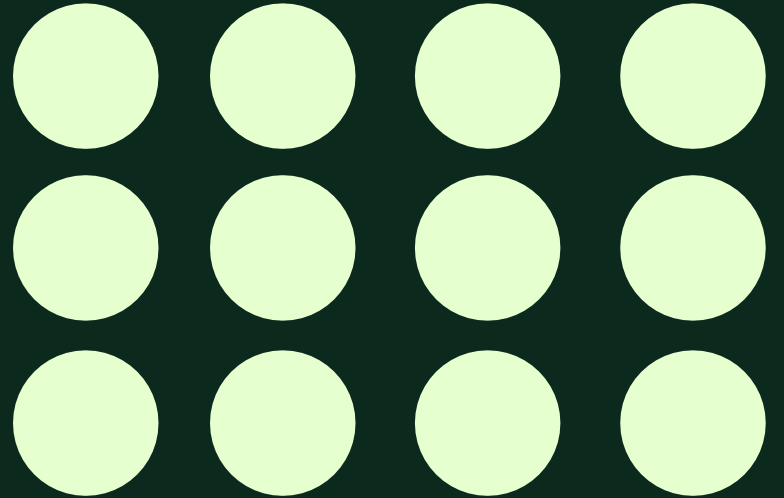




Breaking Barriers between *Deaf & Hearing* Communities.

**Transforms sign language into
speech and speech into sign
language in real time.**

| June 2025 | Intersign AI Inc



Challenges Faced by 1.5 Million Completely & Profoundly *Deaf People* *in North America*



How it Feels – ‘A lot of people think I’m stupid because I haven’t heard them’,
‘It’s hard to fit into a hearing world’.

✧ Communications Barriers

Hinder learning, socializing, and working.

✧ Workplace Inequality

63% report having unequal opportunities.

✧ Social Isolation

83% feel excluded, and 69% report feeling lonely at work.

✧ Current Solutions

No real-time communication with hearing individuals.

✧ Medical Care

Challenges accessing doctors and hospital services.

✧ Learning

Children struggle with lessons and often feel isolated.

Economic Impact of *Hearing Loss*



\$981b

Annual Global Cost

32%

Added Healthcare Costs

\$297k—\$1m

**Lifetime Cost per Person in the U.S.
— 67% Attributed to Reduced
Work Productivity**

The WHO report stated that even small reductions in the impact of hearing loss through improved communication could prevent substantial economic losses to society, yielding a return of \$15 for every dollar invested — resulting in significant productivity gains.

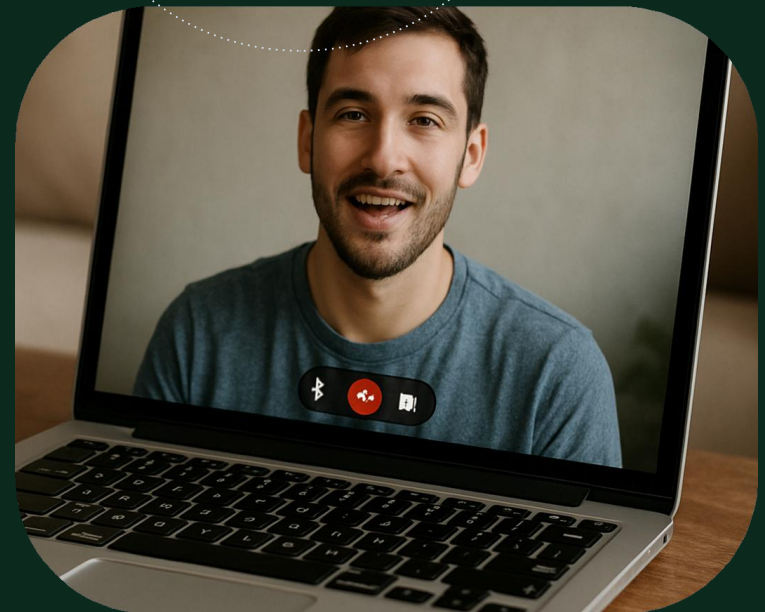
Data source: National Library of Medicine and WHO

Our Mission

Enable the 1.5M completely or profoundly deaf people in North America to converse directly with hearing people in real-time.

Open up new opportunities for education, healthcare and social interaction for deaf individuals.

Empower deaf people to engage with the hearing world on an equal footing, driving social and economic progress.



Our Market – *North America First*

+30M

Over 30M people worldwide live with profound or complete hearing loss.

+14.7M

1 million use ASL; 14.7M use sign language globally.

Many deaf individuals don't learn sign language because their circle doesn't sign. Our solution gives them a reason to — enabling real-time conversations with hearing people.

**+500
000**

500,000+ companies, medical facilities, and schools seek better ways to support the deaf community.

After launching ASL support, we'll expand to Spanish and Brazilian sign languages.

Hearing Loss Severity	Millions of People Worldwide	Percentage Prevalence	Our Market (North America)
Complete	12.6	0.2%	760,000 - primary
Profound	17.2	0.2%	760,000 - primary
Severe	30.7	0.4%	1,520,000 - secondary

Data from WHO – World Report on Hearing

Our Solution



Enables Communication in Real-Time between deaf and hearing people.

- Converts ASL to speech via a talking avatar & speech to ASL via signing avatar.
- Includes transcripts, summaries, e-mail
- Supports videoconferencing for Zoom, Microsoft Teams & Google Meet
- Initial product release model trained on 4,000+ gestures & full prosody (expanding to 12,000 gestures)
- Interpretation both ways on one processor.

Works on broad range of hardware and local processing (Edge based)

- MacBook Pros, iPad & Windows laptops with GPUs; iPhones and Androids with GPUs.
- Works with 'smart glasses' (added after 1st release).

Customizable Voices and Avatars

- Offers multiple voices to select from & uses their picture for their talking avatar.

Our Solution is a clear 'Pain Killer' and once used, is not likely to be dropped

ASL to voice & voice to ASL

The computer used by deaf person



A MacBook or iPad with Intersign installed handles all processing: converting ASL to speech via a talking avatar, and speech to ASL via a signing avatar. The screen is split to show both avatars, and the speaking avatar's voice is played aloud.

The device is placed in front of the deaf person so the camera can capture facial expressions and hand signs – including full prosody.

In low-noise environments where both parties are in close proximity, only the deaf user's device is required. The hearing participant can hear audio output directly, eliminating the need for additional hardware.

In high-noise settings—such as classrooms or lecture halls—optional peripherals (e.g., wireless microphones or shared displays) connected to the deaf user's Mac enhance accuracy and clarity.



The microphone can be either the Mac's built-in mic or an external wireless one. If both parties are nearby with minimal noise, the internal mic is likely sufficient. In louder environments—like classrooms or lecture halls—a wireless mic placed near the teacher or lecturer is used.

For videoconferencing (Zoom, Microsoft Teams, Google Meet), all processing remains local to the deaf user's device. Hearing participants see a real-time talking avatar representing the deaf user.

(Future iterations will address how the signing avatar differentiates between multiple hearing speakers during group calls.)

Optional screen used by hearing person



This feature is optional and depends on proximity. If participants are close and ambient noise is low, it may not be needed. In noisier settings—like classrooms or lecture halls—the hearing person can use a MacBook, iPad, or iPhone with Apple's screen-sharing to see and hear the deaf person's screen. Alternatively, they can use a wireless speaker or earbuds connected to the deaf person's Mac.

Capture

Camera captures ASL movements

Convert

Edge-based AI translates gestures to/from speech with emotion (prosody)

Display

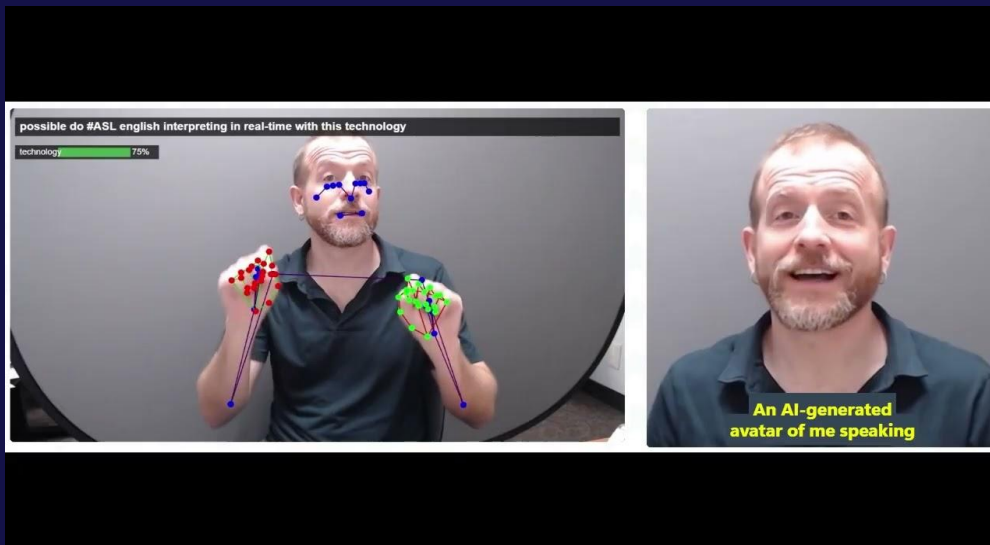
Speech converted to ASL animations

Secure Processing

Local processing ensures speed and privacy

Using AI to Create Avatars

Video of our working prototype.



We create an avatar for a deaf person and interpret their ASL to “feed” the talking avatar and create an avatar of a talking person and interpret their speech to “feed” the signing avatar.

The Avatar serves as a virtual interpreter bridging the communication gap in face-to-face conversations or video calls. It enables seamless communication between deaf & hearing people.

Value Proposition



Completely & Profoundly deaf people will license our solution

- Our solution enables a signing person to communicate with any hearing person, expanding their social and professional networks.
- A quote by our ASL advisor: I'm excited to be involved with Intersign as an Advisor and look forward to being able to use the completed product to be able to communicate with non-signing colleagues, neighbours and extended family members.

Corporations and Medical facilities will license our solution

- Canadian & American Governments consider deafness a 'Disability'. Law requires employers and institutions to make reasonable accommodation.

Government Support

- Aligns with Government initiatives to support individuals with disabilities.

Customer continued use

- Once users experiences the significant benefits of being able to communicate with anyone, the low annual fee ensures continued use and customer retention.

Revenue Model & Go-To-Market Strategy

Total addressable Market (TAM) estimated at \$850M in North America

Initial Revenue Targets

Individuals, organizations, and institutions supporting the deaf community, including K–12 and higher education.

Corporations, medical and dental offices supporting deaf employees and patients — hearing loss is a recognized disability with benefits such as assistive devices, interpreters, and tax credits. Employers are required to provide accommodations under the Americans with Disabilities Act and Accessible Canada Act.

Additional revenue with Spanish and Brazilian Sign Languages with 500K and 600K users.

30+M worldwide live with profound or complete hearing loss.

1M use American Sign Language (ASL) while 14.7M use 300 different sign language worldwide. Others lip read and use speech that is frequently difficult for hearing people to understand.

Initial Market - North America	TAM	Sell Through Rate	Annual Fee – with initial 1-month free trial period	Annual Revenue
Completely deaf – Individual	760,000	10%	\$200	\$15,200,000
Profoundly deaf – Individual	760,000	5%	\$200	\$7,600,000
Severely deaf – Individual	1,520,000	1%	\$200	\$3,040,000
Corporate, medical, dental & educational site licenses	500,000	10%	\$500	\$25,000,000
Total – North America only	3,540,000			\$50,840,000

Not all deaf individuals learn to sign if their circle doesn't. Our solution gives them a reason to, enabling communication with any hearing person.

Data from WHO – World Report on Hearing

Marketing Strategy

- Strategy will be tailored to each of the 3 client categories
- (i) Deaf Community, (ii) K-12 & Higher Education, (iii) Workplace, Medical & Dental Facilities
- Our financial model based on an annual renewal rate of 80% although we expect a higher retention rate
- Total acquisition costs for each new license sold is a maximum of \$24 by 2029 with a renewal rate of 80%
- Sales will be direct to deaf individuals and via companies offering solutions to the deaf community.
- Offer competitive licensing fees and 1-month free trial.

The Deaf Community

- Media Advertising & articles in monthly magazines such as 'Deaf Life' & Audiology Today.
- Direct marketing.
- E-Commerce site + video.
- Advocacy & public relations through 'World Federation of the Deaf', National Assoc. of the Deaf, American Society for Deaf Children & government agencies
- Demonstrations & workshops

K-12 and Higher Education

- National Education Conferences such as American Association of School Administrators with exhibit and/or presentation time slot.
- Work with Apple to select school pilots.
- Regional road shows
- Demonstrations & workshops

Workplace & Medical Facilities

- Work with 'not for profit' organizations supporting the deaf.
- Approach the 'for profits' providing services to deaf community for advertising and/or sales agreements.
- Enable medical facilities to meet disabilities acts to avoid fines.
- Industry events & conferences
- Press releases & media outreach
- Possible insurance coverage

Planned Strategic/ Advocacy Alliances

- We will build relationships with all Government and Corporations that support, provide services to, or advocate for, the deaf community
- We will seek relationships with technical institutions with relevant areas of expertise

Organizations Supporting the Deaf

- World Federation for the Deaf
- National Association of the Deaf
- American Society for Deaf Children
- ASL Hearing Association
- American Speech-Language-Hearing Assoc which provides direction to Title V programs
- National Assistive Technology Assistance Partnership
- Canadian Association of the Deaf
- US & Canadian gov agencies
- 'For profits' selling solutions for the deaf.

Canadian AI Gov Orgs

- Partner with Vector Institute, IRAP, Mitacs & Mila

Apple

- Reach K-12 and Higher Ed markets

Microsoft & Google

- To support & promote Teams & Google Meet videoconferencing

Canadian Universities

- Partnered with SFU Vision & Media Lab

Corporations

- Engage with large employers (corporate and medical) to enable their deaf employees and customers (ie. Amazon, Shopify)

Milestones Roadmap

Milestone	Technical	Financial	Sale and Marketing
Incorporation of Intersign AI		May 2024	
Founder \$\$ Friends and Family totaling 246K		May 2024 - May 2025	
SFU AI research team contract to design model, provide proof of concepts, build the prototype.	Aug 2024		
The ASL instructor, who was completely deaf, signed the Advisor Agreement.	Sept 2024		
EBC registration was approved for friends and family investments		Sept 2024 & April 2025	
SFU Proof of concept, Model design and working prototype completed	Feb 2025		
SFU report on prosody methodology.	Mar 2025		
30-second video speech to asl signing avatar and vice versa, 500 words and 15k training videos	May 2025		May 2025
Files a provisional patent	June 2025		
SFU upgrading algorithm	June 2025		
Agreements for \$200k Gov grants		Q2/Q3 2025	
Increase model to 1,000 words, 127,000 training videos, and add Microsoft Teams extension	Jun 2025		
Angel financing of 1 mil spread over 4 months		Aug 2025 – Nov 2025	
Sales team ramp up sales materials and demo			Sep 2025
Initial product release with 4,000 words and first sales revenue	Dec 2025		Dec 2025
High-profile sites in place and key advocates seeded with the solution			Dec 2025
Angel / VC financing for 1M after 1st sales		Jan 2025	
Gross profit > 80k per month (could be reinvested to accelerate Spanish & Brazilian sign language)		Mar 2026	
Financing for \$2M		May 2026	
Operating profit (opportunity to fuel additional growth by using funds to add other sign languages)		Jan 2027	1,200 licenses / month
\$50M gross annual run rate revenue target.		Jul 2029	6,000 licenses / month



Competitive *Landscape*

Company	ASL to Speech	Speech to ASL	2 Way	Real Time	Edge Based	Video Conferencing	Avatars	Transcripts	Smart Glasses	Prosody	Comments
Hand Talk	-	Yes	-	-	Yes	-	Yes	-	-	-	It is a dictionary for Speech to ASL, not a live communication tool, One way only
Brightsign Glove	Yes	-	-	Yes	Yes	-	-	-	-	-	Limited sign interpretation as hand only and ignores all facial gestures. One way only
Signapse	-	Yes	-	-	-	-	Yes	-	-	-	Interprets signs, video and newscasts into ASL. No live communication. One way only.
SignForDeaf	Yes	Yes	Yes	-	-	-	Yes	Yes	-	-	Interprets signs, video and newscasts into ASL. Live communication under development.
Slait.ai	Yes	Yes	Yes	Yes	-	Yes	-	Yes	-	-	Two way but ASL to text and Speech to text
SignAll	-	-	-	-	-	-	-	-	-	-	Alphabet interpretation only
Nvidia	-	-	-	-	-	-	-	-	-	-	Providing an AI platform for teaching ASL - only 100 signs currently going to 1,000
Ava	-	Yes	-	-	-	-	Yes	-	-	-	Live captioning only
Coda	-	Yes	-	-	-	-	Yes	-	-	-	Live captioning only
Signer	-	Yes	-	-	-	-	Yes	-	-	-	Live captioning only
Signapse	-	Yes	-	-	-	-	Yes	-	-	-	Live captioning only
Omnibridge (Intel)	Yes	Yes	Yes	Yes	-	-	-	-	-	-	Asl to text and text to ASL only. Recently bought by Sorenson so product direction may change
SignGPT	Yes	Yes	Yes	Yes	-	-	-	-	-	-	University of Surrey project, funded with 8.5 million pounds in 2025
Silence Speaks	-	Yes	-	-	-	-	Yes	-	Yes	-	British Sign Language - not ASL. One way only
Sign-Speak	Yes	Yes	-	Yes	-	-	Yes	-	-	-	Two way communication. Not edge -based
Intersign	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Two way & in real time, full language gestures with prosody, edge- based. Integrates with Zoom, Microsoft Teams & Google Meet video conferencing. Initial 4,000 gestures.



What is *Prosody* and why is it important

A quote from an ASL expert:



Prosody is essential for all languages, whether spoken or signed. Without it, a significant layer of meaning is lost. This is one of the frustrations with relying on closed captioning or speech-to-text — elements like tone, emotion, & nuance aren't conveyed.

Here's a classic example: "I never said she stole my wallet." Depending on which word is emphasized, the meaning changes:

"I never said she stole my wallet." → Someone else might have said it.

"I **never** said she stole my wallet." → Denying ever saying it.

"I never **said** she stole my wallet." → Maybe you implied it, but didn't say it outright.

"I never said **she** stole my wallet." → It was someone else, not her.

"I never said she **stole** my wallet." → Maybe she borrowed it or found it, but didn't steal it.

"I never said she stole **my** wallet." → It might've been someone else's wallet.

"I never said she stole my **wallet**." → Maybe she took something else, but not the wallet.

Based on our competitive analysis, Intersign is the only company including prosody in its interpretation of ASL. It adds a material degree of complexity and we are fortunate that the SFU team have a design solution which is the main subject of our Provisional Patent.

Differentiation & Defensibility

Our Competitive Advantage

- Only solution offering real-time, two way fully language gestures based ASL interpretation, including prosody (1st release with 4,000+ gestures - not simply alphabet.)
- Operates on local hardware.
- Includes transcripts, summaries and e-mail.
- Provides avatars for Zoom, Microsoft Teams & Google Meet video conferencing solutions.
- No one else offers real time, two-way ASL interpretation - except limited supply of live interpreters.
- No current solutions allow deaf people to communicate seamlessly with hearing people.

The Competition

- No one else offers real time, two-way language gestures ASL interpretation.
- No current solutions allow deaf people to communicate seamlessly with hearing people.
- In Canada, deaf people can book interpreters for video conferences, in advance, at a cost of \$350 an hour – paid by the Government.

Our Moat

- Provisional patent to be filed in June 2025, no-one ahead of us.
- Deepest ASL support with 4,000 gestures at launch, increasing to 12,000 6 months later.
- SFU research team leading edge model design.
- Local 'edge' support for high end portable and mobile devices
- We use 'best of breed' third party components in our stack to speed development, reduce R&D costs and ensure quality

Experienced *Management Team*

✧ Kirk Harrington - *CTO*

35+ years hi-tech experience, 6 startup founder, 4 exits, CTO Pivotal, CEO Simba, Excel/PageMaker dev. GenAI expert. Known David since 1986

✧ Dallas Jasper - *VP Product Management*

Instrumental in customer traction for early-stage startups, VP Product Management at Chancery, NCompass Labs.

✧ David Rebak - *Pres & CEO*

15+ years hi-tech, CEO and founder of Chancery Software, CEO of 1st 4 IKEA stores in Canada. Strategic alliance with Apple, Experienced Board Member. Known Kirk since 1986.

✧ Adrian Desmarais - *ASL Advisor*

A completely deaf ASL instructor with more than 20 years experience in ASL Interpretation & hearing technology.

Our *R&D* Team & Research Partners



Third Parties

- We use 'best of breed' components in our stack to capitalize on their investment in technology.
- Currently using: Media pipe by Google, Hey Gen and OpenAI LLM models.
- Potentially using: SignGemma by Google (sign language interpreter) and Unity (cross platform 3D/2D creation engine)

Company R&D Team

- Building a funnel of highly skilled AI technical team members to join once funding secured.
- CTO has many years experience building and managing world class sophisticated R&D teams.
- Skilled in GenAI application development and full stack development.
- Acquiring ML technology skills.

SFU - Vision and Media Lab

- Ranked #4 in Canada in AI research & #1 in BC.
- Key team members are:
 - Dr. Steven Bergner - PhD and M. Sc in Computational Visualistics
 - Rishabh Kaushal – M. Sc and Gen AI expert.

Financial Plan

Round	Amount	Timing	Outcome to be Delivered
Seed & Family & Friends Rounds	\$246K+	Complete	• Proof of Concept, Model Design & Working Prototype by SFU • Provisional Patent Filed • Demonstration Video • ASL team record 125,000+ videos for 1,000 gestures • Operating interface to Microsoft Teams Videoconferencing
Angel Round 1	\$1M	• Aug 2025 - \$400K • Sep 2025 - \$200K • Oct 2025 - \$200K • Nov 2025 - \$200K	• Initial Product Release Dec 2025 with 4,000 words & Videoconferencing • Initial Product Release & First Sales Revenue Dec 2025
Angel or VC	\$1M	Jan 2026	GP > \$80K per month Mar 2026
Angel or VC	\$1M of \$2M	May 2026	Operating Profit Jan 2027

Planned Non-Dilutive Financings in 2025

- \$200K cash grants for research and salary subsidy from Mitacs, NSERC and/or Health Research BC and/or grants for compute training time.
- \$47K SR&ED credit resulting from 2024 research
- Unknown sum non-cash contributions by Government for training compute & inference time.

Intersign was approved as an Eligible Business Corporation in 2024 for the Friends and Family rounds which enabled BC resident investors to receive 30% of their investment back as a tax rebate from the BC Government. Intersign has again been approved in 2025 to support BC resident investors participating in additional Friends and Family and the Angel Round 1.



Summary



- Proof of concept and working prototype completed by SFU research team with key technical challenges identified with proposed solutions.
- Provisional Patent to be filed in June 2025
- Now raising \$1M to build out product and achieve first sales revenue
- First revenue forecast Dec 2025 & first monthly operating profit forecast Jan 2027
- Conservative revenue forecast to \$50+M in 2029 resulting in high valuation
- Additional revenue opportunity with Spanish and Brazilian sign languages
- This is a much much needed real-time, two-way ASL interpretation solution with prosody and which does not currently exist.
- Operates on edge-based equipment - the technology required is only recently available & no regulatory approvals required
- Experienced management team in both tech and business development and ASL expert advisor on board.
- The market is large, well defined and can be reached relatively easily with an expected high annual license renewal rate

In Conclusion



This is a much-needed solution that currently does not exist for the 1.5 million completely & profoundly deaf individuals in North America.

In the U.S., the lifetime societal cost per person can reach up to \$1 million — 67% of which stems from reduced work productivity.

The total addressable market is estimated at \$850 million in North America, positioning us for an achievable \$50 million in revenue by 2029 and a rapid path to profitability by October 2026.

An exit is likely to occur through a strategic acquisition.

We hope you will join us in this exciting opportunity.

Contact either:

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Appendix



How many people use sign language globally?

Short answer:

- The best-documented figure is **≈ 70 million Deaf people who rely first-and-foremost on a natural sign language**. That number comes from the World Federation of the Deaf (WFD) and is echoed by the United Nations and many other organizations. [WFDUnited Nations](#)
- Add in **hearing signers**—children of Deaf adults (CODAs), professional interpreters, educators, classmates, partners, and enthusiastic learners—and the community easily passes **100 million and may approach 150–200 million worldwide**.¹
- More than **300 distinct sign languages** are in daily use (Ethnologue lists ~150; other linguistic atlases count 300-plus, and new village or micro-sign languages keep being discovered). [WikipediaNational Geographic Education](#)

How many people use American sign language?

There is no single “official” head-count of ASL users, so every estimate is a model built from partial data:

- World Report on Hearing. World Health Organization. 2021. <https://www.efhoh.org/wp-content/uploads/2021/03/World-Hearing-Report.pdf>
- National Health Interview Survey (NHIS), analyzed by Mitchell & Young (2010-2018 sample) - [\(PDF\) How Many People Use Sign Language? A National Health Survey-Based Estimate](#)

Additional Data Sources

- National Council on Aging: <https://www.ncoa.org/adviser/hearing-aids/hearing-loss-statistics/>
- WHO Report on Hearing: <https://apps.who.int/iris/rest/bitstreams/1334317/retrieve>
Definitions of hearing loss – page 38
Number people by grades of hearing loss – page 40
Economic impact – pages 49 & 50

¹ Because those upper-bound figures are extrapolations (e.g., applying the US 2.8 % prevalence to the global adult population would imply ~200 million users), researchers usually cite them with caution. Still, they help illustrate that the signing world is far larger than the Deaf-only estimate