

Division of Services for the Deaf and Hard of Hearing

Overview of Hearing Loss Populations, Major Issues, Legal Mandates

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March 18, 2019

Communication Modes

- **Broad spectrum with many variations**
 - Sign, oral, tactile, written word, auditory
 - No such thing as “one-size fits all”
 - “Effective Communication” – what it takes to achieve it depends on the individual and situation

“Effective Communication”

- **Americans with Disabilities Act (ADA) of 1990**
- For Deaf, Hard of Hearing, Deaf-Blind:
 - Effective communication simply means information is transmitted between parties clearly and understandably, just as it would be for all parties that are not Deaf, Hard of Hearing, or Deaf-Blind

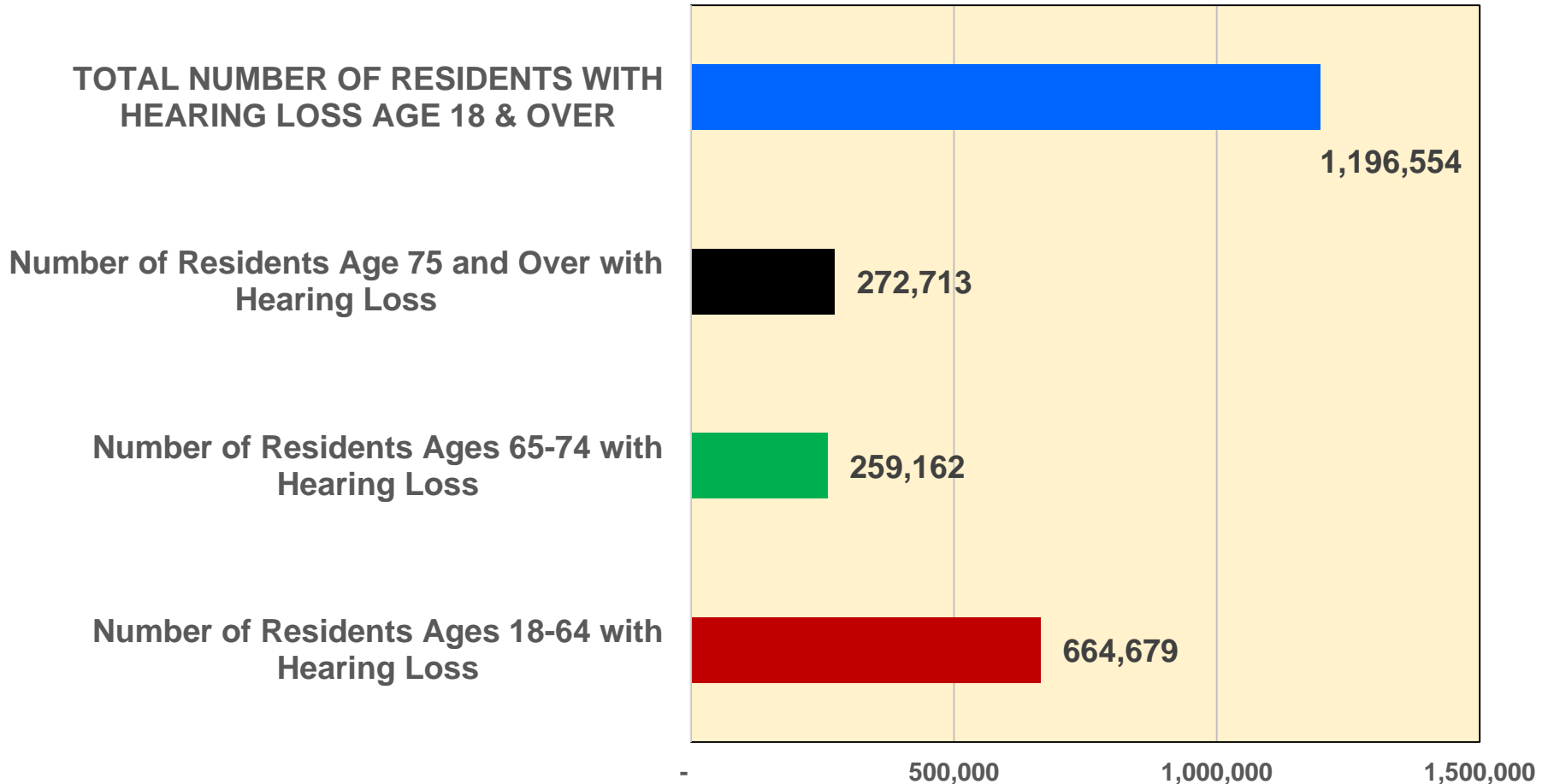
Communication Access Accommodations

- **Accommodation, or Auxillary Aid or Service**
 - **Tool, device, or service used to achieve effective communication**

- Sign Language interpreter
- Deaf interpreter
- Tactile interpreter
- Close-vision interpreter
- Oral transliterator
- Cued Speech interpreter
- Video Remote interpreter
 - Large monitor
- Foreign sign language interpreter
- Driver/Support Service Provider
- Writing notes
- Lip reading
- Captioning
 - CART, C-Print
- Personal amplifier
 - With neck loop
- FM System
- Remote MIC
- Roger Pen
- Ubi-Duo
- Tablet – Automated Speech Recognition

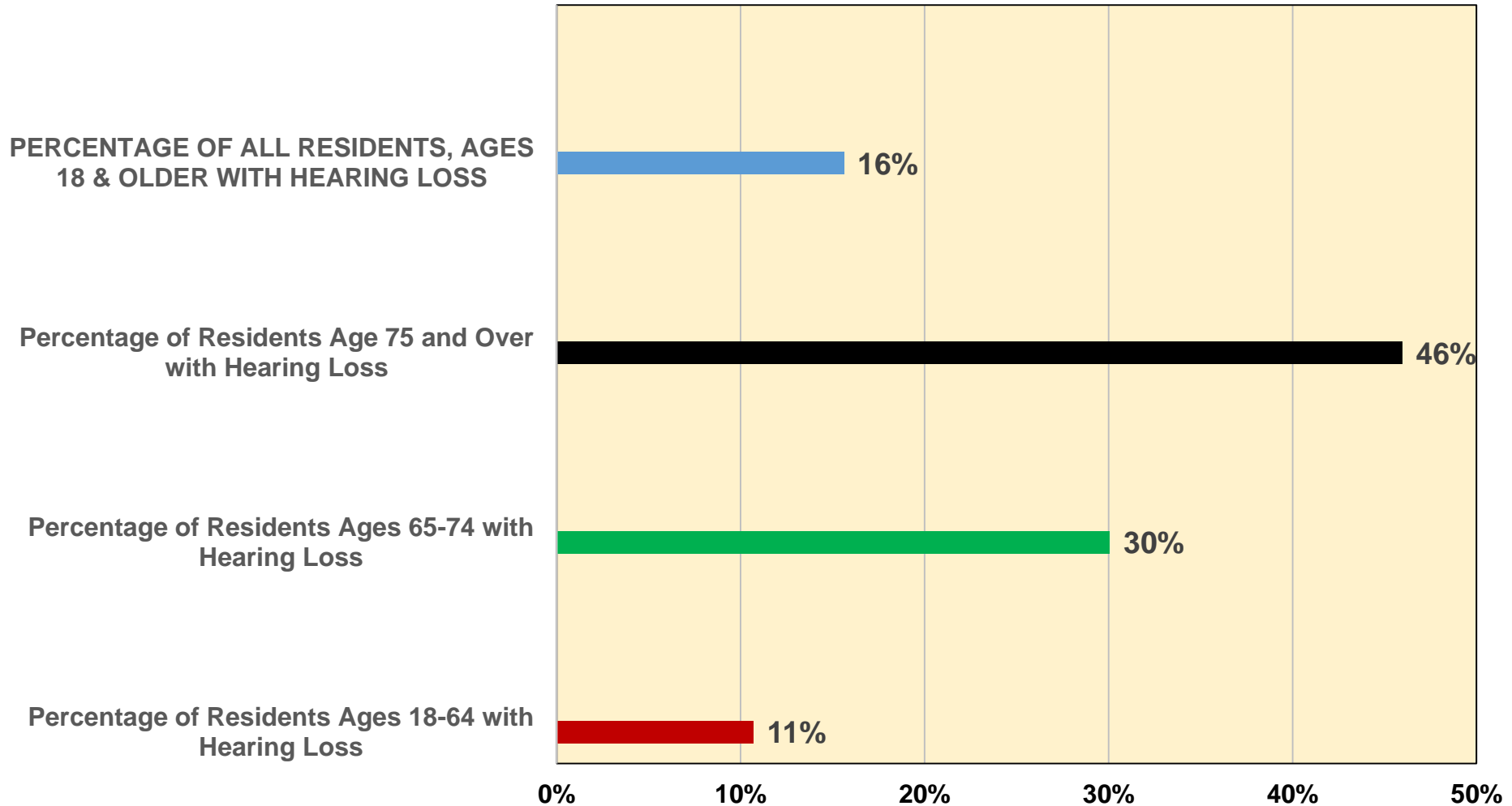
Number of Residents With Hearing Loss, By Age

Source: North Carolina Division of Services for the Deaf and Hard of Hearing, 2019 Demographic Update



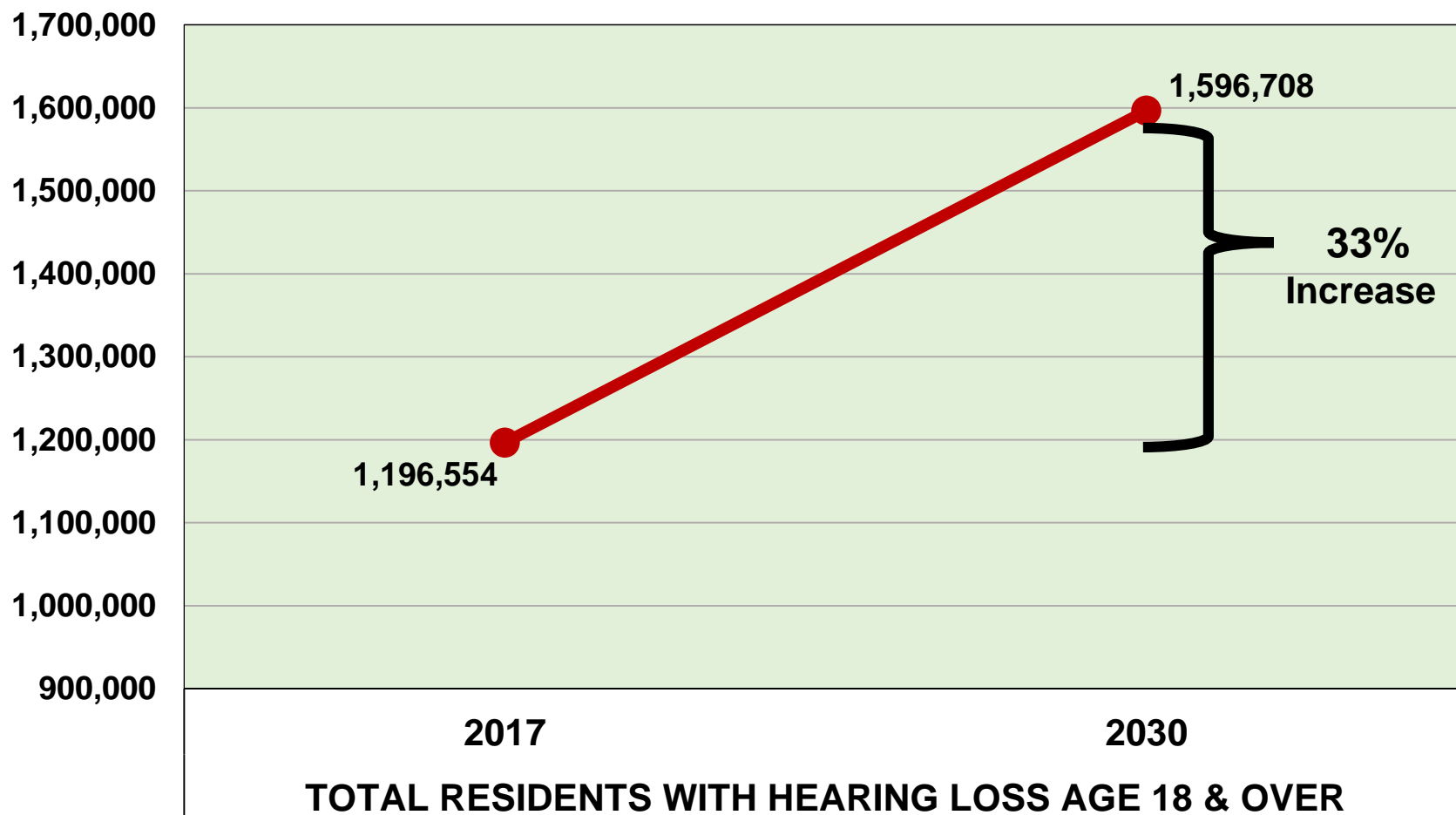
Percentage of North Carolina Residents With Hearing Loss, By Age

Source: North Carolina Division of Services for the Deaf and Hard of Hearing, 2019 Demographic Update



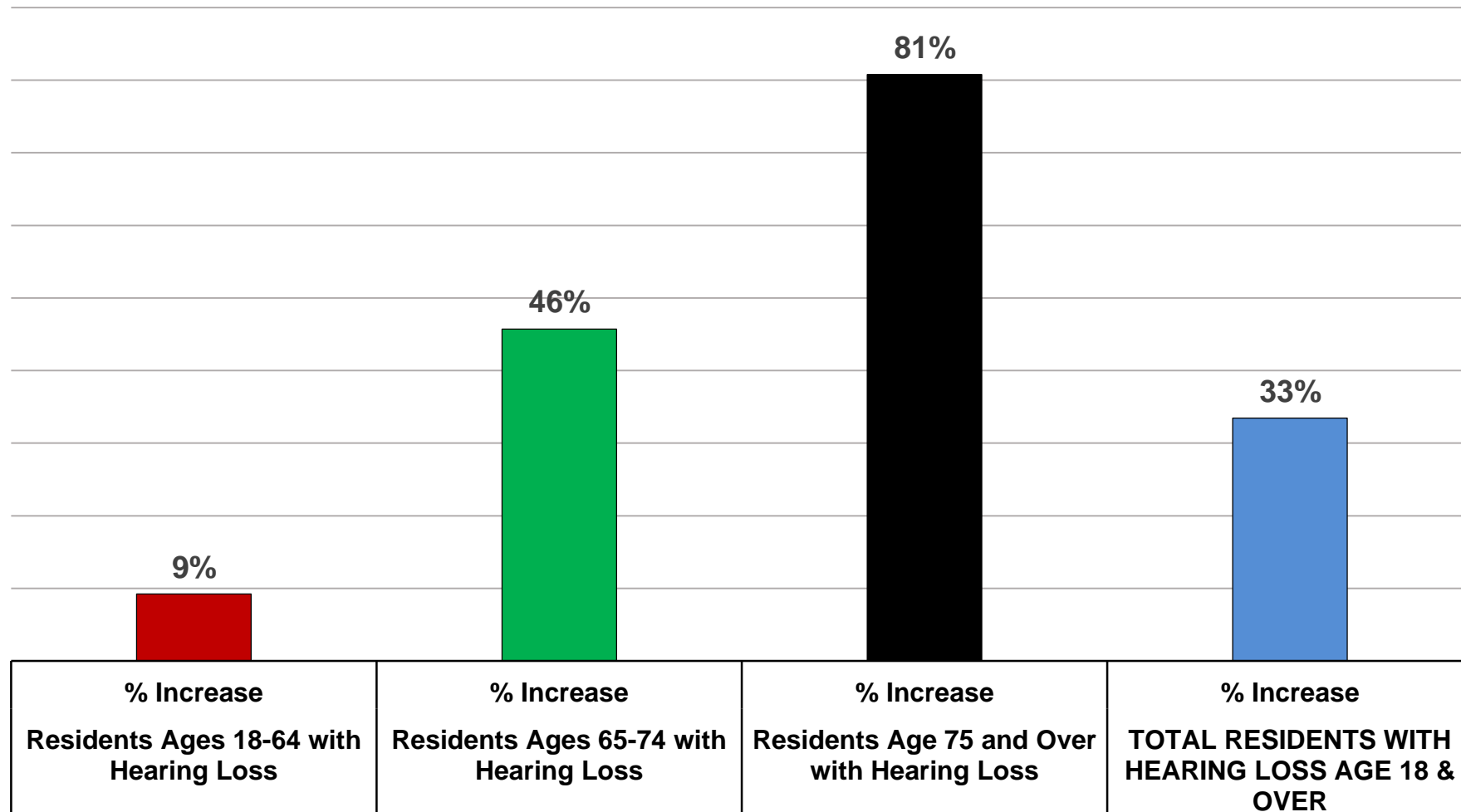
2017 - 2030 PROJECTED INCREASE IN NC POPULATION 18 & OLDER WITH HEARING LOSS

Source: North Carolina Division of Services for the Deaf and Hard of Hearing
2019 Demographic Update



2017 - 2030 PROJECTED INCREASE IN NC POPULATION WITH HEARING LOSS, BY AGE

Source: North Carolina Division of Services for the Deaf and Hard of Hearing
2019 Demographic Update



Types of Research on the Economic Impact and Costs of Hearing Loss

Prevalence Based with Direct Costs

- **Diagnostic** – includes costs of consultation with physicians, audiologists, otolaryngologists and other specialists
- **Rehabilitation** – hearing aids and other assistive listening devices, including surgery

Societal Perspective with Indirect Costs

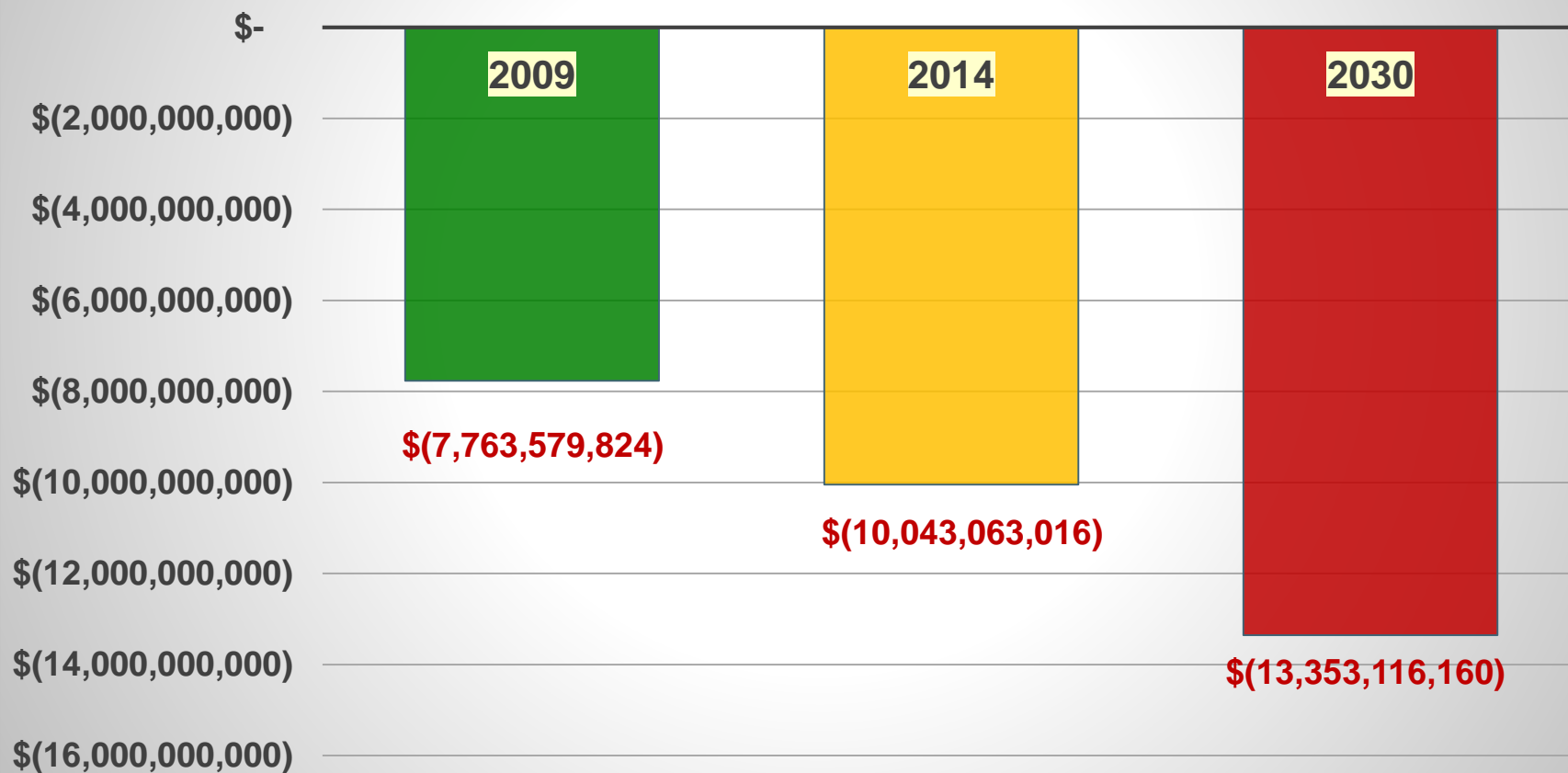
- **Productivity Losses** – includes unemployment, underemployment, and other income losses
- **Foregone tax revenue** for local, state, and federal governments

Intangible Costs

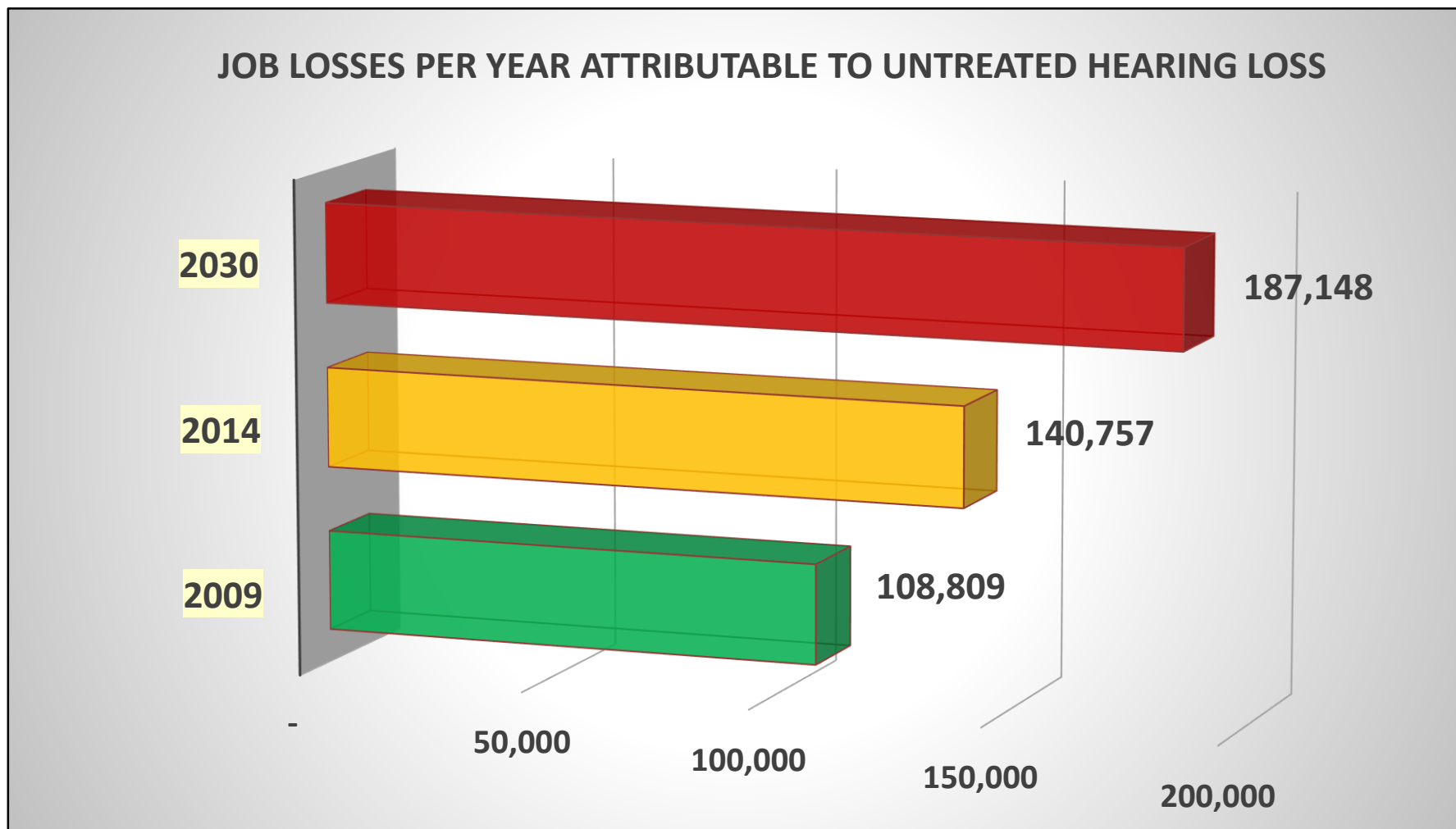
- **Quality of life** – assessment of impact on activities for daily living and emotional and social well-being

Impact of Untreated Hearing Loss in NC on State Revenue

TOTAL PRIVATE SECTOR AND PUBLIC SECTOR IMPACT OF UNTREATED
HEARING LOSS IN NC, 2009-2030



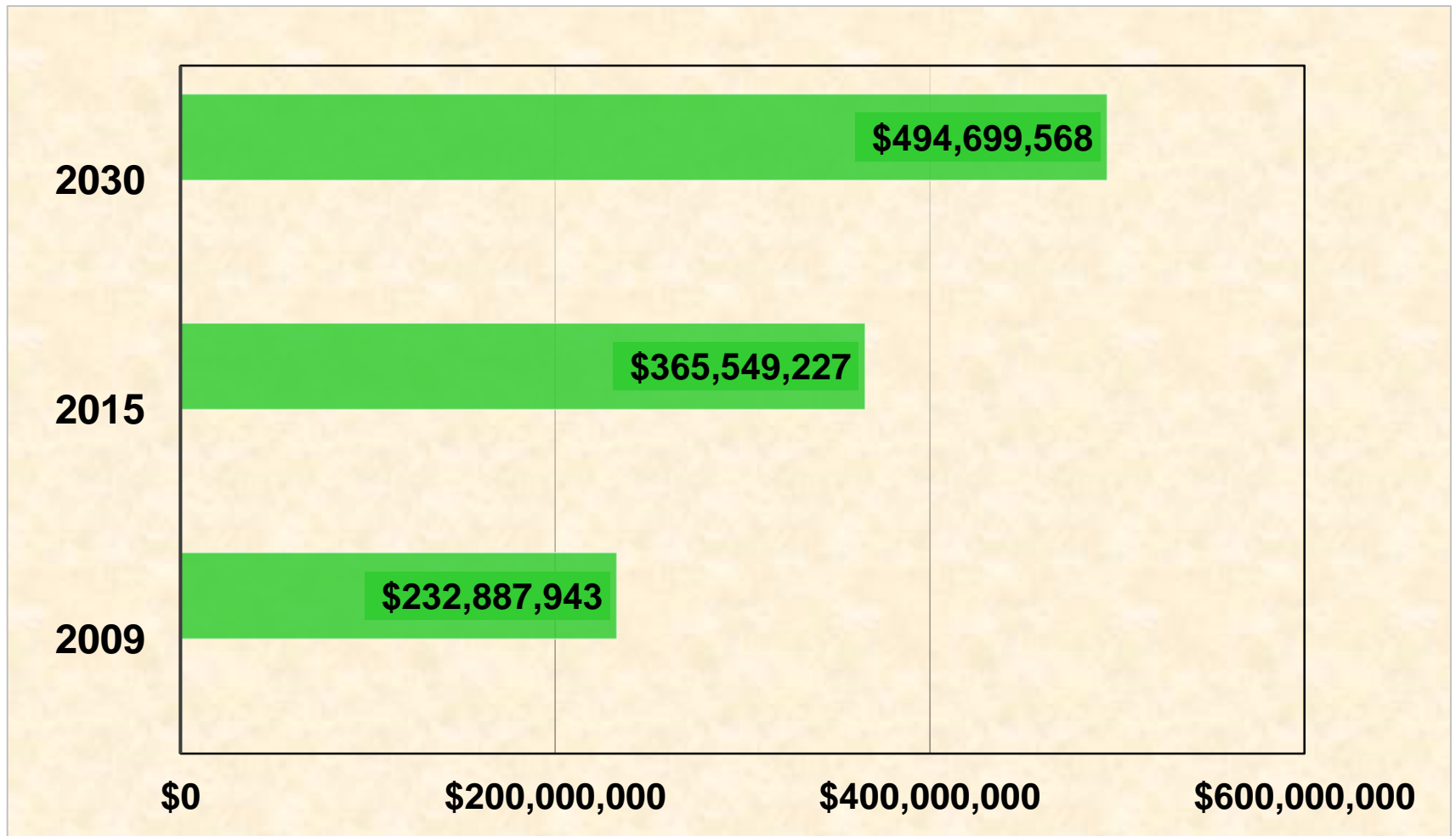
Impact of Untreated Hearing Loss in NC on Employment



Employment Economic Benefit of Providing Communication Access

YEAR	Unemployed North Carolina Residents with Untreated Hearing Loss	3% Reduction in Unemployed North Carolina Residents with Hearing Loss that Results from Improved Communication Access	Increase in Number of Employed North Carolina Residents with Hearing Loss
2009	108,809	105,545	3,264
2015	171,239	166,102	5,137
2030	231,762	224,809	6,953

Financial Economic Benefit of Providing Communication Access



Major Federal Accessibility Laws

- **Americans with Disabilities Act of 1990**
- **Section 504 of 1973 Rehabilitation Act**