IOWA DEPARTMENT OF TRANSPORTATION

AGENDA ITEMS/COMMISSION ORDERS

Tuesday, January 8, 2008
Materials Conference Room
Ames DOT Complex

ITEM NUMBER	TITLE	SUBMITTED BY	PAGE
D-2008-43 8:00 a.m.	*Approving Minutes of the December 11, 2007, Commission Meeting	Connie Page	1
	Commission Comments		
	Staff Comments		
PPM-2008-44 8:05 a.m.	*Revitalize Iowa's Sound Economy (RISE) Application – Greene (Delegation)	Stuart Anderson	2
PPM-2008-45 8:15 a.m.	*Iowa Safe Routes to School Funding Recommendations	Stuart Anderson	3
PPM-2008-46	*Statewide Transportation Enhancements Program Funding Recommendations	Stuart Anderson	4
H-2008-47 8:30 a.m.	Teen Driver Behavioral Research Projects	Sandra Larson/ Dan McGehee	5
9:10 a.m.	Adjourn		

*Action Item

On Monday, January 7, 2008, the Commission and staff will meet informally at 4 p.m. in the Materials conference room at the DOT complex in Ames. Transportation-related matters may be discussed but no action will be taken.

Form 102110wd
06-05

DEPARTMENT OF TRANSPORTATION
COMMISSION ORDER

Division/Bureau/Office Director's Office Order No. D-2008-43

Submitted by Connie Page Phone No. 515-239-1242 Meeting Date January 8, 2008

Title Approving Minutes of the December 11, 2007, Commission Meeting

DISCUSSION/BACKGROUND:

PROPOSAL/ACTION RECOMMENDATION:

It is recommended the Commission approve the minutes of the December 11, 2007, Commission Meeting.

COMMISSION ACTION:

Moved by Sawtelle Seconded by MacGregor

	Vote Aye	Nay	Pass
Blouin	X		
Boden	X		
Cleaveland	X		
Crawford	X		
MacGregor	X		
Sawtelle	X		
Wiley	X		

Division Director | Legal | State Director

Chairman Cleaveland noted Commissioner Crawford is participating in today's meeting by telephone from San Francisco.

1. Welcome to Commissioner Mike Blouin.

   On behalf of the Commission, Chairman Cleaveland welcomed Commissioner Mike Blouin to the Transportation Commission.

Form 102110wd
05-06

DEPARTMENT OF TRANSPORTATION
COMMISSION ORDER

Division/Bureau/Office: Planning, Programming and Modal Division, Office of Systems Planning | Order No. PPM-2008-44

Submitted by: Stuart Anderson | Phone No. 515-239-1312 | Meeting Date: January 8, 2008

Title: Revitalize Iowa's Sound Economy (RISE) Application – Greene (Delegation)

DISCUSSION/BACKGROUND:

The city of Greene submitted a RISE Immediate Opportunity application requesting a grant to assist in grading and paving an extension of Industrial Parkway from the end of the existing pavement west approximately 188 feet.

The improvements are necessary to provide access to the Allan Industrial Coatings' new facility. This company conforms to the legislative requirements of the RISE program.

The roadway will support:

- The creation of 15 new jobs at the Allan Industrial Coatings' Greene facility.
- $594,100 in associated capital investment.

The RISE cost per job assisted will be $3,013.33, and there will be a total capital investment of $13.14 for each RISE dollar requested.

PROPOSAL/ACTION RECOMMENDATION:

Based on the capital investment and job creation commitments, it is recommended the Commission award a RISE grant of $45,200 or up to 80 percent of the total RISE eligible project cost, whichever is less, from the city share of the RISE fund.

COMMISSION ACTION:

Moved by _____ Seconded by _____

	Vote		
	Aye	Nay	Pass
Blouin			
Boden			
Cleaveland			
Crawford			
MacGregor			
Sawtelle			
Wiley			

Division Director | Legal | State Director

PPM-2008-44

Stuart Anderson, Office of Systems Planning, presented a RISE immediate opportunity application from the city of Greene to assist in the grading and paving of a 188 foot extension of Industrial Parkway. Using a power point map, he reviewed the location of the project. This proposed roadway is required to provide adequate access for a new Allan Industrial Coatings facility. Allan Industrial Coatings is an Iowa-based company with two existing facilities in Butler county. The Commission recently awarded RISE funding to expand the facility at Allison.

Mr. Anderson said this new location will serve as a wet paint facility and result in the creation of 15 new jobs within two years of project completion and an associated capital investment of about $594,000. The average starting wage of the positions to be created is $14.61 per hour which is 126 percent of the Butler county average wage rate.

Mr. Anderson said we will recommend a RISE grant of $45,200 which is 80 percent of the total road cost of $56,500. The city will provide the 20 percent local match. Funding will be contingent on the creation of 15 new jobs within two years of project completion. That results in a RISE cost per job assisted ratio of $3,013.33 and a total capital investment per RISE dollar of $13.14. He introduced Kevin Blanshan, Director of Transportation and Data Services, Iowa Northland Regional Council of Governments.

Mr. Blanshan said Allan Industrial Coatings, over the next two or three years, will add about 125 jobs in Butler county through this and the Allison projects. He expressed appreciation to Mr. Anderson and his staff for the work they do. They feel they have a great working relation that, hopefully, will continue in the future.

Mr. Anderson reviewed staff's recommendation.

Commissioner MacGregor moved, Commissioner Wiley seconded the Commission, based on the capital investment and job creation commitments, award a RISE grant of $45,200 or up to 80 percent of the total RISE eligible project cost, whichever is less, from the city share of the RISE fund. All voted Aye.

Form 102110wd
05-06

DEPARTMENT OF TRANSPORTATION
COMMISSION ORDER

Division/Bureau/Office: Planning, Programming and Modal Division, Office of Systems Planning — Order No. PPM-2008-45

Submitted by: Stuart Anderson — Phone No. 515-239-1312 — Meeting Date: January 8, 2008

Title: Iowa Safe Routes to School Funding Recommendations

DISCUSSION/BACKGROUND: Review of the current round of applications for funding from the Iowa Safe Routes to School Program (SRTS) has been completed. The following funding recommendations will be presented.

Noninfrastructure		
Black Hawk Metropolitan Area Bicycle & Pedestrian Safety Study (Iowa Northland Regional Council of Governments)	$138,000	
Boone Safe Routes to School Program (Boone County Hospital Foundation)	20,200	
City of Spencer Safe Routes to School Study (Spencer)	24,630	
Clinton Community School District Safe Routes to School Plan (East Central Intergovernmental Association)	15,000	
Dubuque Community Schools Safe Routes to School Plan (East Central Intergovernmental Association)	39,225	
Engineering Assistance for Safe Routes to School (Iowa DOT)		72,000
Fort Madison Safe Routes to School Plan (Fort Madison)	30,000	
Iowa Safe Routes to School Encouragement and Education Program (Iowa Bicycle Coalition)	132,665	
Mason City Safe Routes to School Initiative (Mason City)	37,388	
Northeast Iowa Regional Safe Routes to School Initiative for Healthier Students (Northeast Iowa Resource Conservation and Development Inc.)	78,000	
Infrastructure		
Aurora Avenue Pedestrian Crossing Improvements (Urbandale)	$ 31,000	
Cleveland Elementary Sidewalks (Cedar Rapids)	111,940	
East Second Street Trail for Kids (Webster City)	250,000	
Highway 1 Safety Project (Solon)	44,554	
Lake Mills Interior Arterial Route (Lake Mills)	131,613	
Marshalltown Community School District Safe Routes to School (Marshalltown Community School District)	150,600	
Oakland Road NE from 29th Street to K Avenue (Cedar Rapids)	134,920	
Safe Routes to Little Wapsi School in Rural Howard County (Howard County Secondary Roads Department)	250,000	
Safe Routes to School in Jewell (Phase I) (Jewell)	64,273	
Safe Routes to School (Perry)	169,588	
Shellsburg Shapes Up with Safe Sidewalks (SSSS) (Shellsburg)	74,666	
Traffic Signalization at the Intersection of 4th Avenue S. and S. 12th Street (Clear Lake)	135,000	
Unity Elementary School Trail (Sioux City Community Schools)	200,000	

PROPOSAL/ACTION RECOMMENDATION:

It is recommended the Commission approve the Safe Routes to School Program funding recommendations as listed.

COMMISSION ACTION:

Moved by _____ Seconded by _____

	Vote Aye	Nay	Pass
Blouin			
Boden			
Cleaveland			
Crawford			
MacGregor			
Sawtelle			
Wiley			

Division Director _____ Legal _____ State Director _____

Stuart Anderson, Office of Systems Planning, said the Iowa Safe Routes to School Program is a relatively new federal funding program created through the SAFETEA-LU (Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users) authorization bill. The purpose of this program is to increase the number of elementary and middle school students that walk and bicycle to school safely. Funding is available to local governments, private non-profit groups, regional organizations, or public and private schools through an application-based program. Funding can be used for non-infrastructure or infrastructure activities including sidewalk improvements, speed reduction improvements, pedestrian/bicycle crossing improvements and safety curricula, development of promotional materials, and additional enforcement activities.

Mr. Anderson said in this round 68 applications requesting $9.7 million were received. Last month we reviewed staff's recommendation to fund 23 projects with approximately $2.3 million of Safe Routes to School funding available this round. He requested Commission approval of the Safe Routes to School Program funding recommendations as listed in the Commission order.

Commissioner Blouin asked if a local match is required. Mr. Anderson said this federal grant program is rather unusual in that it does not require a match. Most federal programs we administer require a 20 percent match or, in the case of enhancements, a 30 percent match by Commission direction. The Safe Routes to School Program requires no match; it is 100 percent federal funding. That was done by Congress to assure that all school districts and areas had access to this funding regardless of their available resources or ability to provide match funding.

Commissioner Blouin asked how often applications are taken. Mr. Anderson said we accept applications once a year. This program was established in SAFETEA-LU which was a couple years late so for last year and this year, we are making available two years of funding for each round. Next year we will be back on the funding cycle and will have $1.3 million available instead of the $2.3 million available for this round.

Commissioner Sawtelle moved, Commissioner Crawford seconded the Commission approve the Safe Routes to School Program funding recommendations as listed. All voted aye.

Form 102110wd
05-06

DEPARTMENT OF TRANSPORTATION
COMMISSION ORDER

Division/Bureau/Office: Planning, Programming and Modal Division, Office of Systems Planning | Order No. PPM-2008-46

Submitted by: Stuart Anderson | Phone No. 515-239-1312 | Meeting Date: January 8, 2008

Title: Statewide Transportation Enhancements Program Funding Recommendations

DISCUSSION/BACKGROUND: Review of the current round of applications for funding from the Statewide Transportation Enhancements Program has been completed. The following funding recommendations will be presented.

Trail and Bicycle Facility	
Ankeny to Woodward Trail (Polk County Conservation Board)	$750,000
Decorah Cut Trail – Segment 11 of Trout Run Trail (Decorah)	750,000
Fairfield Loop Trail – West Segment (Fairfield)	350,000
Raccoon River Valley Trail Addition (Dallas County Conservation Board)	750,000
Urban Youth Corps (Iowa DOT)	100,000
Scenic and Environmental	
5th Avenue Entry Streetscape – Phase 2 (Coon Rapids)	$300,000
Fairfield Streetscapes (Fairfield)	282,100
Iowa's Living Roadways Project Program (Trees Forever)	200,000
Roadside Beautification/Maintenance Reduction: County Highways (University of Northern Iowa)	200,000
Walcott Recreational Trail and Park Project (Walcott)	330,773
Historic and Archaeological	
Cultural Resources Study in the Loess Hills (Golden Hills Resource, Conservation and Development)	$119,710
Iowa Transportation Museum – Phase One Buildings (Grinnell)	750,000
Minburn Depot Restoration (Minburn Betterment Group)	336,531
Photo Archiving (Iowa DOT)	50,000

PROPOSAL/ACTION RECOMMENDATION:

It is recommended the Commission approve the Statewide Transportation Enhancements Program funding recommendations as listed.

COMMISSION ACTION:

Moved by _____ Seconded by _____

	Vote Aye	Nay	Pass
Blouin			
Boden			
Cleaveland			
Crawford			
MacGregor			
Sawtelle			
Wiley			

Division Director | Legal | State Director

PPM-2008-46

Stuart Anderson, Office of Systems Planning, said the Transportation Enhancement Program is a federal program used for community-based projects that expand travel choices and enhance the transportation experience by supporting bicycle, pedestrian, cultural, historic, aesthetic, and environmental projects related to surface transportation infrastructure.

Mr. Anderson said by Commission direction half the enhancement funding allocated to the state is administered by the Department via an application process for projects of statewide significance. The other half is allocated to Iowa's 18 Regional Planning Affiliations (RPAs) and 9 Metropolitan Planning Organizations (MPOs) for their selection of projects of regional and metropolitan significance. The priorities of enhancement funding include relationship to the transportation system, relationship to land use and transportation plans, support Iowa's tourism efforts, project need and local support, quality, and qualification in more than one transportation enhancement category.

Mr. Anderson said in this round 41 applications were received requesting approximately $25 million. Last month he reviewed with the Commission a recommendation to fund 14 projects totaling approximately $5.3 million. This funding is a 30 percent match, and he requested Commission approval of the Statewide Transportation Enhancements Program as listed on the Commission order.

Commissioner MacGregor moved, Commissioner Wiley seconded the Commission approve the Statewide Transportation Enhancements Program funding recommendations as listed. All voted aye.

Form 102110wd
05-06

DEPARTMENT OF TRANSPORTATION
COMMISSION ORDER

Division/Bureau/Office Research and Technology Bureau Order No. H-2008-47

Submitted by Sandra Larson/Dan McGehee Phone No. 515-239-1205 Meeting Date January 8, 2008

Title Teen Driver Behavioral Research Projects

DISCUSSION/BACKGROUND:

The Iowa and Minnesota departments of transportation are currently funding a teen driver behavioral research project in urban settings at Eagan High School in south Minneapolis with The University of Iowa. A teen driver behavioral research project in rural settings was previously conducted at Clear Creek Amana High School in Tiffin.

After more than 500,000 miles of testing, significant reductions in safety-relevant driving have been found among the riskiest drivers. This technology has very high acceptance ratings amongst teens and shows promise for improving teen driving for the long term.

Dan McGehee, director of Human Factors and Vehicle Safety Research Division of The University of Iowa's Public Policy Center, will present on these research studies.

General Motors is also providing funding directly to The University of Iowa for the urban study.

PROPOSAL/ACTION RECOMMENDATION:

For information.

COMMISSION ACTION:

Moved by _____ Seconded by _____

	Vote		
	Aye	Nay	Pass
Blouin			
Boden			
Cleaveland			
Crawford			
MacGregor			
Sawtelle			
Wiley			

Division Director | Legal | State Director

Sandra Larson, Highway Division, said Dr. Dan McGehee, University of Iowa, will share information about a teen driver behavior research project we have underway. This is a pooled-fund research project utilizing State Planning and Research (SP&R) federal funds. SAFETEA-LU requires the state to set aside two percent of certain federal funds and 25 percent of those SP&R set aside funds are required to be spent on research development or tech transfer. Our SP&R projects cover a broad range and include research projects such as the one we are going to hear about this morning. This fund pools and leverages research funding from the Iowa and Minnesota DOTs. In addition, General Motors is funding part of the project through the University of Iowa.

Ms. Larson said this project is of particular interest because it targets safety relevant driving among the riskiest drivers – teens. This project is on human factors research which is an emerging area in transportation research. By studying the driving behavior of various segments of our population, we can better understand the cause of accidents and focus on improving safety for the motoring public.

Ms. Larson said Dr. McGehee is the Director of the Human Factors and Vehicle Safety Research Division at the University of Iowa's Public Policy Center. He holds adjunct appointments at the University of Iowa with the colleges of engineering, public health, injury prevention research center, and NADS (National Advance Driving Simulator). He is one of the first researchers in the country to place triggered video devices in cars driven by teens for scientific evaluation, and this is the first study in rural Iowa and urban Minneapolis. Between the Iowa and Minnesota studies, he has tested this method in over a half million miles of teen driving. Ms. Larson said we are excited about the opportunity this research project gives us to learn about and make a positive impact on teen driving behavior and we are optimistic about the difference that can be made through what we learn in this research project.

Dr. McGehee said teen driving crashes are a major public health issue and the number one cause of death among teens. These crashes, fatalities, and injuries are due to a set of imperfectly learned motor vehicle control skills; i.e., inability to identify hazards, willingness to take risks especially with other passengers on board, and poor calibration of driving ability relative to driving demands. They have cell phones; they are texting; they have iPods; and, as always, they have peer influence. Based on what we see in crash data, every teen added to a vehicle increases the risk of a crash almost exponentially. That is directly illustrated by an accident that happened last month in Edgewood when a driver with a school permit and five kids on board crashed on the way to school resulting in one fatality.

Dr. McGehee said video feedback intervention is one technological method the University looks at. They look at a number of technologies that try to reduce risks in driving but they are also interested in changing behavior for the long term. There are

many “tattletale” system technologies that can track a teen driver and evaluate how fast they go but the context is missing. They want to be able to extend the parent’s mentoring ability, and the technology he will show today essentially allows parents to drive with the teen but only show up when they have a risky event or something that causes abrupt braking or steering. The video provides a crucial context for the learning aspect which is the long-term goal for this project.

Dr. McGehee said the in-vehicle system they use places a camera behind the rearview mirror. It is always on but does not record until there is an exceedance event; i.e., abrupt braking or steering, and then it goes back and records ten seconds before and after the event. You get that one 20 second event. The main issue is that the teen has control with this technology, and that is a critical element because technology acceptance is the key to the success of the program. The driver sees a little blinking light when the camera goes off so they immediately know when it is recording. The system is downloaded through a secure wireless network every time they drive into the high school parking lot.

Dr. McGehee said there are many technologies. They evaluated a lot of them but they really wanted to find out if this kind of system works. Can they design an intervention (a weekly report card) that provides that critical element for parents to essentially co-drive with their teen? Can this reduce the kind of driving events that are representative of crashes and, of course, increase seatbelt usage among all drivers? They developed a lot of data coding analyses and communication protocols for parents.

Dr. McGehee said they chose to do the study in Tiffin, Iowa, where Clear Creek Amana High School is located. It is unique in the sense it has a 162 square mile area that teens have to commute (40 miles per day on average) so there is exposure to rural highways and gravel roads. Another reason they chose Clear Creek is over the last six years, there have been five separate fatalities in teen crashes. With only 60 kids in each class this is a terrible concern.

Dr. McGehee said they employed the system for 57 weeks among 25 teens (13 young women and 12 young men). For the first nine weeks the system was in the car the kids didn’t get any feedback. University staff wanted to characterize their driving, see how many times they triggered the system. For the next 40 weeks the teens and their parents were given a weekly report card. The teens drove over 366,000 miles in one year and triggered over 4,000 twenty-second events including two airbag crashes, three non-airbag crashes, three near catastrophic crashes which means a significant evasive maneuver was required, four deer collisions, and nearly two dozen near deer collisions.

Using power point, Dr. McGehee showed a picture of the Clear Creek Amana High School. The antenna on the side of the building covers a three acre parking lot so every day when the teen parks his/her car, their data gets downloaded and transferred to University where it is analyzed. It is an advanced, high tech way to integrate an additional learning experience to the drivers. Weekly the drivers/parents get a summary and graphical report card of where they sit relative to the peer group. He noted over two-thirds of the drivers don't trigger the system any more in both the rural and urban areas. They also look at the young driver's seatbelt compliance as they can identify their seatbelt usage. An interesting thing is that it gets parents engaged in their own seatbelt activity. Also critical is the passenger seatbelt usage. Some 80 to 90 percent of drivers use a seatbelt but only 15 percent of passengers, nationally, use one especially among teens. At the end of the program drivers were at 100 percent seatbelt compliance and passengers at 85 percent.

Dr. McGehee said between the urban and rural studies they have over 7,000 video clips. He presented a case study of a rural 16-year old driver who started the program with a zero percent seatbelt usage rate. This driver would trigger the system 15 to 20 times on his way to and from school. Dr. McGehee reviewed a 20-second film clip showing the driver cutting the corner frequently at about 40 miles per hour. The next clip showed the same young man in a rear-end crash in Iowa City that totaled his car. After this young man started the program and started getting weekly feedback, his seatbelt usage rate went to 100 percent. Several months later during the winter, he was driving a rural highway at about 60-miles per hour when a truck pulled out in front of him and he rolled his vehicle on its side. In the video clip, you can see how, when his vehicle is sliding on its side, the seatbelt holds him in. Dr. McGehee said this is a quick illustration of how dramatic some of these experiences are and the parent can use this as part of their educational tool to point directly to the context of these events.

When doing this kind of study, Dr. McGehee said you might expect that if a camera is placed in a car, that car might not be driven as much but one of the things about a rural environment is that once you are involved in that commute, the vehicle is used. They found during the baseline period (the first nine weeks) that the students drove about 36 miles per day and that increased to about 41 miles per day so there wasn't a decrease in driving which is something they were interested in looking at.

Dr. McGehee said they found that one-third of the drivers were high risk and triggered the system all the time. About two-thirds of the drivers were fairly normal; they triggered the system maybe a couple times a week. In the baseline period, the researchers looked at number of events per thousand miles. The risky group drops after just nine weeks, and after a period of another ten weeks the high-risk group matches the low-risk

group, and over the course of the year, they pretty much flatten out. At the end, they take the system out for two months and then look at how they sit, and the high-risk group actually dropped events relative to the low-risk group. In regard to crash data, the first six months of teen driving is the most risky. That is where you see the most fatalities and crashes.

Dr. McGehee said technology acceptance is key to being able to implement this kind of technology. He gives presentations all the time but the hardest is going into a high school full of new 16-year drivers and telling them he wants to put a camera in their car. Once they understand they have control over the system, their parents will give them more autonomy. He reviewed some follow-up questions presented to the teens:

- When the camera triggered while you were turning, how often did you agree that you had turned too fast? Eighty percent agreed they had turned too fast. There were similar statistics in regard to braking. They were essentially agreeing that the way we set up the system trigger was accurate.

- Do you think it changed the way you drove? The response was 72 percent of the time it changed the way they drove.

- Do you feel like you knew what would trigger the camera? One hundred percent of the students knew what would trigger the system. This gets to control. If they can figure out a way to fly under the radar, the effect, essentially, is to slow down, anticipate traffic, etc. Dr. McGehee said one of the teens indicated he had figured out the system by anticipating the traffic ahead and slowing down for corners, and he hadn't triggered the system in two months.

- Were you able to keep the camera from triggering? The response was 84 percent of the time they could.

- Did you feel the camera was an invasion of privacy? Ninety-two percent said no. It gets back to their comment that they can control this and know what sets it off.

Dr. McGehee said after completing the program, 60 percent felt they were a safer driver and 64 percent felt more confident in their driving. When asked if they were glad they participated in the program, 100 percent responded yes, and all would recommend this program to other teens. Dr. McGehee said he took some of the Tiffin students with him when he recruited students in Eagan, Minnesota. In regard to overall satisfaction with the program, all the students were satisfied/very satisfied.

Dr. McGehee noted the rural study found that 33 percent of the drivers were risky compared to 40 percent in the urban group. And after so many miles, they are starting to get some interesting teen driving patterns. The good news is this behavior is amenable to the weekly intervention, the report card, to reduce those risky drivers, and the majority of the benefit was seen in just nine weeks in this particular group.

In regard to the urban pilot study, Dr. McGehee said Ms. Larson has provided fantastic support in coordinating with other states. They also received a grant from the Center of Disease Control and Prevention (CDC) to look at 14-year old school permit drivers so they are looking for new partnerships and collaborations as part of that. They are currently proposing a "million mile study" which is a four-year study that starts with 14-year old school permit drivers and follows them until they are 18. The goal is to capture a million miles for those four years, and they are trying to put together a six-state partnership involving states with school permits. They want to see what works on our highways because there is a high crash rate within the school permit rank relative to the 16-year old driver so it is a significant issue. Dr. McGehee said rural driving is key to this because of the high mileage exposure. In the urban area the high school is generally a few miles from home and the number of miles and amount of time the teen driver is on the road is not that great whereas if you are on the road an hour per day, that is where they see the most dangerous crashes and injury areas.

Dr. McGehee said they are currently seeking additional partners. NHTSA (National Highway Traffic Safety Administration) and CDC are partners, and they would like to get additional funding from Iowa, Kansas, Mississippi, Montana, South Dakota, and Wyoming which are school permit states that allow 14½- to 15-year olds to drive to and from school activities.

In terms of feedback from these events, Commissioner MacGregor asked if that is all parent feedback or is there another source feeding information to these kids when the data is collected. Dr. McGehee said they provide a factual report that describes what is seen in those 20-second videos. They can provide support for the parents but like the saying "a picture is worth a thousand words," these videos are worth more. The teen knows they have done something; they can see what they have done, right or wrong, and it is the start of conversation for those safety related issues. They provide a factual record of the event that triggered the camera so they don't have to say anything because it is generally clear what has occurred.

Commissioner Boden asked how Dr. McGehee foresees implementing this for the average student driver and parent because everyone can't be part of this program. Dr. McGehee said the initial project was funded by American Family Insurance through research grants. Economically it makes sense for insurance companies to employ this.

In fact, American Family Insurance decided to do a three state pilot program where they gave the system to a thousand drivers. As of three weeks ago, they expanded this to all 18 of their states. Commissioner Boden asked if the University is set up so if 200,000 students or their parents want to participate, they can. Dr. McGehee said the University is not. They are there to examine the scientific aspect to see what does and doesn't work. The private sector would have to take on those 200,000 students. Drive Cam, for instance, supplies commercial vehicle fleets with event data recorders and has the ability to take that on.

Ms. Richardson asked if American Family Insurance offers an incentive like an insurance rate difference if this was put in a teen's car. Dr. McGehee said yes; you could save money and have "peace of mind." Parents feel they are able to participate in their teens driving and can see when things go right or wrong and when there are no more events. The lack of events generally equates to calmer driving.

Ms. Richardson said the Department is proposing legislation relative to teen driving and may call on Dr. McGehee. She met with the folks at the Injury Prevention Center and they stand ready to help if we can get before legislative committees. This information could be helpful. It was stated that 33 percent in the rural study and 40 percent in the urban study were considered risky drivers. The implication to her was that is a greater dichotomy between the two than you would find in the general public. Do we know the ratio for the general public? Dr. McGehee said we don't know. That is what we found in these two particular teen populations. Based on research that looks at risk in general, we know that parents who have different risky behaviors, whether smoking, alcohol, non-seatbelt use, etc., have children that follow similar patterns.

Ms. Richardson asked if the study does any long-term follow up. Dr. McGehee said for the rural study they will contact the students after a year and ask them to fill out a survey. The full-time data collection for the rural study ended at the end of the school year in May so they are close to doing a post study for them. The Eagan High School project will last until the end of the school year this year so they are about a year behind. They hope to start the study of 14-year old school permit drivers this fall. At the national level they are looking at how universities in other states have provided information to law-making practices. North Carolina, for example, is primarily a rural state with some urban components. They have one of the best graduated drivers licensing tools in the country and have actually shown dramatic reductions of fatalities and injuries post implementation.

Chairman Cleaveland asked if Dr. McGehee has considered applying this program to senior drivers. Dr. McGehee said they are looking at implementing this in a number of populations. This week he met with the Director of the Iowa Traumatic Brain Injury

Network and will be meeting at the national level on that. They are looking at other neurologically impaired populations (Alzheimer, Parkinson, and other age related dementias). When children become the care takers and decision makers for their parents, often times it is a challenge to take away that drivers license. This could be a diagnostic tool or shine the spotlight on an older person who is having difficulties and doesn't see what they are doing in traffic. The problem with age is that it doesn't generally get better. With teens improvements can be made.

Ms. Richardson asked if the camera can be calibrated to trigger at different points. Dr. McGehee said yes, they worked with a company to develop a more sophisticated box that now has global positioning system information so they can trace the routes of drivers as well as get all the vehicle information – speed, engine parameters, braking, etc. They can tap into that electronic data and capture it into one packet of information.

Commissioner Blouin said it was stated the technology triggers 10 seconds before the event and 10 seconds after. How does that work? Dr. McGehee said it is on 24 hours a day and has a little sensor that lies in wait. Commissioner Blouin said so it is constantly recording but just keeps the record 10 seconds before and after an event. Dr. McGehee said yes, it remains on when the car is parked and has even captured hail storm events.

Commissioner MacGregor asked how parents access the information. Dr. McGehee said they currently receive a CD in the mail of recorded events and a report card every Friday. The first thing the parent will say they do is bend the envelope and hope they don't have a CD. The next version will be a web-based download. A large part of the population, especially in rural areas, doesn't have access to high speed internet or possibly even have a computer so the University is intentionally slow to go high tech with the information. The software is intentionally designed to work with Windows 98 so a person can have a six-year old computer and still use this program.

Commissioner Wiley asked what the device on the high school does. Dr. McGehee said it essentially is a wireless antenna and 15 seconds after the student parks in the high school parking lot it sends a signal to find its mate and will download its information through an encrypted protocol. Commissioner Wiley said that was for the study group at the high school. What would be done if you had a scattered group? Dr. McGehee said we would pay them $5 a week to park in the lot for a minute. The next version is a cellular system so they won't have that constraint. When an event is captured, it will immediately get downloaded through the cellular network.

Chairman Cleaveland asked if there are any candidates for America's Funniest Videos. Dr. McGehee said they have many. This can be somewhat entertaining or quite tragic. When students crash the video can be very graphic. They had one serious crash and had to go to the site to reconstruct the crash. This is a unique piece of information for crash engineering and injury control. In the future they will be able to transfer the video to the Trauma department, and they are working with the University of Iowa Hospitals and Clinics Trauma program to determine if in ten years when it is more acceptable in terms of being able to record this, how the trauma doctors can be trained to evaluate injuries from this kind of video. They are looking at different applications.

Commissioner Wiley asked if there is a legal question as far as access to data in determining where the fault lies in an accident. Dr. McGehee said the National Institute of Health provides a certificate of confidentiality which is a federally protected certificate that essentially protects any subject participants' data, and research can't be release as part of the court's subpoena process. It becomes a different story within the insurance industry implementation but a lot of that case law has been argued. About eight years ago, General Motors started putting chips in cars that record speed, whether or not the brakes were applied, etc. That law is more mature in terms of who owns that data when there is a crash. For now, cameras in cars are rare so when there has been a crash, the last thing the officer will notice is the camera. Most times they have found it exonerates the teen which helps the insurance companies. They see exactly what happens and don't have to go through a long litigation process.

Ms. Richardson said she wasn't sure how the students in the research were solicited but the different involvement and skill levels of parenting could also have an impact. She asked if Dr. McGehee was able to see any difference in outcome based on commitment and skill levels of parents. Did they always deal weekly with their child on the report? How much time did they spend, etc.? Dr. McGehee said they saw a bigger parental issue in the urban area. When a parent doesn't review the report cards, the events continue to go up. An advantage of the on-line version is the researchers can see whether or not the parent has opened the report card; they don't know that now. Parent involvement is important. Where there isn't parent involvement, this doesn't work, and they are seeing that in Minneapolis. They didn't see it as much in the rural areas but they were such small groups, it is hard to generalize. As in everything, if the parents are unengaged, you are going to have more difficulties.

This item is for information only.