



The Future of Driving: The Hype, the Reality, & How to Prepare

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With contributions from the TFL Team

www.gatfl.org

For Handouts: <http://www.gatfl.gatech.edu/tflwiki>

Thursday, March 30, 2016

www.amacusg.org





Welcome to the Assistive Technology Revolution!

- Session Overview:
- This session will discuss the helpful tools, both low tech and high tech in place for both populations of drivers. Alternatives to driving, pertinent across the lifespan, will also be discussed. The future of driving will examine driverless cars, technology research and the perils and advantages to both. Participants will be able to identify currently available options and programs and learn how to prepare their communities for the advent of all this new technology.

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AMAC

AMAC Accessibility is a social change organization on a mission to create affordable services for governmental, private and non-profits organization working with individuals with disabilities. Services include e-text, braille, captioning, assistive technology, office management software and consulting.



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Anaheim, California

INTEGRATING UDL AND AT TO CLOSE

THE ACHIEVEMENT GAP

**FEB
25**Griffin RESA
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H
Griffin, GA 30224

ATLANTA ABILITIES EXPO

**Abilities
EXPO****MAR**Georgia World Congress
Center
Hall G4

TFL AppFinder



Georgia Tech TOOLS for LIFE
Georgia's Assistive Technology Act Program

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Welcome to Tools for Life

Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing access to and acquisition of assistive technology (AT) devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice.

Tools for Life and the TFL Network work collaboratively together to accomplish our mission through:

IDEAS CONFERENCE

JUN 2 Epworth by the Sea, St Simons Island

WEBINARS

MAY 28 [Georgia's Leadership Model for Increasing Accessible ICT in State Government](#)

JUN 25 [Learn More and Do More: Exploring Accessibility and Apps for Android](#)

JUL 30 [Position for Work: A Closer Look at Workplace Accommodations & Assessments](#)

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- Webinar Archives

TOOLS FOR LIFE APPFINDER



...for Living, Learning, Working, and Playing.

AT ONLINE EXCHANGE



AT Acquisition!

- Tools for Life endeavors to break down the barriers which prevent individuals with disabilities, their families, and service providers from acquiring and effectively using Assistive Technologies to gain greater independence.
- To insure that AT products are available to Georgians with disabilities
- Eliminate Funding Barriers





Vehicle Modification Discounts

Vehicle Discounts

[Ford Mobility Motoring](#) offers up to \$1,000 of assistance toward the cost of adaptive equipment on a new Ford, Lincoln or Mercury vehicle. Ford Mobility Motoring Customer Care Center; 1-800-952-2248.

[GM Mobility Program](#) with OnStar offers up to \$1,000 reimbursement (\$1,200 on Chevy Express/GMC Savana vans) plus two extra years of the OnStar safety and security service on an eligible new GM vehicle (except Cadillac); 1-800-323-9935. Toyota Mobility Program provides cash reimbursement of up to \$1,000 toward aftermarket adaptive equipment or conversion installed on any eligible purchased or leased new Toyota; 1-800-331-4331.

The [Chrysler Automobile Program](#) provides up to \$1,000 in financial assistance toward the installation of adaptive equipment on new Chrysler, Jeep and Dodge vehicles; 1-800-255-9877.

[Hyundai Mobility Program](#) offers \$1,000 toward the cost of adaptive equipment. See dealer for more; 1-800-633-5151.

[Lexus Mobility Program](#) provides Lexus retail vehicle buyers with a cash reimbursement of up to \$1,000 to help offset expenses incurred for adaptive mobility equipment; 1-800-255-3987.

[Volvo Mobility Program](#) reimburses up to \$1,000 toward the cost of adaptive equipment added to a new Volvo. Mobility by Volvo Center; 1-800-803-5222.

- http://www.christopherreeve.org/site/c.mtKZKgMWKwG/b.4453469/k.8F9D/Cars_and_Driving.htm

In-Vehicle AT & TBI- Research

In-Vehicle Assistive Technology (IVAT) for Drivers Who Have Survived a Traumatic Brain Injury

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ABSTRACT

IVAT (in-vehicle assistive technology) is an in-dash interface borne out from a collaborative effort between the Shepherd Center assistive technology team, the Georgia Tech Sonification Laboratory, and Centrafuse™. The aim of this technology is to increase driver safety by taking individual cognitive abilities and limitations into account. While the potential applications of IVAT are widespread, the initial population of interest for the current research is survivors of a traumatic brain injury (TBI). TBI can cause a variety of impairments that limit driving ability. IVAT is aimed at enabling the individual to overcome these limitations in order to regain some independence by driving after injury.

Categories and Subject Descriptors

J.4 [Computer Applications]: Social and Behavioral Sciences – Psychology.

General Terms

Performance, Design, Human Factors

Keywords



Figure 1. IVAT in-dash display.

2. TRAUMATIC BRAIN INJURY

2.1 TBI Classification

The level and type of cognitive limitations resulting from TBI depend on the injury details: severity, mechanism, and location. The most common causes of TBI include violence, transportation accidents, construction mishaps, and sports injuries [6]. Brain concussion, cortical contusions, intracranial hemorrhage, and axonal shear injury may occur with both open and closed head injuries. Classification is generally made using observational

Key Extender

Key Extender



- For those with limited hand mobility or arthritis, key extenders offer more leverage for turning keys in the door and ignition.

Leveraging Devices

Leveraging Devices



- This equipment provides a secure platform for drivers getting in and out of a car. The stainless steel device locks securely into position, utilizing the vehicle's U-type striker plate where the door latches.
 - Easy to store and carry, this product includes a safety belt cutter and side window breaker, and it can support up to 350 pounds.
 - These devices do not work on vehicles that do not have a U-shaped striker on the door pillar.
- <http://seniordriving.aaa.com>

Swivel Seat Cushion

Swivel Seat Cushion



- Swivel seat cushions work well for most drivers by reducing pain in the back, hips and knees.
- Ideal for car seats, the seat cushion rotates, allowing the driver to smoothly transfer from a sitting to standing position, and vice versa.

Panoramic Mirrors

Panoramic Mirros



- Convex panoramic rearview mirrors reduce blind spots simply by clipping onto your existing rearview mirror.
- This type of mirror is ideal for drivers who have limited neck mobility or a difficult time looking over their shoulder to perform a check of the blind spot.

Convex Mirrors

Convex Mirrors



- For drivers with neck mobility problems, convex safety mirrors can help drivers reduce dangers caused by your blind spot when passing and changing lanes on the road.
- When used properly, convex mirrors will show drivers what is in their blind spot without having to turn the neck too far.

Pedal Extender

Pedal Extender



- Pedal extensions allow drivers to comfortably reach gas and brake pedals.
- They help drivers maintain a greater distance from the air bag in the event of a deployment.
- Pedals come in a variety of lengths, from 1 to 4 inches high, and should be installed by a professional.

Portable Left Foot Accelerator

plfa Portable Left Foot Accelerator

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A left foot accelerator you can easily transfer to most vehicles. Car rentals are no longer a problem. This system was originally developed by Becky and Mike Marquis for Mike's limited use of his right leg due to a stroke. Mike, who enjoys driving, is not confined to driving one customized vehicle. This quality built Portable Left Foot Accelerator is light weight, extremely safe and easy to use, and competitively priced.

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Portable Driving Aid
for the physically challenged



Leg Lift Strap

Leg Lift Strap



- Leg lift straps can help drivers with limited lower extremity strength.
- The strap attaches to the thigh or foot, allowing the driver to use upper body strength to lift his or her leg into a vehicle.
- This provides drivers an easier way to transfer from a wheelchair to the cars seat.

EQUAL: A Compact Electric Vehicle Specially Designed for People with Disabilities



Concept Car - GM

The Benefits of Driverless Cars for Disabled People

There are many benefits of driverless cars, some general and some specific to people with disabilities. The more general benefits of driverless vehicles include:

Improved Safety

Human error is a key factor in many road traffic accidents, with driverless vehicles there is no human error and failing to look or not seeing hazards is no longer an issue. Driverless vehicles use a range of sensors placed around the whole car, ensuring they can sense hazards. If safety is improved then there will be less risk of injuries, fatalities and disabilities caused by traffic accidents.



General Motors EN-V Electric Autonomous
Concept Car

Shepherd Center Driving Evaluation

- Before an appointment can be scheduled, you **MUST** obtain a doctor's referral (either and MD order that requests a "PT/OT driving evaluation" or the completed Driver Rehabilitation Referral form below). Please complete the following steps to help us schedule your appointment as quickly as possible:
- Print out our referral packet (Referral Form and Driver Rehabilitation Referral) below and have your doctor complete the forms and return them to Shepherd Center.
- Your doctor must fax the order and a copy of your medical history that lists your chronic (long-term) and acute (short-term) illness to 404-350-7356.
- If you have vision issues, your eye specialist must complete the Vision Approval form in the packet. If you do not have visions issues, you may disregard that form.
- Once your forms are received, Shepherd Center will contact you to set up an appointment.
- **To contact Shepherd Center directly to schedule an appointment call 404-350-7760.**

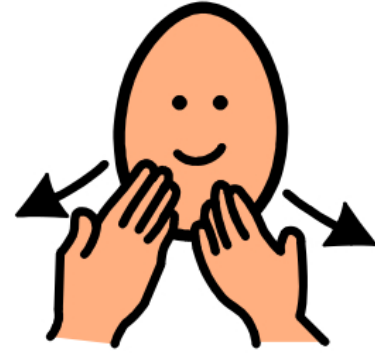




**My Question to You:
What have You Learned today?**

Thank You!

thank you



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Disclaimer

This presentation is produced by Tools for Life which is a result of the Assistive Technology Act of 1998, as amended in 2004. It is a program of the Georgia Institute of Technology, College of Architecture, AMAC Accessibility Solutions and Research Center and was made possible by Grant Number H224C030009 from the Administration for Community Living. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HHS.