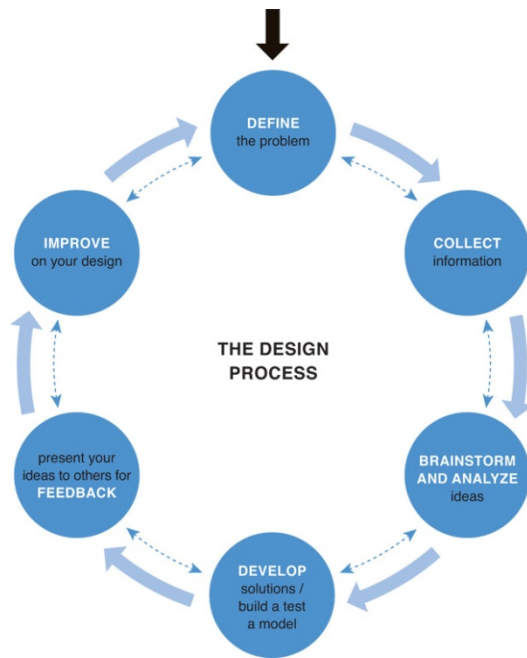


**The American Skyscraper: Transforming Chicago and the Nation**  
*Landmarks of American History and Culture Workshop for Teachers*  
Summer 2017

## Using Free Digital Resources in Student Design Projects including CAF's DiscoverDesign.org

---



**DEFINE** the problem

**COLLECT** information

**BRAINSTORM / ANALYZE** ideas

**DEVELOP** solutions / build a test model

**PRESENT** your ideas to others for **FEEDBACK**

**IMPROVE** on your design

**DEFINE** the problem

**COLLECT** information

<http://factfinder2.census.gov>

US Census. Search by your zip code to see great data about the built environment under "Housing Characteristics"

<http://maps.google.com>

Google Maps with maps, aerial photos, and street view can help students understand the site of a new design project

## **BRAINSTORM / ANALYZE** ideas

[www.sketchup.com](http://www.sketchup.com)

Sketchup. Free, powerful, and easy to use modeling software.

[www.youtube.com/user/4sketchupgo2school](http://www.youtube.com/user/4sketchupgo2school)

Your school may block youtube.com for students, but we can recommend showing them to students or using them yourselves. Our favorite Sketchup tutorials from the guys at **g0-2-school.com**.

## **DEVELOP** solutions / build a **TEST** model

<http://susdesign.com/tools.php>

Sustainable by Design. Free tools to help students understand sun angles, calculate overhangs on buildings, and understand the path of the sun... and why it matters in building design.

[www.iesve.com/software/interoperability/sketchup](http://www.iesve.com/software/interoperability/sketchup)

A free plugin from IES allows you to assign important sustainable design information like location, building and room type, construction types and HVAC systems to a SketchUp model.

[www.energy-design-tools.aud.ucla.edu](http://www.energy-design-tools.aud.ucla.edu)

Energy analysis tools that pull climate data from thousands of locations around the country.

## **PRESENT / GET FEEDBACK**

[www.gimp.org](http://www.gimp.org)

A simple and free Photoshop-like program. Allows students to manipulate images in many ways.

[www.xnview.com](http://www.xnview.com)

Free software to download lets students convert most any graphic file type to any other type.

[www.sketchup.com/products/3D-warehouse](http://www.sketchup.com/products/3D-warehouse)

Sketchup's 3D warehouse lets students share their models with the world, and also import them into Google Earth.

## **IMPROVE**

<http://products.construction.com>

Sweets Network. Provides detailed information on thousands of building products. Free registration required. CAD/BIM files, SketchUp files, images, and specs also included.

## **Our favorite sites for architectural blogs and skyscraper news** (as well as reference info on historic and contemporary buildings around the world)

---

[www.skyscrapercenter.com](http://www.skyscrapercenter.com)

The global tall buildings database of the Council of Tall Buildings and Urban Habitat (CTBUH).

[www.archnewsnow.com/news/TodaysNews.htm](http://www.archnewsnow.com/news/TodaysNews.htm)

Our favorite at CAF. A free subscription with daily e-updates about architectural news around the world.

[www.archdaily.com](http://www.archdaily.com)

Shows exciting architectural projects built or on the boards. Each project has a thorough explanation as well as photos, renderings, diagrams and a lot of technical drawings.

[www.Bldgblog.blogspot.com](http://www.Bldgblog.blogspot.com)

Architectural essays, including analysis of projects, book reviews, op/eds.

[www.worldarchitecturenews.com](http://www.worldarchitecturenews.com)

[www.architectureweek.com](http://www.architectureweek.com)

[www.usgbc.org](http://www.usgbc.org)

US Green Building Council

[www.architizer.com](http://www.architizer.com)

Architizer is a new site for architects to interact, show their work, and find clients. It is an open community created by architects for architects.

[www.morphopedia.com](http://www.morphopedia.com)

Morphosis. An exciting architecture firm from Los Angeles that has taken the unique step of sharing a great deal of background info, drawings, design process sketches, technical drawings, and architect/client interviews on many of their projects.

[www.greatbuildings.com](http://www.greatbuildings.com)

Provides background info and images of important buildings – both historic and modern – throughout the world.

### **CAREER INFORMATION**

[www.archcareers.org](http://www.archcareers.org)

A great gateway that introduces students to the steps in becoming an architect.

[www.aia.org](http://www.aia.org)

The American Institute of Architecture Students

[www.aia.org](http://www.aia.org)

The American Institute of Architects

# Digital Resources for Architectural History Research

(Chicago and around the country)

---

[www.encyclopedia.chicagohistory.org](http://www.encyclopedia.chicagohistory.org)

an amazing treasure of resources for background / history on the city

[maps.google.com](http://maps.google.com)

[earth.google.com](http://earth.google.com)

<http://maps.cityofchicago.org/kiosk/mpkiosk.jsp>

aerial photographs

<http://sanborn.umi.com/>

a treasure trove of information on how places change over time! Your local university or state library will likely have an online subscription to digitized Sanborn Fire Insurance maps; in Chicago Illinois digital Sanborn maps are available only in person at UIC Daley Library, Newberry Library, and Chicago History Museum

<http://sanborn.umi.com/HelpFiles/key.html>

symbols and legends used on the Sanborn maps; includes both the color and black-and-white versions of the maps

[www.chicagoancestors.org/#tab-tools](http://www.chicagoancestors.org/#tab-tools)

<http://stevemorse.org/census/changes.html>

Chicago city directories; Chicago street name / numbering changes tools; especially the address conversion tools and the City of Chicago Directory Street Guides available as PDFs; also stevemorse.org has great address look-up tools

<http://webapps.cityofchicago.org/landmarksweb/web/historicsurvey.htm>

Chicago Landmarks Historic Resources Survey database; includes basic building permit info for 17,000 architecturally significant historic buildings in Chicago

[www.chsmedia.org/househistory/1898-1912permits/search.asp](http://www.chsmedia.org/househistory/1898-1912permits/search.asp)

Search the Chicago History Museum's online database for building permits noted in *American Contractor* between 1898 – 1912.

[www.cookcountyassessor.com/data/searchflat/search.asp](http://www.cookcountyassessor.com/data/searchflat/search.asp)

[www.ccrd.info](http://www.ccrd.info)

Cook County Assessor – provides assessment values, and also includes a photo and building age as reference

Cook County Register of Deeds – search property owners from 1985 to present

[www.measuringworth.com/uscompare/](http://www.measuringworth.com/uscompare/)

determine the relative value of a dollar at various times in history

[www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm)

US Department of Labor, Bureau of Labor and Statistics Consumer Price Index (CPI) helps determine buying power. The CPI inflation calculator represents changes in prices of all goods and services purchased for consumption by urban households.

[www.ancestry.com](http://www.ancestry.com)

[www.heritagequest.com](http://www.heritagequest.com)

US general population census in searchable format; require a monthly/yearly subscription  
To protect the privacy of individuals, the National Archives does not release this specific information until 72 years after it was collected: the 1930 census was released to the public in 2002. Ancestry.com is easier to use, but requires subscription. In Chicago, Heritagequest.com is available free with a Chicago Public library card through remote online access.

[www.alookatcook.com](http://www.alookatcook.com)

Invaluable resources for doing ; includes Chicago ward maps and Cook County enumeration district maps when looking up census data for a particular location

#### **OTHER HELPFUL WEBSITES**

[www.cityofchicago.org/Landmarks/pdf/Your\\_House\\_Has\\_A\\_History.pdf](http://www.cityofchicago.org/Landmarks/pdf/Your_House_Has_A_History.pdf)

*Your House Has a History: A Step-by-Step Guide to Researching Your Property*, Alison Zehr with the Commission on Chicago Landmarks, Chicago Department of Planning and Development, 1998.

[www.chipublib.org/cplbooksmovies/research/database\\_atoz.php#c](http://www.chipublib.org/cplbooksmovies/research/database_atoz.php#c)

The Chicago Tribune historical archive (1849 – 1986) – searchable and free with a Chicago Public Library card

[www.census.gov](http://www.census.gov)

The main website for the current United States Census has easily searchable maps and data for any state, county, city, or zip code; it also includes information on previous census years dating back to 1980

<http://memory.loc.gov/ammem/gmdhtml/cityhome.html>

The American Memory Collection at the Library of Congress has a database of historical city maps from throughout the country and around the world

<http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html>

The Chicago History Museum has teamed up with the Library of Congress to put 1902 – 1933 Chicago Daily News photographs online; you may find photographs of your neighborhood or main cross streets

## RESIDENTIAL ARCHITECTURAL HISTORY REFERENCE BOOKS

***AIA Guide to Chicago***, 2nd ed., Alice Sinkevitch, ed. San Diego: Harcourt, 2004. NA735.C4A43

***America's Architectural Roots, Ethnic Groups That Built America***, Dell Upton. New York: John Wiley & Sons, Inc., 1986. NA737.5.A43

***Chicago, City of Neighborhoods: Histories & Tours***, Dominic A. Pacyga and Ellen Skerrett. Chicago: Loyola University Press, 1986. F548.18.P33

***The Comfortable House: North American Suburban Architecture, 1890–1930***, Alan Gowans. Cambridge, MA: MIT Press, 1986. NA7571 .G68

***Do People Grow on Family Trees? Genealogy for Kids and Other Beginners, The Official Ellis Island Handbook***, Ira Wolfman, Michael Klein, illust., foreword by Alex Haley. New York: Workman Publishers, 1991. CS15.5.W65

***Ethnic Chicago: A Multicultural Portrait***, 4th ed., Melvin G. Holli and Peter d'A. Jones, eds. Grand Rapids, MI: William B. Eerdmans Publishing, 1994. F548.9.A1E85

***A Field Guide to American Houses***, Virginia & Lee McAlester. New York: Alfred A. Knopf, Inc., 1984. NA7205.M35

***How Buildings Learn, What Happens After They're Built***, Steward Brand. New York: Viking, 1994. NA2542.4.B73

***Streetwise Chicago: A History of Chicago Street Names***, Don Hayner and Tom McNamee. Chicago: Loyola University Press, 1988. F548.67.A1H38

***The Value of a Dollar: Colonial Era to the Civil War, 1600–1865***, Scott Derks and Tony Smith. Millerton, NY: Grey House Publishing, 2005. HB235.U6D47

***The Visual Dictionary of American Domestic Architecture***, Rachel Carley. New York: Henry Holt and Company, Inc., 1994. NA7205.C27