or private road or driveway or section 48 of P.L.1951, c.23 (C.39:4-66.1) concerning the operation of a vehicle when entering an alley, driveway, garage, or private road or driveway from a highway shall be subject to the penalties set forth in R.S.39:4-203 (39:4-14.3x).
Operator only on bicycle	A motorized bicycle shall carry only the operator (39:4-14.3d).
Compulsory Liability	Every owner of a motorized bicycle principally garaged or operated in this State and every person in the business of renting motorized

Appendix IV. Existing NJ Motorized Bicycle Regulations

Insurance Coverage	bicycles shall maintain liability insurance coverage, under provisions approved by the Commissioner of Insurance, insuring against loss resulting from liability imposed by law for bodily injury, death and property damage sustained by any person arising out of the ownership, operation or use of a motorized bicycle (39:4-14.3e).
Accident Reports	Article 15 of chapter 4 of Title 39 of the Revised Statutes pertaining to accidents and reports shall be applicable to all accidents involving motorized bicycles. Any law enforcement officer investigating an accident in which a motorized bicycle is involved shall report the accident to the Division of Motor Vehicles. Said report shall include information relating to the cause of the accident and extent of injury, if any, to the operator and such other information as may be required (39:4-14.3f).
Operation by person under influence	It is unlawful for any person to operate a motorized bicycle while under the influence of intoxicating liquor, or a narcotic, hallucinogenic or habit-producing drug. Any person who violates the provisions of this act shall be subject to the same penalties as provided in R.S. 39:4-50 for conviction of operating a motor vehicle while under the influence of any such substance. In any prosecution for a violation of this act, the presumptions, consent and procedures set forth in P.L.1951, c. 23, s. 30 (C. 39:4-50.1) and P.L.1966, c. 142, ss. 2-5 (C. 39:4-50.2 to 39:4-50.5) shall be applicable (39:4-14.3g).
Suspension of privilege	Any person under the age of 17 who commits a second violation of the provisions of P.L.1975, c. 250 (C. 39:4-14.3) or P.L.1977, c. 267 (C. 39:4-14.3a et seq.) or any other provision of chapter 4 of Title 39 of the Revised Statutes shall have his privilege to operate a motorized bicycle suspended for a period of 30 days from the date of conviction. For a subsequent violation a person shall have his privilege to operate a motorized bicycle suspended until he reaches the age of 17 (39:4-14.3h).
Registration	In addition to the requirements of section 2 of P.L.1975, c. 250 (C. 39:4-14.3) and P.L.1977, c. 267 (C. 39:4-14.3a et seq.), no motorized bicycle as defined by R.S. 39:1-1 shall be operated on the public highways or on public lands of this State unless registered by the owner thereof as provided by this act. The Director of the Division of Motor Vehicles in the Department of Law and Public Safety is authorized to grant a registration to the owner of a motorized bicycle who is at least 15 years of age, provided that the application for registration has been properly made, the registration fee has been paid, and the motorized bicycle is of a type approved by the director

Appendix IV. Existing NJ Motorized Bicycle Regulations

	(39:4-14.3i).
Form for sale of motorized bicycles	At the time of original sale of a motorized bicycle in this State, a motorized bicycle dealer shall complete a form, of a kind to be approved by the director (39:4-14.3j).
License Plate	At the time of issuance of the registration of the motorized bicycle, the director shall also issue to the registrant, at no additional cost, a motorized bicycle license plate to be attached to the bicycle by the registrant. Each plate shall contain a clearly visible license number to be assigned by the director and shall bear the insignia "MOPED" in clear lettering. The license plate number shall be contained on the certificate of registration (39:4-14.3k).
	No person shall operate a motorized bicycle in this State unless a license plate is displayed in accordance with the provisions of R.S. 39:3-33 applicable to motorcycles (39:4-14.3m).
Transfer of ownership	Whenever a motorized bicycle for which a registration certificate has been issued has been permanently removed from the State, the owner shall notify the director in writing within 10 days.
	Whenever a motorized bicycle for which a registration certificate has been issued has been destroyed, stolen, or whenever its use has been discontinued, the owner shall notify the director in writing, sign and execute the registration certificate, and return it to the director within 10 days.
	Whenever there is a transfer of ownership of a motorized bicycle for which a registration certificate has been issued, the owner shall sign over the registration to the purchaser (39:4-14.3I).
Make and model numbers	a. The director shall promulgate rules and regulations pursuant to the "Administrative Procedure Act," P.L.1968, c. 410 (C. 52:14B-1 et seq.), requiring manufacturers or distributors to certify in writing to the division the make and model numbers of motorized bicycles which they sell or distribute in this State.
	b. The director shall compile and maintain a list of approved motorized bicycles and shall only permit approved makes and models of motorized bicycles which are sold or distributed in this State after the effective date of this act to be registered pursuant thereto.
	c. Nothing contained herein, however, shall preclude registration of a

Appendix IV. Existing NJ Motorized Bicycle Regulations

	motorized bicycle pursuant to this act where the registrant of the motorized bicycle establishes with reasonable specificity that the
	motorized bicycle establishes with reasonable specificity that the
	requirements of section 2 of P.L.1975, c. 250 (C. 39:4-14.3) and
	P.L.1977, c. 267 (C. 39:4-14.3a et seq.) (39:4-14.3n).
Nonresident	The registration provisions governing motorized bicycles shall not
Motorized	apply to a nonresident motorized bicycle owner who has complied with
Bicycle	the registration and licensing laws of his state of residence, if the
Owner; Registration	motorized bicycle is appropriately identified in accordance with the laws of his state of residence. Nothing in this section shall authorize
Registration	the operation of a motorized bicycle contrary to the provisions of this
	act, section 2 of P.L.1975, c. 250 (C. 39:4-14.3) and P.L.1977, c. 267
	(C. 39:4-14.3a et seq.) (39:4-14.3o).
Proof of	With respect to motorized bicycles purchased prior to the effective date
Ownership	of this act, and for which no bill of sale or other formal proof of
	ownership is available, the director may accept as proof of ownership
	a sworn affidavit from the owner, setting forth with reasonable
	specificity facts regarding the acquisition of ownership of the motorized
	bicycle, together with any supporting documents, as proof of
	ownership of the motorized bicycle.
	A person who knowingly submits a false bill of sale, false receipt for purchase, or any other false proof of ownership, or who knowingly submits any false affidavit or false supporting document regarding proof of ownership of a motorized bicycle, commits a crime of the fourth degree (39:4-14.3p).
Helmet	No person shall operate a motorized bicycle unless he wears a protective helmet of a type approved by the director (39:4-14.3q.)
Dealer	Requiring a motorized bicycle dealer to be licensed as a motor vehicle
Licensed as	dealer under R.S. 39:10-19 for the purposes of this act shall not mean
Motor Vehicle	that he is a motor vehicle dealer for the purpose of meeting any
Dealer	restrictions or regulations contained in a planning or zoning ordinance
	under the "Municipal Land Use Law," P.L.1975, c. 291 (C. 40:55D-1 et
	seq.) (39:4-14.3r.)
Rules and	The director shall have the authority to promulgate rules and
regulations	regulations pursuant to the "Administrative Procedure Act," P.L.1968,
	c. 410 (C. 52:14B-1 et seq.) to effectuate the purposes of this act
	(39:4-14.3s).
Ownership	The owner of a motorized bicycle who acquired ownership prior to the
Ownersinh	The owner of a motorized bicycle with acquired ownership prior to the

Appendix IV. Existing NJ Motorized Bicycle Regulations

Acquired Prior to Effective Date of Act	effective date of this act shall have 90 days from the effective date to comply with the registration, titling, and license plate requirements contained herein (39:4-14.3u).
Education Program for Safe Operation	The director shall establish a fund not to exceed \$50,000.00 per year for the purpose of providing an educational program for the safe operation of motorized bicycles (39:4-14.3v).
	The Director of the Division of Motor Vehicles shall use a portion of the fund established pursuant to section 22 of P.L.1983, c. 105 (C. 39:4-14.3v) for the purpose of providing an educational program for the safe operation of bicycles (39:4-14.3v1).
Appropriation of fees	The fees collected pursuant to this act shall be appropriated to the Division of Motor Vehicles (39:4-14.3w).

References

_

¹U.S. Consumer Product Safety Commission, Consumer Product Safety Alert, "Scooter Sales Skyrocket, Injuries Soars: CPSC Recommends Riders Wear Safety Gear" http://www.cpsc.gov/CPSCPUB/PUBS/5026.pdf, Accessed May 18, 2004

² Barsi, T, C. Faergemann and L.B. Larsen, Road Traffic Accidents with Two-Wheeled Motor Vehicles During a Five-Year Period in Odense, Denmark, *Traffic Injury Prevention*, Vol. 3, No. 4, pp. 283-287, 2002.

³ Brogan, Joe, "Hot-Ticket Item: Police Targeting Popular Scooters", Palm Beach Post (Florida), December 31, 2003.

³ "Scooter Issues Call for Common Sense", The Advocate, Baton Rouge, Louisiana, February 25, 2004.

⁵ Kern, Emily, "Brusly Police to Confiscate Scooters", The Advocate, Baton Rouge, Louisiana, March 3, 2004.

⁶ Anderson, Ed, "Three Bills Take Different Routes To Regulate Motorized Scooters", The Times-Picayune, New Orleans, Louisiana, March 26, 2004.

⁷ "Little Motorized Scooters Aren't Street Legal In Mississippi", The Associated Press State and Local Wire, Jackson, Mississippi, December 31, 2003.

⁸ Abram, Susan, "Complaints Rising Over Scooter Users", The Daily News of Los Angeles, April 3, 2004.

⁹ New York Law Journal, "Decision of Interest: Court Sustains Reckless Driving Charge Against Children Driving 'Goped' Scooters", Vol. 63, pg. 24, April 2, 2004.

¹⁰ Ravasio, Mary, "Limited Gas-Powered Scooters Are Hip, But Because They Have Motors, PennDot Bans Them From Public Byways", Pittsburgh Post-Gazette (Pennsylvania), February 22, 2004.

¹¹Graber, Shane, "Laws Put the Brakes on Scooter Craze", St. Louis Post Dispatch (Missouri), December 23, 2003, pg. B1.

¹² "Tucson Bans Motorized Scooters from City Streets", Associated Press State and Local Wire, May 11, 2004.

 $^{^{\}rm 13}$ "Scooters are Illegal on Roads, Banned on Sidewalks", The Associated Press State and Local Wire, May 10, 2004.

¹⁴ "New Crackdown on Go-Peds After Boy, 13, Lands in Court", Western Morning News (Plymouth), January 31, 2004.

¹⁵ Aiello, Dorothy D., "Motorized Mobility," Rehab Management, August/September 2001

¹⁶ Fleischer, Doris Zames and Zames, Frieda *The Disability Rights Movement: From Charity to Confrontation*, Temple University Press; 2001.