Seniors, Baby Boomers, Old Folks
Handicapped
Disabled
Crippled
The first Wheelchair Ramp

• Mention of the first wheelchair was in China in 6 AD

• 1595 King Fillip II of Spain had a deluxe wheelchair made with foot and arm rest

• The first mention of a wheelchair ramp or “pente douce” is found in French architectural history.
The first Curb Cuts

- Curb cuts were designed for the connivance and safety of wheelchair users.
- Curb cuts originated in Berkley, California in 1970.
- Curb cuts make life easier for mothers with strollers, delivery men, and people using other mobility aids such as walkers.
A Rose by Any Other Name

**Age related**
- Macular degeneration effects people over 60
- Presbycusis - progressive hearing loss associated with aging
- Alzheimer's Disease
- COPD shortness of breath limits life expectancy

**Disabilities**
- Retinitis pigmentosa low vision
- Ushers Syndrome
- Multiple Sclerosis progressive cognitive and neuromuscular symptoms
- Cystic fibrosis frequent lung infections limits life expectancy
Functional Parallels between Senior Citizens and People with Disabilities

- difficulty with physical activities
- reduction of activities at home
- reduction of activities at school
- reduction of activities at work and
- reduction in other activities.

(vision, hearing, speech, mobility, dexterity, emotion, cognition and pain)
• According to CNN Money and Met Life nursing home cost topped $80,000 a year (4/12/13)
• Met Life fixed the monthly cost of Assisted Living at $3,550.
• Met Life places the hourly rate of home health aids at $21 an hour.
• Adult Day Services average $70 a day.
What they are most afraid of ..... 

Seniors

• Loss of independence

• 89 % fear nursing homes more than death (according to Aging in Place in America)

People with Disabilities

• Loss of independence

• Fear nursing homes more than death
Designing Intelligent Environments

- Imaging sensors
- Smart Wheelchairs
- Pressure Mat
- Medicaid Management Systems
- Remote Patient Monitoring
- Indoor location sensors
- Tongue Drive Sensors
Inclusive Home Design Act of 2012

• H.R. 5781
• Representative Janice D. Schakowsky
• To require all newly constructed, federally assisted, single-family houses and town houses to meet minimum standards of visitability for persons with disabilities.
• Committees [House Financial Services]
Visitability

- Designing intelligent environments
- One entrance that does not have steps
- Doors that are 32 inches wide, particularly the bathroom door
- Hallways 42 inches wide
- Grab bars in the shower/bathtub and close to the toilet
- Thermostat and light switches between 15 and 48 inches from the floor.
Planning for Access

• Consider access early in the process and throughout all phases
  – Project use (residential, retail, office, etc.)
  – Funding sources (public vs. private)
  – Building type (new construction vs. renovation)
  – Housing type (Single family vs. multifamily)
  – Housing ownership (Condo vs. rental)
Designing Intelligent Environments

• Imaging sensors
• Smart Wheelchairs
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Technology and Durable Medical Equipment

• Options for keeping people with disabilities and senior citizens in their homes rather than moving to a nursing facility.
Beyond Robbie the Robot

• Dedicated robots included robots helping to administer medications and alerting a remote caregiver if the patient is about to miss his or her medicine dose (oral or no-oral medications).

• A semi-autonomous robot has been designed to support disabled and elderly people in their daily life activities, like preparing and serving a meal, or reintegration in professional life.
Smart Homes
More than “Help I’ve Fallen”

- Home security systems are more than burglar alarms
- New system include
  - Panic button
  - Voice activated dialing
  - Broken glass sensors
  - Motion detectors
  - Pressure Pad
Reminders and Medication Dispensers
Really Smart Phones
Home Security System Can

• Cameras can provide caregivers with peace of mind when at work or shopping

• Two-way audio between the camera and monitor

• Camera has infrared LED's to "see in the dark" - 15 foot range
ALHousingSearch.org
a free service to find and list rental housing in Alabama
"Social Equity" has been defined by APA (Planning & Community Equity, 1994) as "the expansion of opportunities for betterment that are available to those communities most in need, creating more choices for those who have few."