Arizona Population: 1870-2013
Arizona Population: 1870-2013
Arizona Population: 1860-2020
State Per Capita Personal Income: 1970-2012

Washington
Colorado
Arizona
Arizona Energy Consumption

Trillion BTUs


Solar  Biomass  Hydro-electric
Nuclear  Coal  Natural Gas  Petroleum
Arizona Solar Energy Production

Trillion BTUs

1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011
Future is Not Yet Realized

People Demand Further Change

-Arizona We Want Report
Arizona We Want

Education
  Individualized education programs and increased graduation requirements

Healthcare
  Public programs available to low-income residents and children

Quality Jobs
  Job training programs for unemployed adults and lowering business taxes

Infrastructure
  State-wide water conservation plan and preservation of open space

Energy Independence
  Investing in renewable energy generating and energy efficiency incentives
How does change occur?

Individuals
Institutions
Technologies
Mechanisms of Change: Individuals

Carl T. Hayden

Sandra Day O’Connor
Student Level Changemaking

**direct**
- **direct service**
  - Community Service
  - Service Learning
  - AmeriCorps
- **entrepreneurship**
  - Innovation Challenge
  - Edson Student Entrepreneur Initiative

**indirect**
- **awareness**
  - Courses
  - 10,000 Solutions
- **advocacy**
  - Valley of the Sun United Way
  - Student clubs
Student Level Changemaking

direct

indirect

ASU Innovation Challenge
ASU Freshman Enrollment by Annual Family Income

Annual Family Income in Thousands

Fall 2002
Fall 2007

Only includes first-time, full-time freshman
ASU Degree Production: 2002-03 to 2019-20

Undergraduate

Penn State
UCF
Ohio State
UT-Austin
Texas A&M
Mechanisms of Change: Institutions

Granite Reef Diversion Dam, 1903
Institutional Examples

ASU Chandler Innovation Center

ASU Phoenix Downtown Campus

ASU Colleges at Lake Havasu City
Mechanisms of Change: Technologies
Targeting technologies and industries that don’t yet exist

Technology Examples

Flexible Electronics and Display Center

Arizona Center for Algae Technology and Innovation
Flexible Electronics and Display Center

Named by CNN as one of ten ideas that will change the world
Arizona Center for Algae Technology and Innovation
What change will ASU create going forward?

Individuals

Institutions

Technologies
Individuals

Great Little Companies
Great Little Companies: Pollen Tech
ASU Center for Law and Society
Develop breeding systems to improve the quality of honey bee stocks used for pollination, valued at over $20 billion annually, and honey production.

Understand how nutrition during early stages of development affects metabolic functions throughout life and life span.

Understand how genetic and hormonal systems evolve and control behavior.

Illuminate the neuro-biochemistry of behavior, learning and memory.

Understand the fundamentals of associative learning and the relationship between reward value and memory.

Understand how complex social behavior self-organizes from collections of individuals.
“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.”

Margaret Mead