



Navigating the Future

How Today's Technology Impacts Tomorrow's O&M

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MCB
MASSACHUSETTS COMMISSION
FOR THE BLIND



New Equipment

- **Navigating the ever-changing world of technology**
- **Updates from:**
 - Technology conferences
 - Sign-up for relevant email distribution lists for sharing updates
 - Community discussions
- **Certified Orientation & Mobility Specialists (COMS) training on new equipment**
- **Our community: A top resource for staying up-to-date**



Image Credit: Center on Disabilities at CSUN



Glide



- **Wayfinding and object detection device**
 - Automatic steering and braking
 - Path detection and guidance
 - Obstacle avoidance with overhead and drop-off detection.
 - Primary target detection and guidance (door, crosswalk, stairs, etc.)
 - Voice input for hands-free control
 - Companion app for setup, onboarding, device settings and Over-The-Air updates
- **Uses Artificial Intelligence (AI) for enhanced performance**
- **6+ hours of use on a full battery**
- **Initial retail price: \$1,499**





NOA

Navigation Obstacles AI



- **Designed for use with mobility devices (cane or guide dog)**
- **Uses GPS and provides turn-by-turn directions**
- **3D sound beeping to indicate obstacle**
- **Detects full-body obstacles (cane or guide dog still recommended)**
- **Artificial Intelligence (AI)-powered full scene description**
- **Searches for common objects (door, stairs, etc.)**
- **App available for O&M specialists**
- **Price: \$4,990**





StellarTrek

- **"AI-powered GPS / OCR assistant"**
- **Built-in camera with Artificial Intelligence (AI) capabilities**
- **Supports street crossings with enhanced navigation**
- **Assists in identifying:**
 - Street addresses
 - Entrances
 - Landmarks
- **More of an orientation aid compared to previous products**
- **Price: \$1,395**





Meta Glasses



- **Universal design for all users**
- **GPS and Artificial Intelligence (AI) capabilities for enhanced navigation**
- **Connects to phone via Bluetooth for seamless integration**
 - Supports *Aira* and *Be My Eyes* for additional assistance
- **New Meta AI feature (live AI for real-time support)**
 - Ideal for "low-risk" tasks (e.g., daily activities)
- **Most affordable piece of equipment in this category**
 - Prices starting at \$299





Applications - NaviLens



- **Uses QR-like codes ("tags") to provide helpful information to users**
- **App allows users to save an unlimited number of routes**
- **Orientation & Mobility (O&M) uses:**
 - **Companies, like the MBTA, can purchase kits and program tags for their facilities**
 - **Sensitive tag detection for accurate scanning in the app**
 - **Tags provide location and wayfinding information to the user**
 - **Scanned tags are saved in the app's history for easy reference**





Applications – EMVI



- **Similar to *Be My AI* in functionality**
- **Uses phone's camera to capture pictures and provide feedback**
- **Interactive Artificial Intelligence (AI) feature offers specific feedback on user-interest areas**
- **Reads and translates text, provides screen descriptions, and identifies colors**
- **Practical uses for Orientation & Mobility (O&M):**
 - **Reading signs**
 - **Indoor orientation**





Artificial Intelligence (AI)



- **Common theme amongst new products**
- **Reliability of AI technology in assisting navigation**
 - **AI uses in static vs. dynamic environments**
 - **Orientation & Mobility (O&M) skills remain the strongest tool for independent navigation**
- **Social component: How AI is enhancing interaction**
 - ***Aira* and *Be My Eyes* compared to *Be My AI* in functionality**
- **The future of technology in mobility and accessibility**
 - **Impact on Culture: How technology is shaping societal norms and interactions**



Role of the School COMS



- **Continue supporting foundational Orientation & Mobility (O&M) skills for student independence**
- **Considering technology for a student:**
 - **Skill level:** Matching tools to the student's abilities
 - **Item cost:** Evaluating affordability
 - **Benefit of tool:** Assessing the value for current O&M and future transition out of school
 - **Post-school access:** Can the student continue using the technology after graduation?



Transition to Adult Services



- **MCB's role in providing technology**
 - Technology provided by the department based on individual needs and budget
 - Assistive Technology (AT) department supplies many pieces of equipment
 - Consumers should talk with their case managers for personalized support
- **Use on campus: Technology support for educational environments**
- **Use on jobsite: Technology support for employment and workplace settings**



Small Group Discussion



- **What types of technology, if any, are your students requesting to use?**
- **Have you used any new technology that successfully enhanced Orientation & Mobility (O&M) skills?**
- **What challenges have you encountered when using technology?**



Meg Robertson Mobility Award



- **Accepting nominations now through August 8, 2025**
- **Open to motivated long cane and dog guide users of all ages and abilities**
- **Specifically seeking individuals who demonstrate mobility skills at their current level and use their cane or dog guide to increase their independence**
- **Three categories: Youth, Adult & DeafBlind**
- **Submit a nomination at mass.gov/whitecane**
 - **Nomination form must be completed by a Certified Orientation & Mobility Specialist (COMS)**
- **Winners announced at White Cane Awareness Day Celebration in October**



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