

# **NOAH 2024 Bioptic Driving Workshop: Methods for Screening, Training & Licensing Candidates**

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# **Bioptic Driving Updates**

# Objectives

- Provide a sampling of major bioptic driving related updates in the United States and Canada
  - Legislation or litigation
  - Workshops
  - Research
  - The ***Next Frontier!***

# Legislation

# PA HB 2296

- Passed & signed into law by Governor Tom Wolfe, 11/25/20
- **PA Bioptic Driving Planning Committee:**
  - Paul Freeman, OD (front, left)
  - Holly Stants, OTR/L, SCLV (front right)
  - Chuck Huss, COMS (left rear)
  - Amy Lane, OTR/L, CDRS (right rear)
  - Marshall Stafford, MD (no photo)
  - Angelia Gillis, PENN DOT (no photo)  
(Mngr.- Driver Qual. Sec., Bur. of Driver Lic.)
  - Chris Magaro, PENN DOT (no photo)
  - Robert Dowling, PENN DOT (no photo)
- **23rd state- 20/200 bioptic driving**



- **Multi-disciplinary professional team in-service staff training (X8), 4/21-6/21**



# Basic bioptic usage lesson (on-foot)



# Reinforcement as active, front seat passengers-in-car





# Sequentially-formatted programs of instruction

- Three (3) regionally located programs
  - Pittsburgh, PA
  - Malvern, PA
  - Philadelphia, PA
- Ten (10) community-based programs providing more homebound type of instruction, **9/21**)

# Vision requirements

- 20/120-20/200 carrier lens vision
- 120° combined horizontal field of view
- Max. 6X bioptic telescope \*
- Enhanced VA of 20/50 - day-time privileges, 20/40 - night-time privileges after one year
- Good color vision

\* Low vision exam and device - funded by PA BBVS, if patient is an agency client

# Training requirements

- Possession of bioptic – 90 days (10 hrs. of passenger-in-car (PIC) training (COMS, CLVT, CDI, CDRS)
- Instructional permit testing
- 20 hrs. behind-the-wheel (BTW) by CDI, CDRS
- 45 hrs. logged driving (parent, CDI, CDRS)
- Driver re-evaluation (CDI, CDRS)
- Standard operator's road test

# Licensure restrictions

- Daytime driving privileges
- Bioptic in place
- Vehicle 10,000 lbs. or less
- Possible radius from home
- No interstate driving
- Annual low vision examination, including visual field testing
- Implementation date: **11/21**

# 3rd party funding announcement

- Administrative staff in-service, **Jun 2022**, arranged by Grace Fontanez, Voc. Rehab. Spec., PA OVR, BBVS (Chuck Huss, COMS - guest presenter – Overview of PA 2296, WV past successes)
- **May 2023** , Dawn Sokol, LPC, CAADC, Director of PA Bureau of Blindness & Visual Services (BBVS)
- BBVS will assist in funding PIC, BTW, and final driver evaluation by CDI or CDRS for BBVS clients, prior to road testing for driver licensure.
- Contact: Janet Roach, (814) 871- 4401, [bbvs@ pa.gov](mailto:bbvs@pa.gov)

# Status of students or clients served

- Ray Vissari (photo to the right) first licensed bioptic driver (11/22) under HB 2296
- Four (4) other licensed bioptic drivers in PA
- Five other applicants in various stages of PIC-BTW training



# Litigation

# Ontario legal challenge

- 2018, the Ontario Ministry of Transportation's (MOT) suspended the driver's license of an experienced Ontario bioptic driver, who subsequently appealed that decision.
- After 2½ years, the bioptic driver won his Charter challenge (and his driver's license restored); because the suspension of his driver's license was ruled a ***violation of the Canadian Charter of Rights and Freedoms.***



# Legal challenge (cont'd)

- October, 2020, the Ministry of Transportation of Ontario (MTO) amended the Traffic Act to accept the use of telescopes to meet the acuity requirements for Class G driver's licenses, which apply to standard motor vehicles, not exceeding 11,000 kilograms gross weight.
- However, the standard for the new amended act to allow for bioptic driving in Ontario was not approved and put into place until ***January 2023***

# Basic entry requirements

- 16 years of age
- Best corrected visual acuity (BCVA) no less than 20/160 in the better eye
- Full visual field as required by regulations (i.e. 120°)\*
- Contrast sensitivity values 1.35 or greater\*\*
- Telescope power not to surpass 4X magnification
- Telescopes that are Autofocus in design are not permitted
- Enhanced visual acuity through telescope of 20/50 or better
- Telescope to fit in true bioptic position
- In office training including: focusing, spotting, and tracking
- Minimum three (3) months using bioptic device (on-foot, bicycle, passenger-in-car (PIC))

**\*Discretion applied re central scotoma**

**\*\* Those applicants below 1.35 may be considered**

# Initial clinical low vision examination for bioptic driving applicants:\*

- Comprehensive case history
- Visual acuity testing with and without any current glasses
- Updated refraction to determine eye glass prescription
- Contrast sensitivity testing
- Color vision testing
- Evaluation with telescopes, bioptic telescopic lens systems, and other low vision devices
- Ocular health assessment
- Visual field testing
- Initial training session (day of visit or at follow-up visit)

\*Compliments: Drs. Tammy Labreche, OD Waterloo, ONT. and Ana Juricic, OD, Toronto, ONT, CAN, Webinar recordings, 2021 and 2023 respectively.

# If applicant meets basic entry requirements:

- Restricted driver's license (G1) will be issued.
- Referral is then made for both an in-clinic and on-road assessment (referred to as a "**functional assessment**") with specially trained occupational therapist.

# Wendy Nieuwland, OT Reg., CDRS

- Wendy Nieuwland, OT Reg. CDRS, Skill Builders Physiotherapy & Rehab Center, 370 Bayview Drive, Suite 100, Barrie, Ontario, L4N 7I3 is currently the only government approved testing center for bioptic driver applicants in Ontario, as of 2024.



# Driver Assessment & Rehabilitation Dept. Staff: Skill Builders Physiotherapy & Rehab Center, Barrie, Ontario, CAN



- Staff members (sitting 1st row, left to right - **Stacy E.**, Driver Rehab. Coordinator, **Michele B.**, Driver Rehab.. Coordinator, and **Lisa Clubb**, Occupational Therapist, CDRS; (Standing back row, left to right): **Norman Phillips**, Licensed Driving Instructor, Driver Rehab. Specialist, **Wendy Nieuwland**, Occupational Therapist, Licensed Driving Instructor and CDRS, **Brent Turner**, Licensed Driving Instructor, Driver Rehab. Specialist with ADED badges of Specialized Instructor, Vision and Older Driver, and **Maria Wright** (not present but her CDRS certificate is), Occupational Therapist, License Driving Instructor and CDRS.

6/29/2024

# Components of the Telescopic Lens Functional Assessment

- The functional assessment consists of a **standardized in-clinic assessment** and a **standardized on-road evaluation**
  - The **in-clinic assessment** includes:
    - A standard group of tests to determine if driving performance will be impacted by the condition.
    - A brief medical history and a review of all medical reports provided

# Sample in-clinic assessment\*

- Contrast sensitivity
- Glare control and recovery
- Color vision
- Vision Perception: Trail making, Depth Perception, MVPT-4
- Cognition: Short Blessed Test, MoCA, Mini mental, Clock drawing
- Useful field of view- test of visual attention
- Driving skills quiz
- Simulated Driving assessment

\*Compliments of Dr. Bhavani Iyer, OD, Director, Dan Arnold Center for Vision Rehabilitation, The University of Texas Health Science Center of Houston, [bhavani.iyer@uth.tmc.edu](mailto:bhavani.iyer@uth.tmc.edu)



# Telescopic Lens Functional Assessment (cont'd)

- The **on-road portion** of the evaluation includes:
- Standardized maneuvers aimed at assessing visual function and the individual's ability to use the telescopic lens effectively while driving.
- Recommendations regarding the number of training sessions to be provided, once the evaluation is completed.
- Novice drivers usually require more training than those who are, or have been, licensed.

# Following the functional assessment

- If passed, an individualized-competency based program of formalized bioptic driver training is considered or recommended for both novice as well as the experienced driver candidates.
- In-car training is provided by three (3) occupational therapists, employed at Skill Builders Physiotherapy and Rehabilitation Center, Barrie, ON (two of the above OT's are trained as licensed driving instructors and both are ADED certified driver rehabilitation specialists (CDRS). And two (2) licensed driving instructors who have advanced training (one who has achieved the VISION and Older Driver Badge from ADED).

# Follow up requirements

- An annual clinical low vision re-examination is required to ensure no deterioration in vision or change in prescription
- The renewal or re-examination form will be sent to all licensed in-Province bioptic drivers in advance of the due date by the Ministry of Transportation of Ontario (MTO).
- For more information on the medical review process and national medical standards, visit us at [Medical Review for Ontario drivers, Ontario, Canada](#)

# Costs re formalized bioptic driving services

- Individual being assessed is responsible for all costs related to the telescopic lens, driving evaluation and training lessons.
- Consideration of financial assistance through **Assistive Device Program (ADP)**

# Legislation

# CT SSB 333

- Passed and signed into law by **CT Governor Ned Lamont, May 17th, 2022.**
- The Commissioner of Motor Vehicles shall issue a motor vehicle operator's license to a person who wears spectacles with bioptic lenses, provided such person otherwise meets the vision standards specified in the regulations adopted pursuant to subsection (a) of this section and requirements for such driver's license.

# Mobilization of a CT Bioptic Driving Task Force

## CT DMV STAFF

- **Tanisha Markland** – MV Analyst/Project Co-Lead on Bioptic Legislation
- **Melissa Jones** - MV Analyst/Project Co-Lead on Bioptic Legislation
- **Lynell Little**, MV Program Coordinator
- **Susan Archambault**, Division Manager, Driver Regulation Bureau.
- **Deborah Notarino**, Act. Division Chief, Driver Regulation Bureau
- **Deborah Mayer**, Consultant-Licensing

## DRIVER REHAB. STAFF

- **Raechaell Corbett**, MS, OTR/L, CDRS, CDI, ESMC
- **Eric Cybulski**, VP-Program Adm., ESMC
- **Melissa Owens**, CDI, CDRS, Dept. of Aging & Disability Services (ADS)
- **Leslie Prescott**, OTD
- **Joan Sevigny Cramer**, MS, OTR/L, CDRS, CDI
- **Theresa Zerilli Zavgorodni**
- **Michele A. Prof. Taratino**
- **Chuck Huss**, COMS, Consultant - Bioptic Driving

# Monthly zoom meetings arranged by Raechaell Corbett, OTR/L, SCLV, CDRS, ESMC to discuss:

- Proposed vision requirements
- Form development (referral – licensure)
- Initial screening (clinical, in-car)
- Future Program coordination, screening, training & regulation
- Scheduling and central source for future in-service staff training





# Zoom session with CT Voc. Rehab.

- **CT BESB & CT VR (5'24)\*:**

- Carol Jenkins, BESB  
Director, CT Aging &  
Disability Services (ADS)
- Mary Burgard, Program  
Supvr., CT ADS.
- Torrey Morse, Education  
Consultant, CT ADS

- **Organized by Raechaell Corbett, MS OTR/L,  
CDRS and Chuck Huss, COMS, Bioptic  
Driving Consultant, Guest Presenter**

- **Areas of discussion:**

- CT SSB 333 & implementation  
date
- Names, number & location of  
professional staff willing to  
provide bioptic driving services
- Inquiry re number of potential  
bioptic referrals per BBVI district
- Rationale for support of Programs
- Potential funding for bioptics  
and services

# Workshop(s)

# In The Driver's Seat Workshops

- Collaborative effort for the TSBVI Short-Term Programs and Outreach Department staff
- Under the direction and coordination of:
- Cindy Bachofer, PhD, CLVT,  
TSBVI Low Vision Consultant  
1100 W. 45<sup>th</sup> Street  
Austin, TX 78756  
[bachoferc@tsbvi.edu](mailto:bachoferc@tsbvi.edu)  
(512) 206-9320



# 3-day annual event @ TSBVI

- Multi-disciplinary team of professionals
- TX VI students (n=15) and parents to gain full awareness of pre-requisites or process of bioptic driving in Texas
- Lectures, panel discussions, hands-on experience with mock-up bioptics (parking lot, passenger-in-car), Q&A



# Workshop agenda

- Visual factors of driving, bioptic design and fitting
- Steps to develop pre-driver awareness skills
- Awareness of TX driving qualifications for individuals with visual impairment
- Cost and time commitments to getting a driver's license
- Access to alternate forms of transportation as an active traveler (non-driver)

# Uncovering the Hidden Population in Low Vision

- Brief overview of the findings and benefits of this low vision driving program workshop for Texas students with vision impairments and their parents, 2012-2022



# Driving Points of the Data

1. What were the characteristics of participants who qualify for driving?
2. What factors predict likelihood of getting a license?
3. How did participants rate the impact of the Driver's Seat Workshop (DSW)?

# Telephone interview -2022

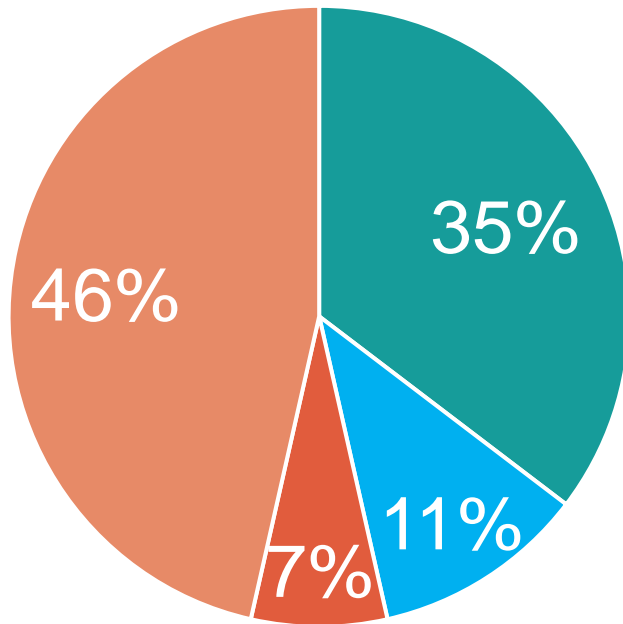
- 15 questions asked
- 75% response rate (111 respondents/148 workshop attendees)\*
- 60% males, 40% females
- Year in school (2 cohorts)
- 11%/ 26% Freshmen
- 33%/ 24% Sophomores
- 25%/ 25% Juniors
- 31%/ 25% Seniors
- Twenty (20) eye etiologies with albinism most prevalent (35%, Cohort 1, 30% cohort 2)

\* attendees wanted to talk about!

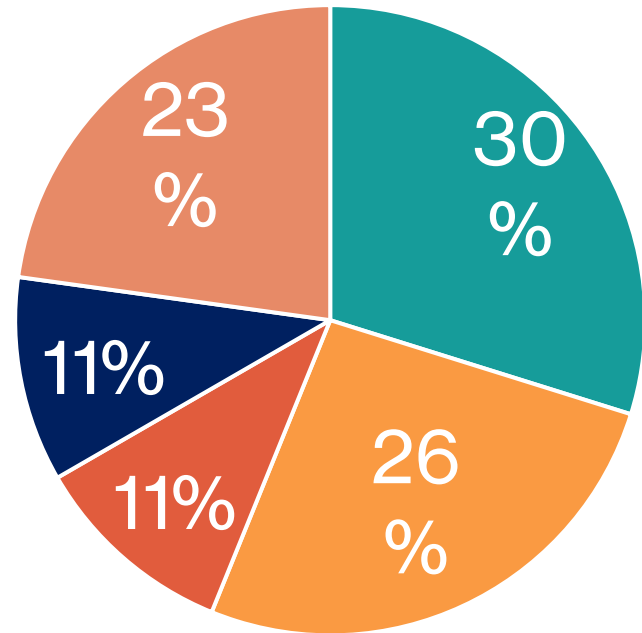




# Eye Conditions for Cohort 1 & 2



■ Albinism ■ Nystagmus ■ ONH ■ Other



■ Albinism ■ ROP ■ ONH ■ ONA ■ Other

# Carrier lens acuity range

- Measured acuities ranged from 20/70-200 for the group
- Acuity ranging between 20/70-20/120 had the most drivers (23%, n=26)
- Acuity ranging between 20/70-20/120 that were not driving (18%, n=20)



# Did O&M service influence decision to drive?

- 57% of respondents (n=63) were driving, or pursuing driving (had a permit)
- Those with 10-12 years of O&M instruction (65%, n=35) were more connected to services and supports.
- Those with same number of years of instruction not driving (55%, n=29); Reasons: "not interested, use other systems" (58%) and "not ready, too nervous" (56%)
- Did Ms. Bachofer's survey interview uncover the need to re-visit what type(s) and extent of basic survival low vision orientation & mobility instruction need to be implemented and emphasized with such future students, who might qualify for bioptic driving privileges at licensing age in a particular state/Province?

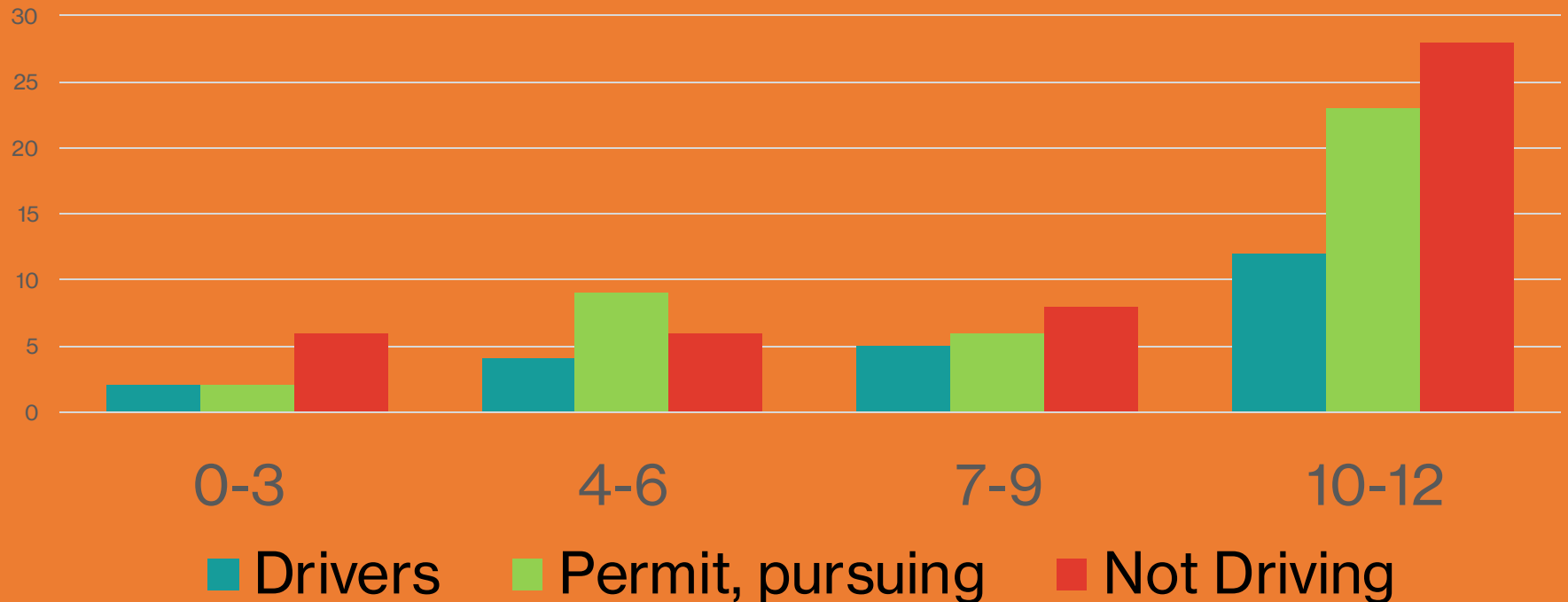
**ACVREP**

Academy for Certification of Vision  
Rehabilitation & Education Professionals

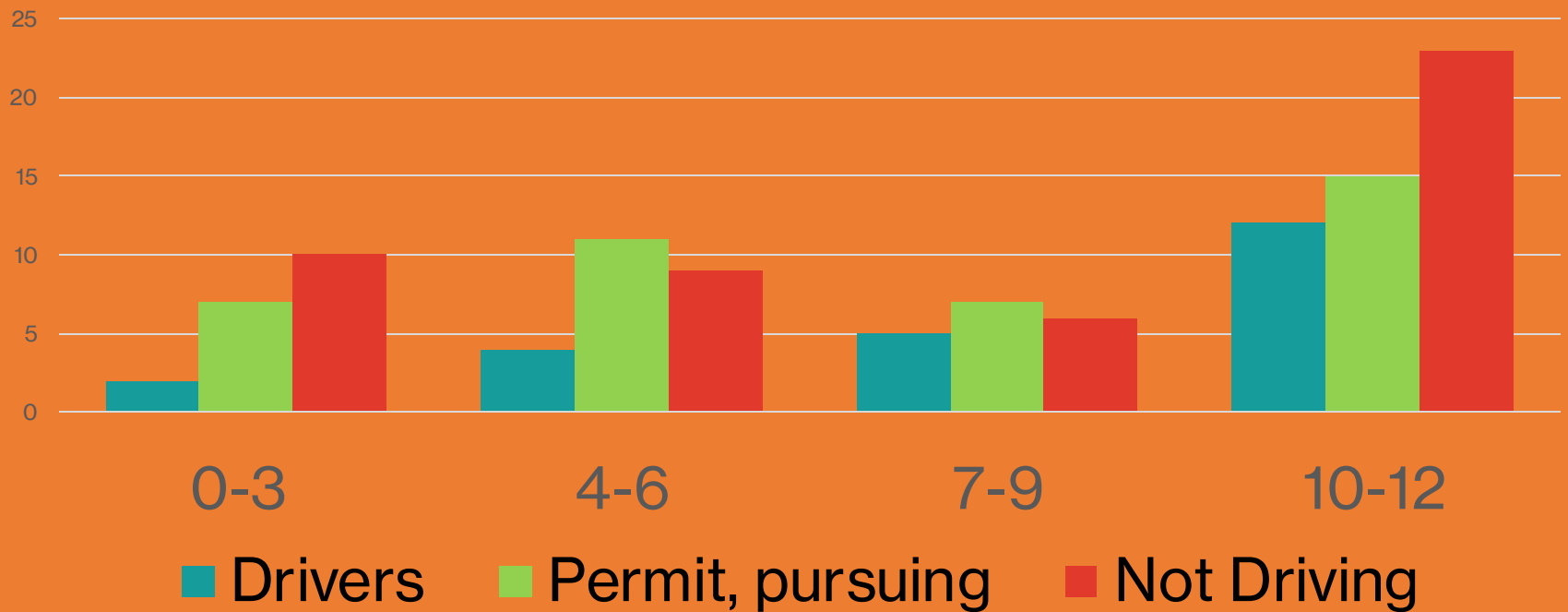


CERTIFIED ORIENTATION

# O&M Years of Service



# TVI Years of Service



# Use of Bioptic by Drivers & Pursuing

**Cohort 1**    **Cohort 2**

58%

47%

4x - most common  
power



“I use my bioptic for everything - at the rodeo, in school, on the forklift at work.”

# BCVA evaluation and BTLS fitting



# Factors Impacting the Decision

- Family attitude to encourage, discourage
- Mindset for demands of driving
- Problem solving through barriers
- Financial support for bioptic, operating a vehicle



# Reasons for not Driving

	<b>C1 (%)</b>	<b>C2 (%)</b>
Not ready, too nervous	12%	44%
Interested, working on confidence	12%	26%
Not interested, other system in place	36%	22%
Other	40%	8%

# Impact of Driver's Seat

**97%** “Very Positive” or  
“Somewhat Positive”

**100%** Recommend the  
workshop to others



# Stories

"Once you get past the nervous part, you take control. I wanted independence and I wanted to prove to others that I was a safe driver."



"He is hyper-aware of safety now following his accident (no injuries). In his first year of driving, he did not wear his bioptic".

*(Mom shared that her son is visually impaired because he was hit by a car at age 3)*

"You have to understand your limitations. Use your bioptic".

*(her son)*

# “I met people *like me.*”

“Connecting with a peer group who had low vision was powerful for him.”

“Meeting her peer group was wonderful. They are still in contact, and they push each other to meet their goals.”

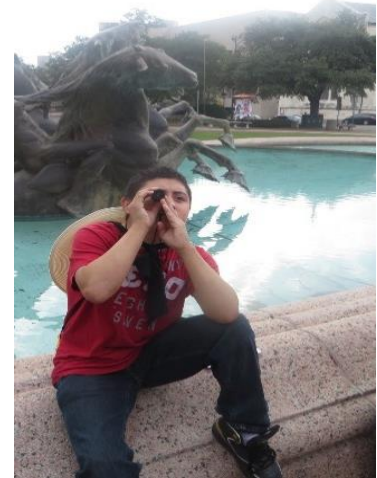
“Finding a peer group helped her become so much more comfortable with her low vision.”

# “It was *life changing!*”

“He came back and was changed. He had a much stronger sense of independence. He feels more self-reliant and believes he can get a job”.

"This program put a new spark in him. He saw he could lead a regular life. He had no idea of the possibility of driving.”

“It helped her feel more independent and gave her more hope for the future.”



# A Tough Decision for Parents

“I want to let you know I had mixed feelings about sending you the photograph of my son with his car. Mainly because it’s a big decision for parents. Circumstances for each child is different. ... I want to believe he can maneuver safely.”

“The program was very positive on practical points, but it was negative on emotional points. This is such a scary idea to think of my child driving.”

# “We needed help at the DMV.”

“It was frustrating, disappointing, and humiliating. They had no idea what to do and showed no interest.”

“DMV shut her down and we don't know how to appeal.”



“We are struggling to get her permit. They hung up on her eye doctor who was explaining the bioptic.”

# Benefits Beyond Driving

“We learned about so many other VI topics”

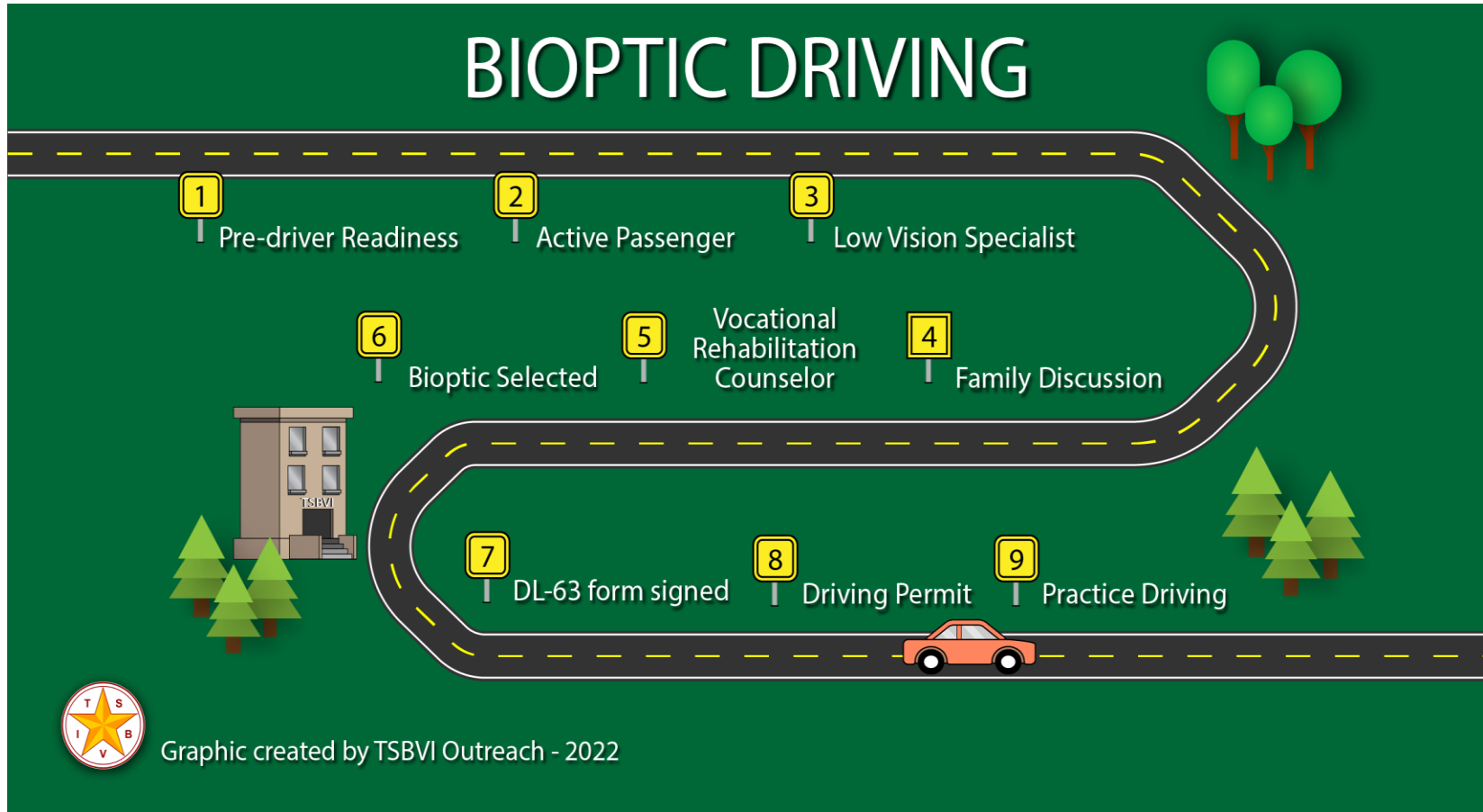
- O&M services, use of an identity cane
- Low vision exam
- Transition services, Vocational Rehabilitation info
- Tech, tips, tools
  - Mobile Eye (Collision Avoidance Systems)
  - Hood wrap (or matte finish paint) for reducing glare
  - Side mirror extenders



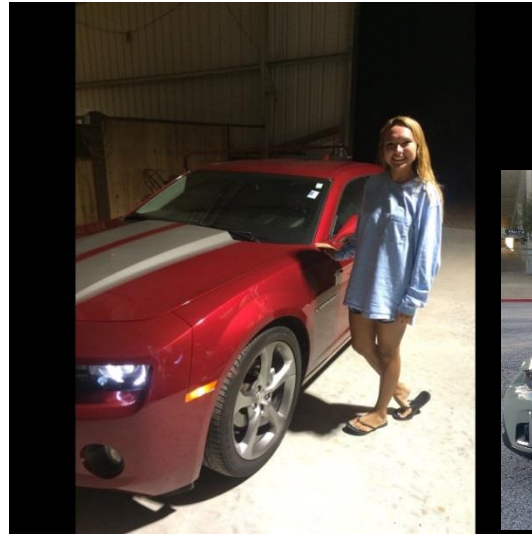
# New Developments for DSW

- Bioptic e-course on TSBVI website
- Social media postings on bioptic driving
- TSBVI Bioptic driving page (resources, studio interviews)
- Driver's Seat Workshop *on the road* in Dallas and Houston; sharing model with other states

# TSBVI Bioptic Driving e-course



Contact Steven Landry, Outreach Training Specialist  
[landrys@tsbvi.edu](mailto:landrys@tsbvi.edu), <https://tinyurl.com/BiopticDriving>



# Research

# 1) Iowa's Looking Beyond Bioptic Telescopes Study ('19-present)

- Authored by Drs. Cheryl Roe, PhD, Mark Wilkinson, OD, FAAO, and Daniel McGehee PhD
- Decision not to proceed with publication, until more bioptic drivers come forward and participate with in-car portion of intended research; to get the analysis power that researchers are looking for.
- Project started during COVID and lost a lot of interest because of delays for over two (2) years to get people into test car.
- Still hoping to recruit some additional bioptic drivers to be tested this summer (will pay hotel, meals, transportation to and from Iowa City, and honorarium to participants).
- Contact: Mark Wilkinson, OD, [wilkinson@uiowa.edu](mailto:wilkinson@uiowa.edu)

## 2) Bioptics, Advanced Driver Assistance Systems (ADAS), and autonomous driving technologies

- **Clinical Report: Experiences of a Driver with Vision Impairment when Using a Tesla Car**
  - Jing Xu, PhD et al,  
Research Associate  
Envision Research Institute,  
Wichita, KS,  
[Xujingcau@gmail.com](mailto:Xujingcau@gmail.com)
  - Published in *Optom Vis Sci*, 2022, 99: 417-421



# Article abstract

- Study documents how a driver with vision impairment uses assistance and automation systems in a Tesla Car to enable less restrictive driving, increased driver confidence, and maintain driver safety.
- Traffic-aware Cruise Control, Traffic Light and Stop Sign Control, and Autopilot functions
- **Active safety features:**
  - Forward collision warning
  - Side collision warning
  - Automatic emergency braking
  - Obstacle aware acceleration
  - Blind Spot monitoring
  - Lane departure avoidance
  - Emergency lane departure Avoidance
  - Rearview camera

### 3) New UNSW PhD Program titled: Public health impact of driver participation for young adults who use bioptics for driving: safety, value and policy"

- Looking for a highly motivated and enthusiastic person to join our team and contribute to world class research in the UNSW School of Optometry & Vision Science, ranked second globally for research impact, **8'23**
- Supervisory team: Prof Lisa Keay, Dr. Sharon Oberstein, Dr. Sheela Kumaran.



- For more information, contact Sharon Oberstein  
OD, PhD, [s.oberstein@unsw.edu.au](mailto:s.oberstein@unsw.edu.au)



# Update: PhD Opportunity: Bioptics in UNSW AUS, 6'24

- PhD student selected (starts **July 2024**)
- Will be involved in collating numbers, gathering evidence and supporting the research agenda of bioptic driving in Australia
- Steering committee was also assembled for project purposes
- Australian driving guidelines -revised and published 2022, next rev. - '24/'25
- Approximately 100 candidates with VA better than 20/80, have been evaluated and supported by Oberstein for conditional driver licenses (with and without a bioptic telescope)
- Restrictions: no night driving, limited distance from home residence
- No formalized bioptic driver training program yet
- One (1) state in Australia has four (4) bioptic drivers with BCVA less than 20/80
- Oberstein et al manuscript (***Does using a bioptic telescope improve visual recognition of the on-road environment?***) accepted for publication, Optometry & Vision Science, June, 2024

# The Next Frontier!

# Formalized Programs of Bioptic Driver Training at Residential Schools for the Blind and Visually Impaired

- "Is there a need to research, develop, and implement **formalized programs of bioptic driver screening and training** at select or all residential schools serving blind and visually impaired students"?
- A potential collaborative effort involving AERBVI, COSB and ADED
- An **informal survey questionnaire** has been put together by this presenter.
- The **goal/objective** of the questionnaire is to determine the extent of knowledge, need, funding and interest in learning more about this topic; including the extent of time, preparation and involvement of typical young novice (never been licensed) students with mild to moderate levels of central vision loss who want to drive, but currently have no other access for such training.

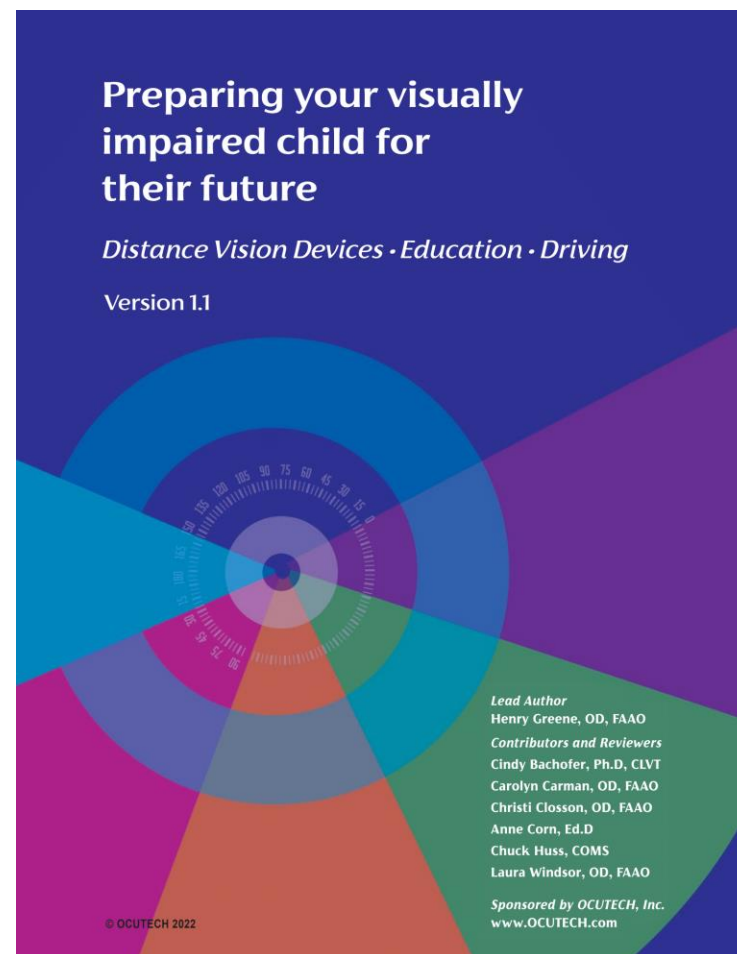
# Current status of formalized programs of bioptic driver training

- **Similar programs of bioptic driver training**, are available in both the public and private sectors in most states and in a growing number of Provinces **for primarily adults 18 years of age or older**.
- That being proposed would be **pre-driver readiness training** for students of pre-school through middle school-age; and actual **formalized classroom and in-car training**, for high school age students (ages 15-18) respectively.
- The latter types of instruction would be structured **sequentially**, just like other classes during the normal school year; or potentially available **concurrently** during the 2-3 remaining summer months (for both qualifiable residentially-based and/or public school students).
- High school-level bioptic driver education instruction would include: **classroom, passenger-in-car and behind-the-wheel instruction**.

# Pediatric Telescope Initiative '22


- Provides suggestions to parents or teachers how to improve a child's or student's use of their distance vision
- **Sections**
  - Introduction: Dear Parent
  - What You Need to Know
  - **Part 1:** About monocular telescopes
  - **Part 2:** Encouraging your child to use a monocular telescope
  - **Part 3:** Learning to use a monocular telescope
  - **Part 4:** About bioptic telescopes
  - **Part 5:** Introducing your child to driving
  - Additional resources

**\*For copies contact: [chuck\\_huss@hotmail.com](mailto:chuck_huss@hotmail.com)**



# Step-by Step Guide to Pre-Driver Readiness

- Free standard and large print size copies available
- Includes instructional material re:
  - Distance viewing skills
  - Critical object awareness skills
  - Basic bioptic usage skills
  - Hazard perception skills
- Contact Chuck Huss, COMS at [chuck\\_huss@hotmail.com](mailto:chuck_huss@hotmail.com)



**Texas School for the Blind and Visually Impaired**  
Outreach Programs

[www.tsbvi.edu](http://www.tsbvi.edu) | 512-454-8631 | 1100 W. 45<sup>th</sup> St. | Austin, Texas 78756

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**Step-by-Step Guide to Reinforcing  
Pre-Driver Readiness Skills with  
Novice Bioptic Driving Candidates**

Developed by **Chuck Huss, Driver Rehabilitation Specialist**  
WV Bioptic Driving Program, WV Division of Rehabilitation Services

[chuck.P.huss@wv.gov](mailto:chuck.P.huss@wv.gov)

Developed for  
**Texas School for the Blind & Visually Impaired**  
Outreach Programs

**For copies of the informal  
survey questionnaire, contact:**

**Chuck Huss, COMS**

**Driver Rehabilitation Specialist**

**TEL: (304) 767-1497 ©**

**E-MAIL: [chuck\\_huss@hotmail.com](mailto:chuck_huss@hotmail.com)**

# Contact sources for updated bioptic driving articles and presentations

- Cynthia Owsley, UAB et al, bioptic driving research articles,, ([owsley@uab.edu](mailto:owsley@uab.edu))
- Gang Lou et al, Schepens Research Institute, naturalistic bioptic driving practices, ([Gang\\_Luo@MEEI.HARVARD.EDU](mailto:Gang_Luo@MEEI.HARVARD.EDU))
- Amy Doherty et al (*Hazard detection with monocular bioptic lens systems*) ([Amy\\_Doherty@meei.harvard.edu](mailto:Amy_Doherty@meei.harvard.edu))
- Bart Dankers et al, Netherlands, Bioptic driving ([bartmelis@vision.org](mailto:bartmelis@vision.org))
- Vincent Moore, OD et al, Bioptic driving programming, Quebec, CAN, ([vincent.moore.inlb@ssss.gouv.qc.ca](mailto:vincent.moore.inlb@ssss.gouv.qc.ca))
- Bradley E. Dougherty, OD et al, *Hazard Perception in Visually Impaired Drivers who use Bioptic Telescopes*, TVST, 2024, 13 (6):5, [dougherty.85@osu.edu](mailto:dougherty.85@osu.edu) or [bdougherty@optometry.osu.edu](mailto:bdougherty@optometry.osu.edu)
- Cindy Bachofer, TSBVI, *In the Driver's Seat: Introduction to Low Vision Driving* Workshops, ([bachoferc@tsbvi.edu](mailto:bachoferc@tsbvi.edu))
- Paul Freeman, OD, PEN DOT MAB, new PA bioptic driving law, ([freemankp@aol.com](mailto:freemankp@aol.com))
- Laura & Richard Windsor, OD, FAAO, Indianapolis, IN, "*Bioptic Driving in the United States*", Eval, Fit and Rx BTLS, color contact lenses), ([drLaura@eyeassociates.com](mailto:drLaura@eyeassociates.com))
- [Joanne M. Wood, Queensland, AUS, On-road bioptic driving research](#), ([j.wood@qut.edu.au](mailto:j.wood@qut.edu.au))
- Moya E. McClure, Bioptic Telescopes article, ([me.mcclure@ulster.ac.uk](mailto:me.mcclure@ulster.ac.uk))
- Bhavani Iyer, OD, FAAO, TX, "*Should my Patient be Driving*", ([BhavaniIyer@uth.tmc.edu](mailto:BhavaniIyer@uth.tmc.edu))
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# In conclusion

- Bioptic lens systems are now accepted for use during driving by 96% of licensing jurisdictions in the USA.
- Pedestrian safety skills and active passenger-in-car skills are a plus before application & entrance into a formalized program of bioptic driver training.
- Being pre-driver ready in many instances reduces the costs, length, and extent of formalized bioptic driver training in order to obtain a driver's license.
- It's OK if your student or child decides not to explore driving.

# *Happy Motoring!*

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