

**Environmental Health and Safety**

# **Air quality permitting; lessons learned during the growth of a large University**

**Mary Cuevas-Delgado**

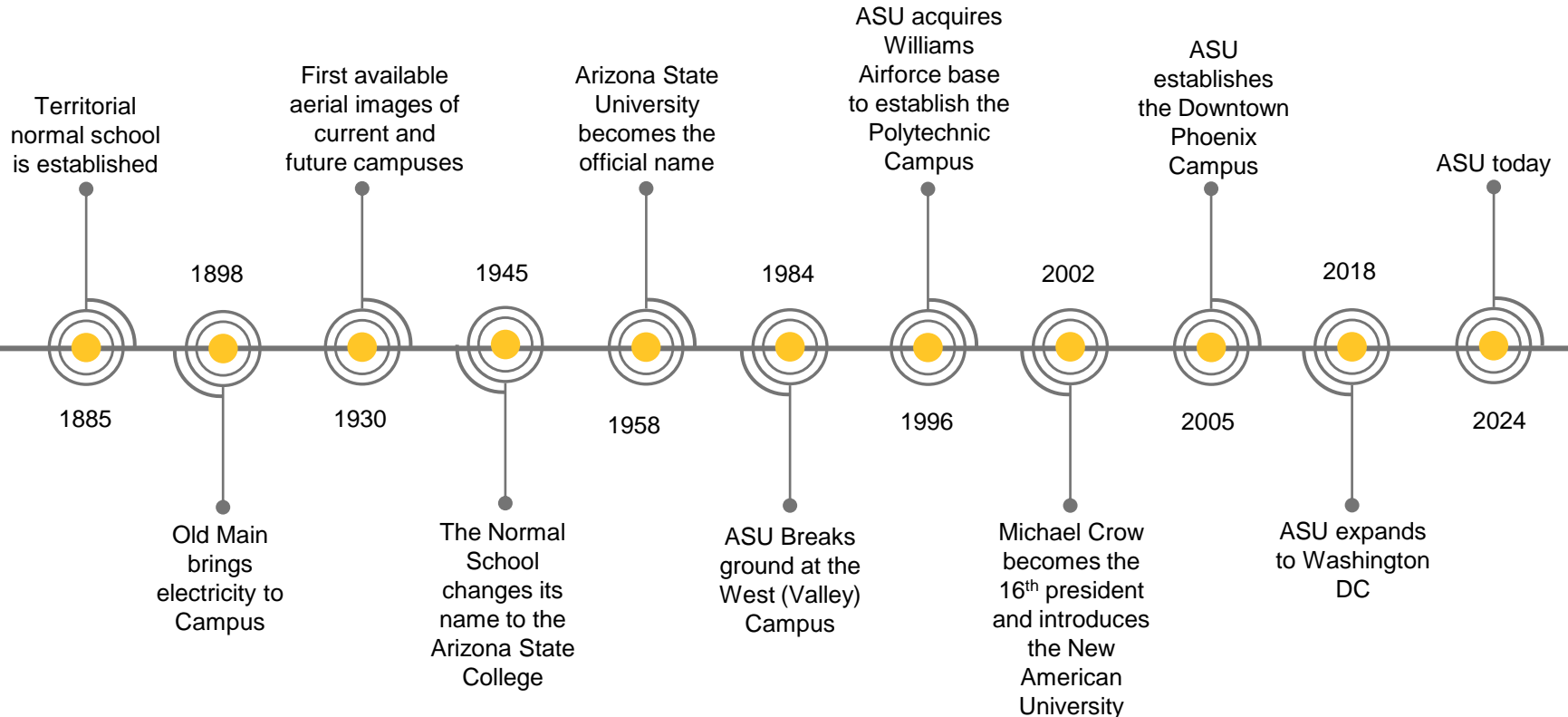
**Safety Partner, Safety in the Built Environment**



# Arizona State University charter

ASU is a comprehensive **public research university**, measured not by whom it excludes, but by **whom it includes** and **how they succeed**; advancing **research and discovery** of public value; and assuming **fundamental responsibility** for the economic, social, cultural and overall health of the **communities it serves**.

# ASU Milestones



# Tempe Campus



West Valley Campus



Thunderbird Rd

1949

51st Ave

49th Ave

47th Ave

43rd Ave

Wood Dr

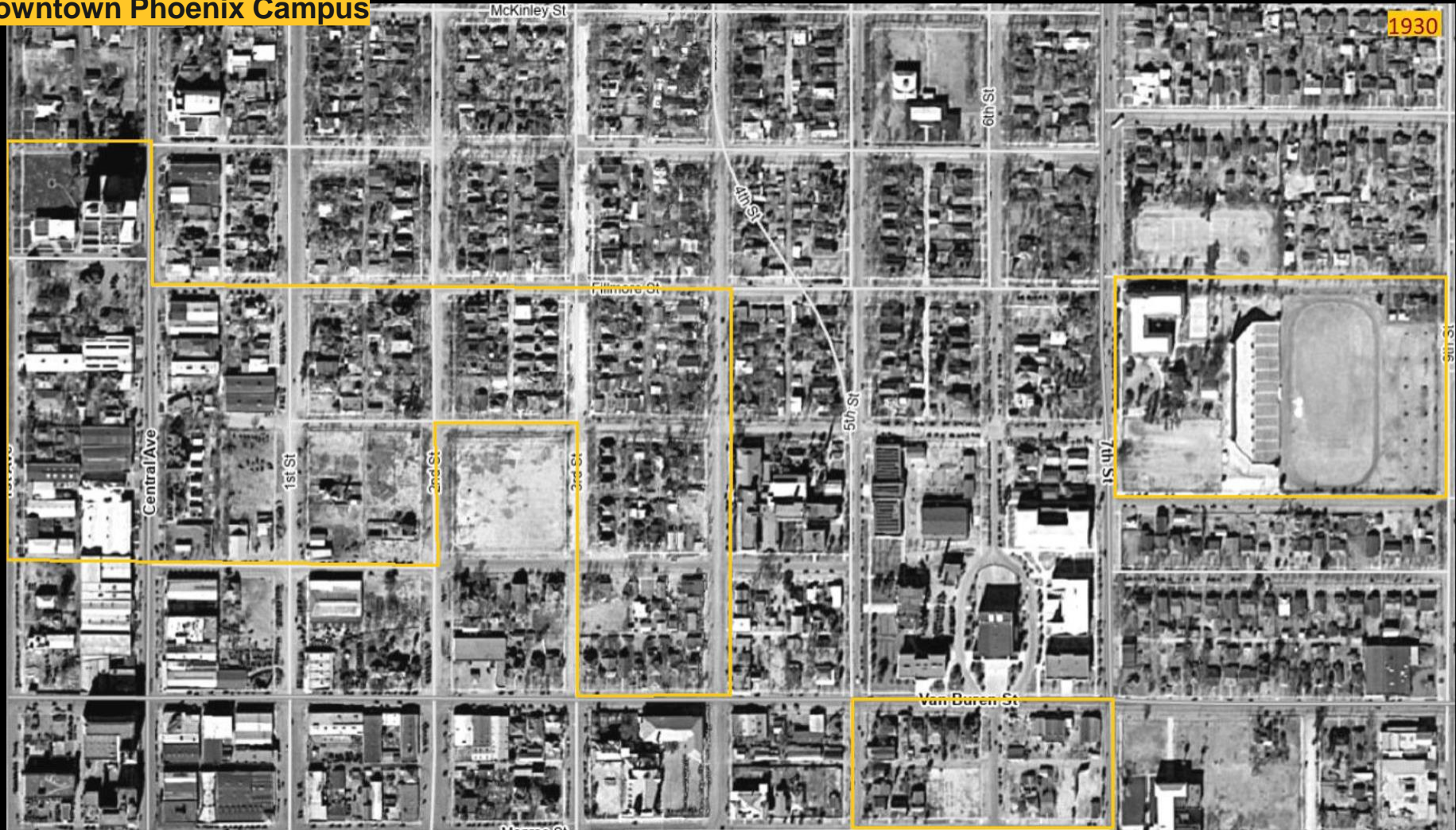
Sweetwater Ave

50th Ave



# Downtown Phoenix Campus

1930





## **One university in many places**

**ASU is located at 48 sites across the country**

Lake Havasu City, Mesa City Center, Tucson, Yuma, Health Futures Center, Phoenix Bioscience Core, ASU Research Park, SkySong, the ASU Scottsdale Innovation Center, Chandler Innovation Center, Grant Street Studios, Natural History Collections at Alameda, Brickyard, Kerr, Fashion Institute of Design and Merchandizing, Herald Examiner Building, Bermuda Institute of Ocean Science, Hawai'i, ASU Online





# Air quality regulations

- Air Pollution Act of 1955
- Clean Air Act
  - 1963
  - 1967
  - 1970
  - 1977
  - 1990
- Arizona Department of Environmental Quality
- Maricopa County Air Quality Department
- South Coast AQMD
- DC Department of Energy and Environment

# Current ASU Air Quality Permits

**F000763** – Tempe Campus

**F000765** – Community Services Building

**F002136** – Macro Technology Works

**F002138** – Downtown Phoenix

**F002139** – West Campus

**F002140** – Polytechnic Campus

**F002141** – Alameda

**F006458** – Grant Street Studios

**F006460** – Chandler Innovation Center

**F039533** – Brickyard

**F039657** – Wexford

**G73349** – California Grand

**7043-SC-0034** – Washington D.C.



# Environmental Health and Safety (EHS)

## **Mission**

Environmental Health and Safety provides innovative programs and services to foster a culture of safety and environmental responsibility for the ASU community.

## **Vision**

Environmental Health and Safety leads a culture of safety and environmental responsibility for the ASU community



# Partners in Compliance

## Facilities Dev. & Management

Service the equipment and send reports

## FDM Business Services

Pay the natural gas bills and send usage summaries

## External Contractors

Service the equipment, pay the natural gas bills, and send the results and nat. gas usage.

# Overcoming challenges due to

## Diversity of activities

- Natural gas boilers
- Kilns
- Emergency generators (engines)
- Surface Coating
- Abrasive blasting
- Wood working
- Power plant
- Semiconductor research



# Overcoming challenges due to

## Unpredictable growth

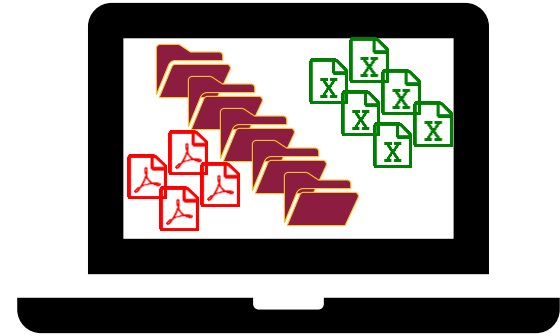
- Funding availability
- Variety of faculty
- Research opportunities



# Overcoming challenges due to

## Recordkeeping

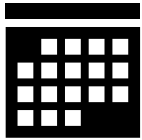
- Amount of information
- Records not received on time
  - Record holder does not know they hold this role
  - Change in personnel
  - Out of Office



# Solutions for Compliance Assurance

## Growing partnerships

Monthly reminders



WebTMA



Site visits



Education and training





# Solutions for compliance assurance


## Creating systems

- Plan reviews
- Material reviews
- Equipment reviews
- Process reviews
- Permit application reviews

The screenshot displays the ASU Business and Finance website. The header includes the ASU logo and navigation menus for Budget and Finance, Business, CFO, Facilities, HR, Safety, Services, and Sustainability. A breadcrumb trail shows the path: Home / Facilities / Facilities Development and Management / Forms and permits. The main content area is titled "Building permit and inspection requirements" and features eight sections in a grid:

- Section 1 – Building Permit Application information
- Section 2 – Types of Building Permits issued
- Section 3 – Permits required by other state and county agencies
- Section 4 – Construction documents required for Plan Review
- Section 5 – Types of Plan Review
- Section 6 – Other Campus Reviews
- Section 7 – Construction inspections
- Section 8 – Certificate of Occupancy

On the right side, there is a vertical sidebar with three items: Design and Construction Professionals, Facilities forms, and Stormwater Program.

A photograph of the Arizona State University (ASU) building, featuring a prominent dome with a yellow and blue geometric pattern. Two flags are flying from a tall pole in the foreground: the United States flag and the ASU flag. The building is a large, multi-story brick structure with many windows. A yellow vertical bar is on the left side of the image.

# Future of ASU's Air Quality Program

Air Quality Database

Air Ambassadors

# Acknowledgements

**Special thank you to the following people for their contributions**

Suzanne Kennedy, Assistant VP Environmental Health and Safety (EHS)

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Cullen LaBagre, Safety Partner, EHS

Emily Williams, Safety Partner Biosafety & Biosecurity, EHS

# Sources

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# Questions

**Questions, comments, concerns?**

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