Beneficial Design – Examples of... 
Designing Beyond the Norm to Meet the Needs of All People 

Stanford University 

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Peter W. Axelson, MSME, Beneficial Designs, Inc., Minden, Nevada 
www.beneficialdesigns.com 

Beneficial Design 
Designing Beyond the Norm to Meet the Needs of All People 
Research 
Design 
Education 

Beneficial Designs’ Mission Statement 
Beneficial Designs works towards universal access through research, design, and education. We believe all individuals should have access to the physical, intellectual, and spiritual aspects of life. 

Beneficial Designs’ Mission Statement 
We seek to enhance the quality of life for people of all abilities, and work to achieve this aim by developing and marketing technology for daily living, vocational, and leisure activities. 

Employees and Consultants 

Machine Shop 

Wheelchair Testing 

Design of Consumer Products 
Product Development 
Assessment of Products 
Universal Design of Products 

Product Development 
Mainstream Products 
Opportunity for Universal Design 
Adaptive Products 
Personal Technologies 
Activity Specific Technologies 

Balance Dimension 
Physical 
Intellectual 
Spiritual 

Sociological Dimension 
Dependence (example) 
Independence (example) 
Interdependence (example) 

Personal Technologies 
Activity-Specific Technologies 
Environmental Technologies 

Activity-Specific Technologies 
Arroya Sit Ski 
Mono Ski 
Available from several companies 
Bi Ski 
Dynamic Seating Spring Assist 
Cross Country Ski 
Pax Back 
Available from BES Rehab Ltd 
Piano Pedal Pusher 
Do it yourself design specifications 

Manual Vehicle Hand Controls 
Available for purchase 

Dynamic Seating 
Hiking Chair 
Hand Bike 
Contoured Seating 
Seat Cushion Testing 
ISO and RESNA standards 
SKELI 
Used for Standards testing 
ASLI Prototype 

HipGrip 
Available from Bodypoint 
FlexRim Ergonomic Pushrim 
Available from Spinergy 
GripRim 

Adaptive Canoe Seating 
Available from Chosen Valley Canoe 
Accessories 
Wave Ski
Environmental Technologies
Things that do not move
Small Watercraft Launch Areas
Water Trail Access Information
Tools and Technology for Accessible Trails
Universal Trail Assessment Process (UTAP) – 1200 people trained
Key UTAP Information
Length, Grade, Width, Surface,
Cross slope, Features & Facilities
Training available from BD
High Efficiency Trail Assessment Process (HETAP)
USDA SBIR Phase II
Equipment available from BD
Developed Outdoor Recreation Assessment Process (DORAP)
Under development at BD
Outdoor Constructed Features
Bench, Camp Shelter, Cooking
Surface/Grill, Fire Ring, Wood
Stove/Fireplace, Outdoor Rinsing
Shower, Parking Area, Picnic Table,
Pit Toilet, Tent Pad/Platform, Toilet
Building, Trash/Recycling
Receptacle, Utility/Sewage
Connection, Viewing Area at
Overlooks, Viewing Scope, Water
Spout
Trail Access Information
Signage available from BD
www.trailexplorer.org
Develop Standards for Trail and Sidewalk Design
Architectural Barriers Act Outdoor Recreation Access Guidelines
ADA Recreation Trail
Grade
8.33% for 200 feet
10% for 30 feet
12.5% for 10 feet
Cross Slope
5% maximum
Rest Areas
60 inches length, 5% slope
Surface
firm and stable
Width
36 inches minimum
Surface Testing
ASTM F 1951–99
Standard specification for determination
of accessibility of surface systems under
and around playground equipment
Testing available from BD
Rotational Penetrometer
Objective surface measurement device
Available from Beneficial Designs
Surface Stabilizers Gravelpave2
Pedestrian Right of Way Assessment Process (PROWAP)
Wireless Measurement Devices
Measuring Process
GIS Data
Mapping
Services available from BD
Universal Design of Fitness Equipment (UDFE) Standards
Accessible "mainstream" fitness equipment
Low Step-up Height Design
Grip Bars
Weight Pin Color Contrast
Weight Pin Gripability
Control Panel Contrast
ASTM standard now published
Development of Uniform Standards for Cognitive Technologies
Goal—Increase Access to Technology for People with Cognitive Impairments
RESNA draft standard in process
Amusement Park Wheelchair Access
Accommodates Wheelchair
Accommodates Transfer
Development of Transfer Devices
Design services available from BD
Aircraft Seating
The Problems with Boarding Chairs
Aircraft Aisle Chair
Aircraft seating issues
PVA funded development project at BD

Beneficial Designs, Inc.
Minden, Nevada
www.beneficialdesigns.com
peter@beneficialdesigns.com
775.783.8822 voice
775.783.8823 fax