

Ch 16 Life at the Turn of the 20th Century

Section 1 Science and Urban Life

Technology and City Life

Skyscrapers

- 1890, 58 cities have 50,000 people; 1900, 4 of 10 people in cities
- Invention of elevators, internal steel skeletons lead to skyscrapers
 - **Louis Sullivan** designs Wainwright Building
- Skyscrapers solve urban problem of limited, expensive space
 - **Daniel Burnham** designs Flatiron Building

Electric Transit

- Before Civil War, horse-drawn streetcars run on iron rails
- By 1900, electric streetcars (trolleys) run from suburbs to downtown
- Some cities build elevated trains or subways

Engineering and Urban Planning

- Steel-cable suspension bridges link city sections
- Need for open spaces inspires science of urban planning
- **Frederick Law Olmstead** spearheads movement for planned urban parks
 - 1857, helps design Central Park

City Planning

- Chicago's population growth results in unregulated expansion
- Daniel Burnham draws plan for city with parks along Lake Michigan
 - designs White City for 1893 World's Columbian Exposition

New Technologies

A Revolution in Printing

- By 1890, U.S. literacy rate almost 90%
- Growing demand for newspapers, magazines, books
- Mills produce cheap paper that withstands high-speed presses
- Faster production, lower costs make periodicals more affordable

Airplanes

- **Orville, Wilbur Wright** use engines to fly "heavier-than-air" craft
 - first successful flight Dec. 1903
- By 1920, first transcontinental air mail established

Photography Explosion

- Pre-1880s, photography requires heavy equipment, time
- **George Eastman** develops light-weight equipment, studio processing
- 1888, introduces Kodak camera, easy to operate
 - millions use Kodak camera
 - helps create field of photojournalism