Elderly Drivers & Declining Vision

An Analysis of Options

By: Ken Morris
Summary

During the 2003 legislative session, the Florida Legislature amended section 322.18, Florida Statutes, by enacting Senate Bill 52 relating to driver license vision exams. This bill requires Florida drivers over the age of 79 to submit to a vision test when renewing their driver’s license, which is to be administered at the driver’s license office or by a state licensed health care practitioner.

Current Florida law allows drivers to forgo the required vision exams by renewing their licenses by mail or electronically up to two consecutive times, which can cover an 18 year period. If a driver renews his or her license at the age of 79, he or she may not be subject to the required vision exam until the age of 85.

As people age, there are normal changes associated with their vision. Older adults are more prone than younger drivers to have crashes related to merging, changing lanes, and making left turns. Visual acuity, visual fields, night vision, contrast sensitivity, and other visual deficiencies that are affected by age are also affected by age related diseases (FADC 2004). To ensure that Florida drivers meet the necessary physical qualifications to safely operate a motor vehicle, the state must adopt different renewal procedures which test drivers’ visual adeptness.

Four distinct policy options were evaluated to replace or incorporate in to the current law for the purpose of maintaining safe roadways. Each policy was evaluated based on the cost to implement and sustain, the level of safety provided, and the feasibility of Florida drivers to comply with provisions of the policy:

1. Lower the age for the required vision exam beginning at age 70.
2. Lower the age for the required vision exam beginning at age 55.
3. Require a road examination for renewals beginning at age 80.

4. Require Florida health care practitioners to report patients’ medical information that may hinder their ability to safely operate a motor vehicle.

Each policy has its strengths and weaknesses. The best policy for Florida to implement at this time is to require a vision test for drivers wishing to renew their license after turning 70. The cost of implementing this policy is relatively inexpensive because the Florida Department of Highway Safety & Motor Vehicles (DHSMV) already has all of the necessary procedures and directions in place. The department would simply have to reduce the age by ten years which would incorporate an additional 1.5 million drivers who will be required to take a visual examination over a four to six year period. Age 70 is also the targeted age by five other states and Washington, D.C. for special provisions such as vision exams, reduced renewal intervals, and restricted driving privileges.

**Background**

Transportation is an important concern across all three levels of the public sector. Federal, state, and local governments each have a stake in the infrastructure, maintenance, and regulation of transportation systems. Vital regional growth, economic development, and day to day activities are dependent on our governments’ ability to provide these transportation services. Public safety is a chief concern in the regulation of highways and roads that also involves all three levels of government. In Florida, the state’s Department of Transportation has a mission statement that ensures that the department “will provide a safe transportation system that ensures mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities.” Federal, state,
and local governments each have a role in the public safety of roadways and developing laws or guidelines for the issuing and regulation of drivers and driver licenses.

Despite the crossover of laws, regulations, and funding, the states have the authority to issue driver licenses. Therefore, much of the burden of public safety and regulation falls on the state legislatures to develop the laws, restrictions, and requirements for obtaining a driver license. One of the essential requirements for a driver license set by the states is the level of a driver’s vision. Drivers are subject vision exams to determine their ability to read signs, identify objects, and awareness of their surroundings. Senior citizens often experience a deterioration of vision as they approach their golden years and perhaps may not be fit to operate a motor vehicle. The National Cooperative Highway Safety Research Program in 2002 reported that there are several declining visual functions as a result of aging. Additionally, motor vehicle injuries are the second leading cause of injury-related deaths among 65 to 74 year olds in the United States (FADC 2004). As the fourth most populous state in the country, and home to an increasing large percentage of senior citizens, Florida must be concerned with the safety of its roads, drivers, and passengers. Nearly 18 percent of Florida residents are 65 years of age or older, which ranks Florida as the state with the highest percentage of senior citizens in the country (U.S. Census Bureau 2002). The number of elder drivers will continue to increase in coming years. From 1995 to 1999, the number of elder drivers aged 65 and older increased by 11 percent. The number of elder drivers aged 85 and older grew 48 percent during the same time period, which represented the largest percentage increase among all age groups (OPPAGA 2001). Florida is expecting a population of over 18 million people by the year 2010 (Morris 2003). Seniors will
continue to migrate to Florida for the warm weather, lack of a state income tax, and relatively cheap cost of living. To protect residents and tourists on the roads, Florida must ensure the qualifications and capabilities of its seniors to manipulate the roadways through the driver licensing and renewal processes.

In Florida, the Department of Highway Safety & Motor Vehicles (DHSMV) examination includes tests of hearing, knowledge of traffic laws, and a demonstration of motor vehicle operation skills. All persons applying for an original, duplicate, or renewal license at a driver license office, regardless of age, must pass a vision-screening exam that is administered by the state (FADC 2004). However, section 322.18, Florida Statues, provides a loophole to forego the vision exam for drivers who wish to renew their licenses. Depending on the terms of issuance, a driver license may be renewable every four or six years. Florida law allows drivers to forgo the required vision exams by renewing their licenses by mail, telephone, or electronically up to two consecutive times, which can cover up to an 18 year period without any direct contact with a licensing agent who may identify possible impairments. Further, the practice of renewing a driver license by mail is encouraged by the DHSMV. Within 30 days of a licensee’s expiration, the DHSMV mails a renewal notice to the licensee at his or her last known address. This notice provides instructions to transmit the completed renewal notice and the required fees by mail, telephone, and electronic means (Section 322.18, F.S.).

During the 2003 legislative session, the Florida Legislature amended section 322.18, Florida Statues, by enacting Senate Bill 52 relating to driver license vision exams. Senate Bill 52 requires Florida drivers over the age of 79 to submit to a vision test when renewing their driver license, which is to be administered at the driver license office or by
a state licensed ophthalmologist, optometrist, or physician. The vision exam is offered free of charge at any driver license office. However, if a person chooses to be tested by a private ophthalmologist, optometrist, or physician, that person will incur the cost of said examination. Also, the DHSMV designed a reporting system in which the physician must complete a form available through the DHSMV’s website. After screening the licensee’s vision, the physician may submit the form electronically to the DHSMV or allow the licensee to mail the form in along with the renewal fee (Sanchez, Robert (2003). Since Florida has four year and six year driver license renewal periods, elder drivers may not need to renew their licenses and take a vision exam until their early to mid 80’s. This law took effect January 1, 2004.

Florida is facing a critical situation with its aging population that must be addressed. The mature at-risk drivers that are so prevalent on the Florida roadways should be scrutinized with more detail to identify possible ailments that may hinder their driving capabilities. In fiscal year 2002-2003, there were 14,797,212 Florida drivers, including 2,204104 drivers between the ages of 65 and 74, along with 242,480 drivers that were 85 years of age or older (FADC 2004). Of course, age alone does not determine a person’s ability to drive safely, but it does raise concerns because of some of the physical deterioration associated with age such as visual difficulties. Visual acuity, visual fields, night vision, contrast sensitivity, and other vision functions are affected by age and disease related changes of the eye, brain, and body (FADC 2004). Early recognition and assessment of potentially at-risk drivers should be one of Florida’s highest priorities. I would like to focus my research on the appropriateness of the age threshold enacted by the Florida Legislature to begin requiring vision exams for the
renewal of a driver license. I will also explore possible alternatives and provisions that
could be implemented to provide additional safety measures in regard to elderly drivers
in Florida.

**Literature Review**

Senate Bill 52 also directed the Florida At-Risk Driver Council (FADC) to study
the effects of aging on driving ability including accidents caused by functional limitations
that affect driving ability, the degenerative processes of vision, hearing, mobility,
cognitive functions and reaction times of the elderly, the implementation of vision
screening requirements, and the availability of alternate forms of transportation. The
council, under the authority of the DHSMV, was required to report its findings to the
President of the Senate and the Speaker of the House of Representatives by February 1,

*The Effects of Aging on Driving Ability* is a comprehensive report on the risk older
drivers pose behind the wheel and identifies Florida’s efforts in education, prevention,
and early recognition of at-risk drivers. Vision is not the only focus of this report.
Several debilitating conditions that commonly affect older drivers are discussed that
reduce normal cognitive and physical functions. Limited alternative transportation and
gaps in coverage across the state is also discussed in order to meet the mobility needs of
seniors and provide them an opportunity to travel without needing a driver license.

The report does not attempt to address the effectiveness of s. 322.18, F.S. as a
policy or recommend measures that would dramatically improve public safety. Instead,
the report is tailored around the requirement of vision exams at age 80 and offers
recommendations such as pilot studies, data collection, and voluntary education and
training programs. These are remedial measures for driver safety which avoid the pertinent question. What is the best practice for the driver license renewal process?

The Effects of Aging on Driving Ability lacks the foresight to safeguard Florida drivers by not acknowledging the feeble policy enacted by the 2003 Florida Legislature. My analysis of options compares and contrasts four policies that are designed to replace the current standards of s. 322.18, F.S., or could be incorporated with the current language to provide a more comprehensive driver license renewal procedure.

Methods

Age alone does not directly determine a person’s ability to safely operate a motor vehicle. However, age can be a useful variable for predicting some aspects of driving performance. The findings provided in this paper indicate a correlation between a driver’s age and accident rates, injury rates, and fatality rates resulting from car crashes. Declining visual capabilities of the elderly is closely examined in the findings as a major contributing factor for the correlation between crash rates and old age. However, there are major limitations to this assumption because elderly drivers could also suffer from other cognitive and physical deficiencies not related to vision. It would be a false statement to claim that drivers’ vision is the route cause for the increase in accident rates. On the other hand, a National Highway Traffic Safety Administration study indicates that drivers with vision problems represent a larger population than drivers with multiple medical conditions. The difference is that vision problems should be more easily identified and corrected (FADC 2004).

This research was collected through a multitude of sources such as academic journals, medical research and findings, state and federal government published materials,
internet searches, and insurance companies. Some of the most informative documents to exhibit the correlation between age and accident rates can be found in the form of graphs and charts in the appendices section of this paper. These graphs and charts showing accident rates among the different age groups are controlled by vehicle miles driven. This is necessary because elderly drivers tend not to drive as much as younger drivers, which affect the probability of being involved in traffic accidents (OPPAGA 2001). Also, Appendix 1 offers the crash rates for Florida residents by age groups of ten year intervals, and controls for the number of accidents for each age group by providing an accident rate per 10,000 licensed drivers. The only downside of these graphs and charts is that the crash rates do not reflect driver fault. The charts show accident rates and involvement rather than fault.

Other limitations include the information available that is specifically pertinent to Florida. Some of the findings presented in this paper reflect nationwide crash rates but are useful tools to apply to Florida. Another consideration is the demographics of Florida residents and the prominence of senior citizens and retirees. With so many elderly drivers on Florida roadways, nationwide findings of high crash rates among seniors should apply to and be a primary concern for Florida.

Since Florida’s current law of testing drivers wishing to renew their license after the age of 79 just recently became effective January 1, 2004, it is too soon to develop a before and after study. Also, Virginia is the only other state with identical provisions for driver license renewals but the Virginia law also took effect in 2004 (U.S. Driver Licensing… 2004). Ideally, a study comparing crash rates among states with similar demographics could provide the insight as to what the best policy would be.
Findings

Many elderly drivers realize that some of their physical and cognitive abilities diminish with age and tend to self-regulate their driving activities. These restrictions may include driving only during daylight hours, taking less challenging routes, and others decide that they may longer be fit to continue driving (FADC 2004).

Driver license examiners are trained to observe license applicants for medical deficiencies including physical, mental, or visual ailments. The examiner is authorized to apply the necessary restrictions and/or equipment requirements for an applicant to be issued a driver license and be designated as a safe driver. Any person, physician, or agency that suspects a licensed driver or applicant to be mentally or physically unfit to operate a motor vehicle is authorized to report such a suspicion to DHSMV. Law enforcement officers may request a reexamination of drivers upon issuing a crash citation and judges may issue a court order requiring reexamination. Furthermore, the general public has the ability to request a driver evaluation by filling out a DHSMV form and submitting by mail, in person, or electronically (FADC 2004).

If a report is filed with DHSMV that requires further consideration before requiring reexamination, the case is referred to the DHSMV’s Medical Advisory Board. The Medical Advisory Board was created in 1952 and may consist of anywhere from 12 to 25 members with different backgrounds. The Board may request additional testing, recommend restrictions, or recommend the revocation of the driver’s license. The Board only serves an advisory function since the final determination or action is carried out by DHSMV. All but two of the sitting board members must be licensed doctors of the state and be in good standing with their respective professional associations. The current
board is comprised of 13 members including one optometrist and two ophthalmologists (TransAnalytics, LLC, 2003).

**Vision**

As people age, there are normal changes associated with their vision. These common changes in vision include poor contrast sensitivity, slow adaptation to changes in illumination, and increased glare sensitivity (Schaie & Pietrucha 2000). Depth perception and judgment is another common problem for older drivers and are required of drivers when attempting to merge into traffic lanes or make left turns across oncoming traffic. This is commonly referred to as gap detection and is defined as the determination of whether or not it is safe to make a turn or merge into traffic. Older adults are more prone than younger drivers to have crashes related to merging, changing lanes, and making left turns (FADC 2004).

Visual acuity, visual fields, night vision, contrast sensitivity, and other visual deficiencies that are affected by age are also affected by age related diseases (FADC 2004). Common age related diseases are glaucoma, cataracts, and age-related macular degeneration. Glaucoma, the leading cause of blindness among the elderly, cannot be prevented but can be treated and managed by a physician. People can rarely detect the symptoms if they have glaucoma but stand the best chance of coping with it the earlier it is detected (Litwak, Anthony B. 2001).

A Cataract is a cloudy area covering the lens of the eye caused by aging and exposure to ultraviolet radiation. The cloudy or fuzzy vision caused by cataracts can make it extremely difficult to drive at night because of the glare of oncoming headlights.
Of the three visual diseases cited, cataracts are the most likely to be self-noticed but require surgery to treat vision loss (Web MD Health).

Age-related macular degeneration (AMD) is a disease that blurs the central vision needed for activities such as reading, identifying people, and driving. AMD usually occurs during middle age but risk increases with age. Like glaucoma, AMD progresses slowly and is difficult to detect without a comprehensive eye exam (National Eye Institute… 2003). Each of the diseases described are more likely to occur with older age, which makes the application and renewal process for obtaining a driver’s license imperative to overall driver safety.

All persons applying for an original, duplicate, or renewal driver license that are subject to the visual examination may use their corrective lenses during the examination but must report to the tester that said lenses are needed. The current visual acuity required by Florida law in either eye or both eyes together is 20/70. If an applicant’s vision is 20/80 or worse, with both eyes, the applicant is not licensed (TransAnalytics, LLC, 2003). If one eye is legally blind, which is 20/200 or worse, the other eye must be 20/40 or better (Vision Requirements General Information). Applicants who have 20/50 vision or worse in either eye, with or without corrective lenses, must be referred to a doctor for possible improvement. If an applicant fails the visual examination, he or she may still be eligible for a temporary and/or restricted driver permit for 60 days (TransAnalytics, LLC, 2003). This could enable such a person to have restricted driving privileges during daylight hours for necessary purposes.

Visual acuity tests do not assess poor visual functions associated with older drivers such as contrast sensitivity and glare conditions. Most states, including Florida,
only use visual acuity tests to screen drivers’ vision but do not test their peripheral field of vision (FADC 2004). Florida law sets the minimum acceptable field of vision to 130 degrees (Vision Requirements General Information). Drivers may be unaware of peripheral vision loss because it often occurs insidiously. A motor vehicle crash may be the wake up call for drivers to test their peripheral vision (FADC 2004). The only time field of vision is tested is if a driver, over the age of 79, foregoes the free test at the licensing office and seeks a personal physician. The physician must complete an official form available through the DHSMV website, which includes a space for the results of a visual field examination. Therefore, field of vision is only measured when it is reported by Ophthalmologists and Optometrists.

Another irony in Florida law is the reporting requirements of physicians relating to the safe operation of motor vehicles. Aside from elderly drivers wishing to renew their license after 80, Florida law does not require doctors to report vision problems to DHSMV that may impair a person’s ability to drive despite the severity of an individual’s vision problems. Currently, section 322.126, F.S., permits, but does not require doctors to report a patient’s visual problems. However, section 381.0031, F.S., requires physicians to report diseases of significant public health to the Department of Health (DOH). The DOH periodically publishes a list of infectious and noninfectious diseases such as HIV, AIDS, and the West Nile Virus, which have been determined to be a threat to public health. The DOH and DHSMV both have public safety concerns but only doctors are only required to report to DOH. Although physicians are not required to report to DHSMV, the Florida Society of Ophthalmology advocates an ethical
responsibility of physicians to report patients with visual deficiencies that should not be
driving and present a serious threat to public safety (Florida Society of Ophthalmology).

Other States

Since the states have the authority to license drivers, there are many variations
among the licensing and renewal procedures across the country. Appendix 2 indicates
the renewal procedures and special provisions for older drivers in the United States and
Washington D.C. Twenty-three states and the District of Columbia impose some type of
restriction or special provision for older drivers. The average age in which the
restrictions begin to take effect among the 24 governments is 66. However, the median
and modal targeted age among the 24 governments is age 70.

There are a variety of different measures taken to ensure the safety of elder
drivers. Common practices include restricting mailing renewals at a particular age,
requiring vision test, requiring road tests, and reducing renewal intervals at a particular
age. Of the 23 states that have special provisions for older drivers, Florida and Virginia
have set the highest age to begin requiring passage of a vision test at the age of 80. Both
Maryland and Maine require vision exams for the first renewal after a driver’s 40th
birthday. North Carolina and Tennessee have some unusual provisions in their respective
laws. Drivers 60 years of age and older in North Carolina are not required to parallel
park during their road examination. Tennessee drivers who are issued driver licenses
after their 65th birthday do not have to renew their licenses because they do not expire
unless there are some extraordinary circumstances such as reported health problems or
numerous motor vehicle accidents. Some state laws prohibit discrimination by reason of
Driver Safety

The Office of Program Policy Analysis & Government Accountability (OPPAGA) is a research and evaluation office of the Florida Legislature that publishes reports on its findings on state programs and policies. In January 2001, OPPAGA published Report No. 01-02 entitled *Driver License-Related Activities Performed by the Licenses, Titles, and Regulations Program*. This report is a comprehensive study of DHSMV that addresses some of the issues regarding elderly drivers in Florida and safety measure should be taken to protect all drivers. OPPAGA found that elder drivers who do not choose to restrict their driving when their abilities begin diminishing are risking the safety of everyone on the road. As drivers age, they are increasing at risk of being involved in traffic accident (See Appendix 3). Between the ages of 70 and 75, elderly drivers begin to experience a dramatic increase in traffic accidents per million miles driven. The only other age groups that compare to the crash rates of elders are the inexperienced drivers under the age of 25. With the exception of teenagers, elders are much more likely to be involved in crashes than any other age group (See Appendix 4). Additionally, elder drivers have a higher fatality crash rate than any other age group including teenagers. The fatal crash rate for drivers 85 years and older is almost 25 percent greater than the fatality rate of teenage drivers. The fatal crash rate for drivers aged 75 to 79 is twice the rate of drivers aged 65 to 69 (OPPAGA 2001). Appendix 5 encompasses the involvement rates, severe injury rates, and fatality rates of drivers nationwide (FADC 2002). This research indicates that the high level of traffic accidents involving elder
drivers is related to the impact of aging on health, physical, and cognitive functions. OPPAGA specifically notes the significant impact of visual impairments among the elderly including diminished acuity, peripheral vision, and contrast and glare sensitivity (OPPAGA 2001).

Aside from the controlling mechanism of measuring accidents by vehicle miles driven, it is important to explore the number of accidents by age group for the number of licensed drivers. Appendix 1 reflects the crash and fatality rates for Florida residents by age group per 10,000 licensed drivers. There is a steady decrease of drivers involved in fatal crashes among the drivers of different age groups until the age of 75. Drivers 75 to 84 years of age show a sharp increase of fatal crashes than the 65 to 74 year old age group. This trend continues to dramatically increase among drivers 85 year of age and older (Office of Management Research & Development 2002).

There are proportionally fewer elderly drivers in the U.S. than licensed drivers between the ages of 20 to 64. Therefore elderly drivers travel fewer miles per licensed driver. However, these older drivers are retaining their licenses longer and driving more miles than ever before because they are living longer. Since 1975, there has been a 24 percent increase in the number drivers 65 years of age and older involved in fatal motor vehicle crashes. Nationally, elder drivers are expected to represent 25 percent of the driving age population since the baby boomer will outlive previous generations. These elder drivers are also expected to represent 25 percent of the fatal motor vehicles accidents. Appendix 6 shows a near flawless bell-curve illustrating the national fatal crash involvement per 100 million miles by driver age, with the exception of temporary
skew in fatal crashes for drivers in their early twenties. This increase may be related to the current drinking age of 21 (Fatality Fact for Older People 2002).

**Options**

There are an enormous amount of measures that could be taken to increase driver safety on Florida roadways, including particular measures targeted toward elder drivers. Possible measures include prohibit nighttime driving, restrict driving distance using a limited radius from a driver’s home, shorten the renewal cycle, increase public awareness, and create special driver programs targeted toward elder drivers. For the purpose of this report, I want to focus on four significant policy options and compare them to the current practice of requiring drivers over the age of 79 to take a vision exam. These are practical policy options that could be, or somewhat have been considered by either the legislative or executive branches of Florida government.

The first option, which was recommend by OPPAGA in 2001 before the current legislation was passed, recommended that drivers 70 years of age and older be required to appear at the licensing office. To draw comparisons with current Florida law, I will use the age recommended by OPPAGA and apply it with the current vision laws and procedures required by the state. Therefore, the first policy option would be to require vision exams, as they are required now, but at the age of 70 rather than 80.

The Florida Mature Driver Database (FMDD), a pilot program created by the Florida Department of Transportation to study the driving behaviors of drivers 55 years of age and older, will also be considered in this research. The FMDD shares its information with other state agencies such as the Department of Elder Affairs and the U.S. Department of Transportation (FADC 2004). As with the OPPAGA recommendation, I
will use the age targeted by the FMDD and apply it as if the state required vision exams for driver license renewals at the age of 55.

The third policy option is slightly different than the first two. Instead of requiring a vision examination at a certain age, the third option is a policy that requires a vision and road test for drivers 80 years of age and older. This is virtually the same targeted age as current Florida law because it requires a vision examination but it also includes a road exam.

The fourth policy option is much more eccentric than the previous three. As mentioned earlier, section 322.126, F.S., permits, but does not require doctors to report a patient’s visual problems. The fourth and final policy option is to require Florida ophthalmologists and optometrists to report any physical or cognitive deficiencies they may observe during a patient visit that would severely reduce a person’s ability to safely operate a motor vehicle. This policy option would encompass everyone of driving age that might suffer from any type of handicap, deficiency, or disease. The policy would not violate doctor-patient privileges or the Health Insurance Portability and Accountability Act of 1996 (HIPAA). HIPAA addresses the use and disclosure of individuals’ health information but permits exceptions to protect the public’s health (Office for Civil Rights…).

Criteria

To evaluate the four policy options and the current law, I developed three measurements to compare, contrast, and rate the policy options. Three measurements are used to evaluate the four policy options and the current practice of visual exams beginning at the age of 80. The criteria variables are rated on a scale one through five,
from a high ranking to low. Every policy maker, especially conservative legislators, must understand the cost to implement an idea. Therefore, the cost of each policy is the first evaluative criterion. The second criterion is the safety the policy would provide since safety is the ultimate goal of each policy chosen. Finally, the third criterion is the feasibility of the policy. The feasibility of each policy is a mixture of the capability of being accomplished and the enforceability. The chart below provides a summary evaluation of the four policies and the current law.

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<tr>
<th>Policy Summary</th>
<th>Cost</th>
<th>Safety</th>
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<tr>
<td>Age 70 (OPPAGA)</td>
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<td>Age 55 (FMDD)</td>
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<td>Age 80 (Road Exams)</td>
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<td>Amend s. 322.126, F.S.</td>
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<td>Age 80 (Current Vision Law)</td>
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**Evaluation**

**Age 70 (OPPAGA)**

By changing Florida law to require vision exams for driver license renewal for drivers of the age of 70 and beyond, Florida will align itself with 25 percent of the governments that impose special restrictions for older drivers. Special provisions for drivers beginning when they are age 70 is the median and modal of the 24 governments that already use special provisions for these drivers. In comparison with the other policy options, there would be very minimal cost to implement this measure. The only change to current procedures is the ten year reduction of the required age to take a vision exam. Therefore, the DHSMV and private physicians would have to examine additional drivers beginning at age 70. Currently, there are approximately 1.5 million drivers between the ages of 70 and 80 (FADC 2004). Since individual driver licenses expire based on
individual formulas, the 1.5 million drivers will renew their licenses through the DHSMV over a four to six year period. Thus, this policy option would be relatively inexpensive and was given a ‘2’ for cost on the policy summary chart.

The safety and feasibility of this measure both earned a ‘3’ on the policy summary chart. From the safety perspective, this policy is an improvement from current law because it encompasses approximately 1.5 million more drivers at a younger age to ensure adequate vision to operate a motor vehicle. Despite the older demographics of Florida, this legislation might be feasible to Floridians because age 70 is targeted by five other states and the District of Columbia.

**Age 55 (FMDD)**

Through the Florida Mature Driver Database program, the state is analyzing the behaviors of drivers beginning at age 55 but implemented a policy in 2004 that affects drivers beginning at age 80. If the state implemented a policy that required vision exams starting at age 55, DHSMV would have to review an enormous amount of renewal applications. There are approximately four million licensed drivers between the ages of 55 and 80 in Florida (Office of Management Research & Development…2002).

Accordingly, DHSMV and private physicians would have to examine these drivers and DHSMV would incur much higher costs because of the targeted age. Since this measure has the lowest target age of the four policy options and would encompass nearly four million people, it would be the most expensive policy to implement and continually carry out over a long period of time. The costs associated with this policy earned a ‘5’ on the policy summary chart.
Requiring vision tests for driver license renewals beginning at age 55 is a very proactive approach to protect Florida’s roadways. As previously noted, it would encompass a large population of drivers during their middle ages when vision problems commonly initiate. Hence, this policy option received a ‘2’ on the policy summary chart.

Maine, Maryland, and Oregon are the only states with a targeted age lower than 55. Maine and Maryland require vision exams beginning at age 40, while Oregon requires vision exams at age 50 (Appendix 2). With consideration to Florida’s demographics, and the fact that only three other states target similarly young ages, Florida is unlikely to adopt this policy. This policy option earned a ‘4’ for feasibility.

**Age 80 (Road Exams)**

If Florida were to implement a mandatory road examination for driver license renewals beginning at the age of 80, DHSMV would incur the entire burden, unlike the vision examination which is shared by physicians. The regional offices of the DHSMV would need to hire some additional examiners, which will cost the state some money. Due to the relatively small population of drivers aged 80 and beyond, the state should be able to bear the costs. This policy option received a ‘3’ for the cost criteria on the policy summary chart.

Although a road test is a terrific measuring tool to determine if a person can safely operate a motor vehicle, this policy option only applies to a very small population of Florida drivers. Consequently, this policy option only received a ‘4’ for safety because of the small population it effects.

New Hampshire is the only state that requires a road examination for driver license renewal specifically for older drivers. New Hampshire sets the road test
requirement at age 75 (Appendix 2). Since Florida currently has the vision standards set at age 80, it would not be too difficult to replace or add this policy option to the current method. Road tests at the age of 80 could be implemented in Florida if they were pursued by DHSMV or the Florida Legislature. From a feasibility standpoint, this option was rated as a ‘2’ on the policy summary chart.

**Amend s. 322.126, F.S.**

In order to require doctors to report visual ailments that could impair a person’s ability to drive, DHSMV would have to publish a formal document listing what doctors should report. Further, the DHSMV will have to develop reporting documents for physicians, similar to the form currently available to ophthalmologists and optometrists, which must be made available through the DHSMV’s website. The Medical Advisory Board would need substantially more funding due to an increased number of medical reports each year. This is an expensive endeavor that may initially cost the state a large sum of money but could justify itself in a long-term effort. Requiring doctors to report patient information scored a ‘4’ because of the high projected costs needed to implement this idea.

Amending section 322.126, F.S., might be one of the safest measures taken in the country for public safety. Florida’s physicians would be the watchdog for DHSMV to ensure that Florida drivers have adequate vision to operate a motor vehicle. This proactive policy is the safest measure of the four policy options so it is number ‘1’ on the policy summary chart because it encompasses all Florida drivers.

Inversely, the feasibility of this option earned a ‘5’ because it is unlikely to be implemented. People may avoid routine vision exams if they are concerned about losing
their license so there still would be a need to have mandatory examinations at a certain age. Although legal and similar to required reporting of infectious diseases to DOH, there would be an outcry against this option because it would jeopardize driving privileges. Also, this policy option would be difficult to enforce and put additional burden and liability on Florida physicians.

The four policy options and the current vision exam law are listed in this chart with the total score of their rankings for cost, safety, and feasibility. Since a rating of ‘1’ was the best score for each category, the lowest total should be considered the best option. The current law, which requires a vision exam for the first driver license renewal beyond 80 years of age, had the lowest combined score of ‘7.’ If a change to current law is immanent, the best policy to pursue would then be requiring vision exams ten years earlier. Age 70 is the standard in five other state and Washington, D.C., for special provisions of older drivers. It would allow DHSMV to get a better grasp on elderly drivers who may have severe vision problems by requiring exams at an earlier age. By the time many seniors reach their 80’s, they would have already taken two or three required examinations under this policy.

### Conclusion

The Florida Department of Transportation and the Florida Department of Highway Safety & Motor Vehicles have a colossal responsibility to ensure the safety of Florida roadways and Florida drivers. An examination in to the licensing and renewal procedures for Florida drivers revealed little to no regulation of Florida’s growing elderly
population in regards to their ability to safely operating a motor vehicle. Until 2004, all drivers were able to renew their driver licenses by mail two consecutive terms, which could exempt them from appearing at a licensing office for up to 18 years. This is an extensive period of time which causes a concern for health related issue that may impair drivers without DHSMV’s knowledge.

Beginning in 2004, drivers 80 years of age and older must submit to a vision exam in order to renew their driver license. This elderly population may appear at a licensing office to take the free examination offered and administered by DHSMV employees or they can choose to see a state licensed physician for a complete visual examination. The physician can complete and submit an examination form on behalf of a patient through the DHSMV website.

Since this new law targets drivers of such an old age, four distinct policy options were offered to replace or incorporate with the current law. The first two options are nearly identical to the current law except that they require vision examinations at younger ages. One option requires vision exams at age 70 and the other at age 55. The third options targets the same age as current law but requires a road examination to be administered by a DHSMV employee rather than just a vision exam at age 80. The fourth policy amends current reporting requirements for state licensed physician who test visual acuity. Currently, any resident or non-resident may notify DHSMV if they believe a person is unfit to drive. This policy option would require physicians such as ophthalmologist and optometrists to report patients with severe vision problems or debilitating diseases that could effect their driving.
Safety is the ultimate goal when creating this type of public policy but each policy option was also measured by the cost and feasibility to implement each idea. The best policy to improve public safety, with a reasonable fiscal impact, and that legislators can sell to their constituents, is to lower the age for required vision exams by ten years. Mandatory vision exams for driver license renewals beginning at age 70 will encompass approximately 1.5 million additional drivers under this policy. Considering Florida’s demographics, this measure should have a significant impact on the safety of Florida roadways.
References


