



# Syncopations in History as Seen From Above



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## Premise

*Humanities and Science can join to further our understandings of culture and history.*



My strategy is to find ways to utilize observational records – specifically aerial photographs – to show change over time that could tell cultural or historical stories.



This is our starting point – a 2013 Google image showing the conference hotel. I'll be using this area to illustrate how scientific observations, again aerial photographs, could be used to help place other elements of a humanities research such as park developments, urban change like the transition away from our reliance upon trains, or the buildup of a neighborhood. Images such as the ones portrayed here can provide a different visual representation for a collection of papers. Think of railroad documents that could be supplemented with images of the buildup and demise of the large rail center pictured in the upper left-hand corner.



Roll back time to just after WWII – 1948. Potentially lots of humanity subjects here to follow through time. Airport development. River changes or man influences on the river. I'll focus on the area around the Westin hotel.



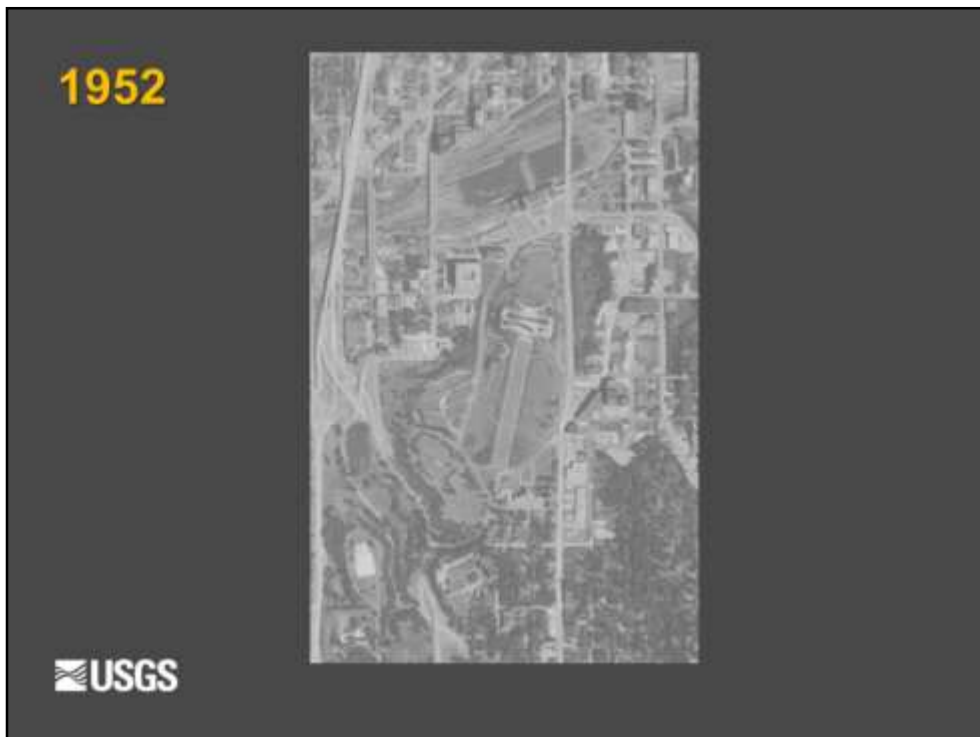
Same 1948 image just zoomed in. Flown by the US Air Force. Could be an interesting story about why the Air Force flew this area at this time.

The WWI Museum at Liberty Memorial is clearly visible as well as Union Station. Built in 1914, Union Station encompasses 850,000 square feet and originally featured 900 rooms. In its prime as a working train station, it accommodated tens of thousands of passengers every year. At its peak during WWII, an estimated one million travelers passed through the Station. The North Waiting Room (now the Sprint Festival Plaza) could hold 10,000 people and the complex included restaurants, a cigar store, barber shop, railroad offices, the nation's largest Railway Express Building (used for shipping freight and mail) as well as a powerhouse providing steam and power.

No Westin Hotel.



1950 Army Map Service. Again, probably an interesting tale of how these photos were used to develop topographic maps which was the normal use for these photos from the Army Map Service. Again no hotel on Pershing Road yet.

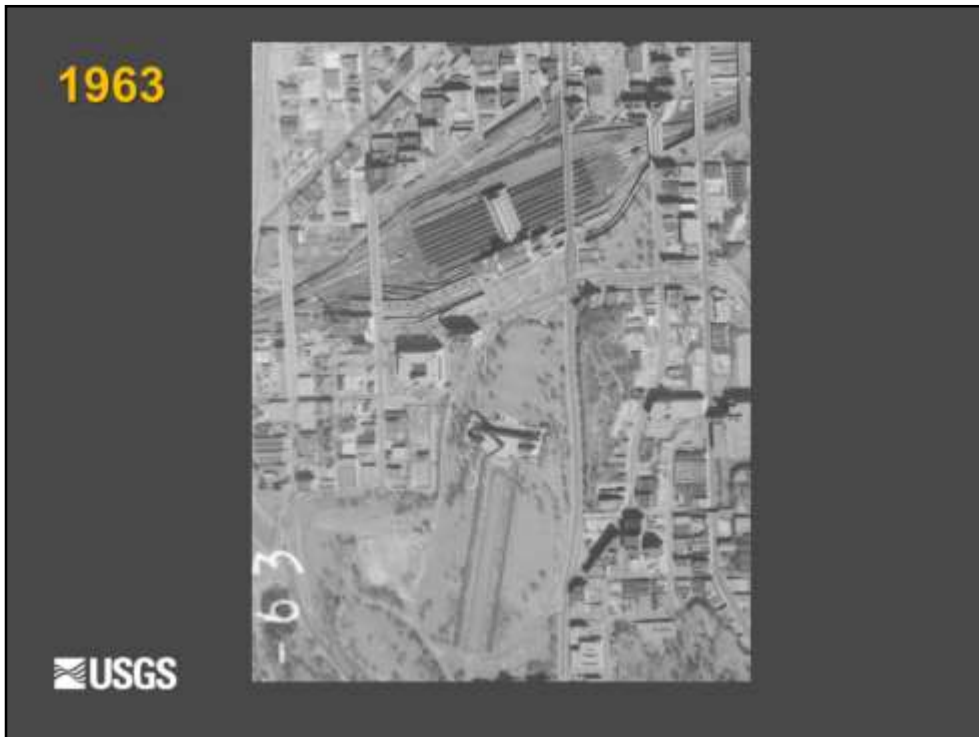


1952 – U.S. Air Force again. I wonder why the need to fly this area again?  
Better detail than the previous images. Can really pick out the shrubs and trees.  
No Westin.



1955 – U.S. Geological Survey. My own agency. Used for mapping the Nation. Larger scale by  $\frac{1}{2}$  resulting in details being sharper. Individual trees are quite easy to see and the Union Station tracks are very identifiable. Again, no hotel yet.

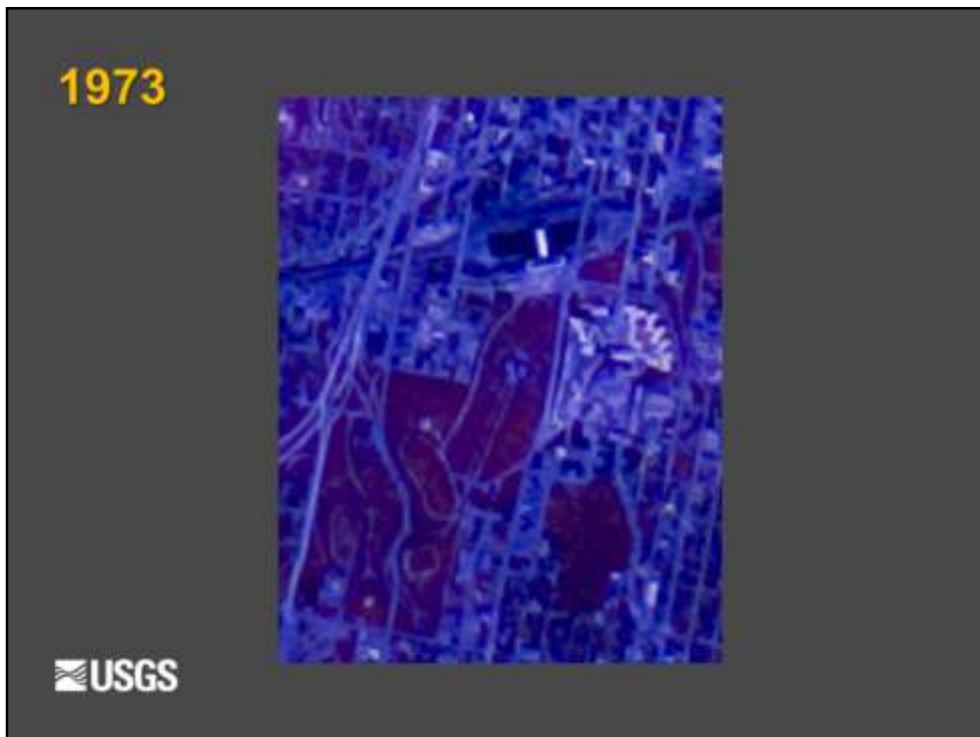




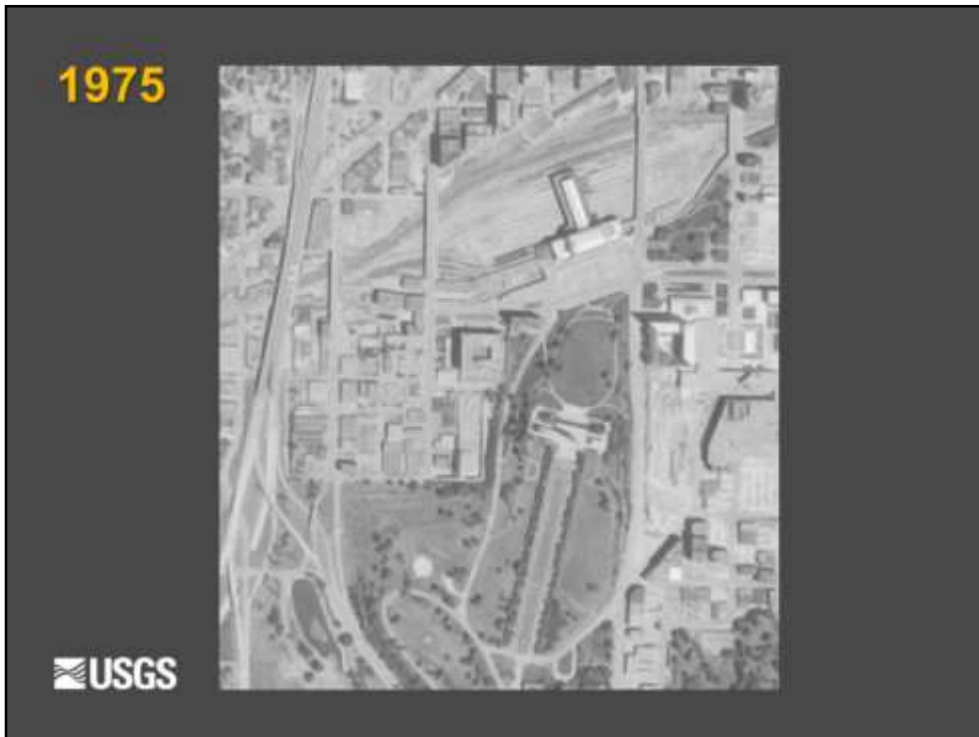
1963 – Another USGS. Good scale, too which means high detail. Notice the shadows indicating where the sun was. Possibly, mid-morning flight. Still no Westin.



1970 – A third USGS image used to create or update paper topographic maps. Our use today would be secondary so we are re-purposing these records. The transportation development could also be tracked through time. No hotel, though.



1973 – NASA Ames, small scale, color infra-red (CIR) – outgrowth from WWII – camouflage detection. The red tint represents vegetation such as trees, bushes and grass. The darker or more vibrant, the more dense and better the vegetation is doing. The Westin opened this year so it is unfortunate that this image, though it is color which provides more information, is flown too high for our purpose. There would be some activity or structure at this time so we can do a little surmizing.



1975 – USGS 1:40,000 scale which means one inch on the photo equates to 40,000 inches on the ground. The Westin appears very distinct two years after construction and opening. Continue to note the train station as this will evolve, also.



1978 USCOE. There are no levies in this image, but this frame was probably just part of a project to document the state of the river banks and levees in the area.

1982



 USGS

1982 – NASA Ames (previous flight was in 1973). CIR – November. Fairly dark, but the hotel is one of the features that stands out.

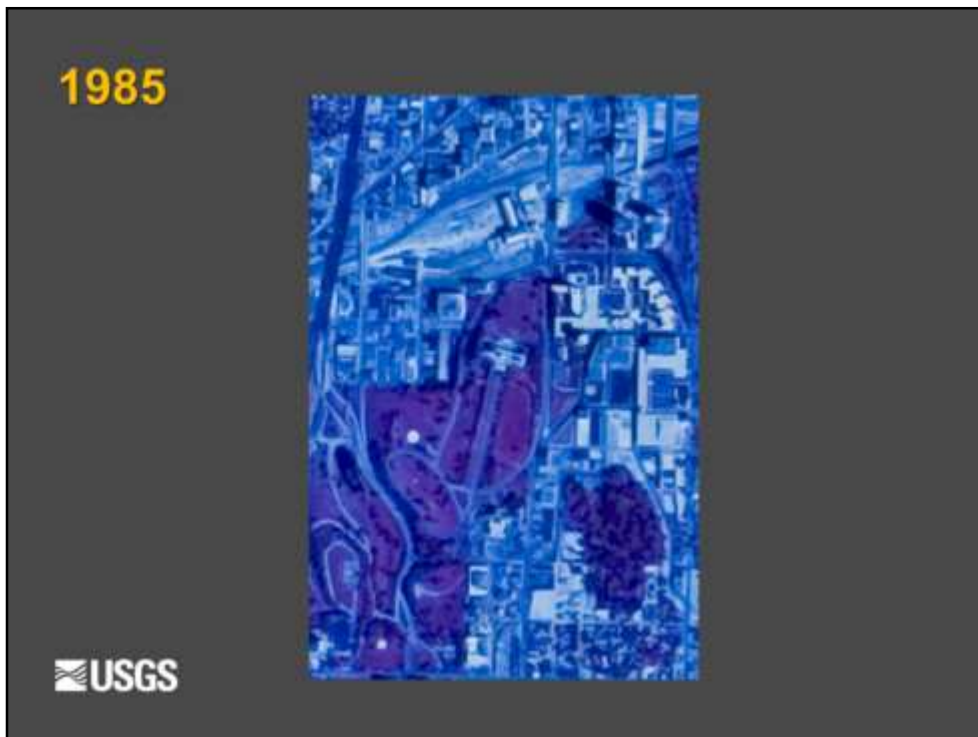
Closed in the 1980s, Union Station sat empty and neglected, escaping demolition on several occasions.

1983



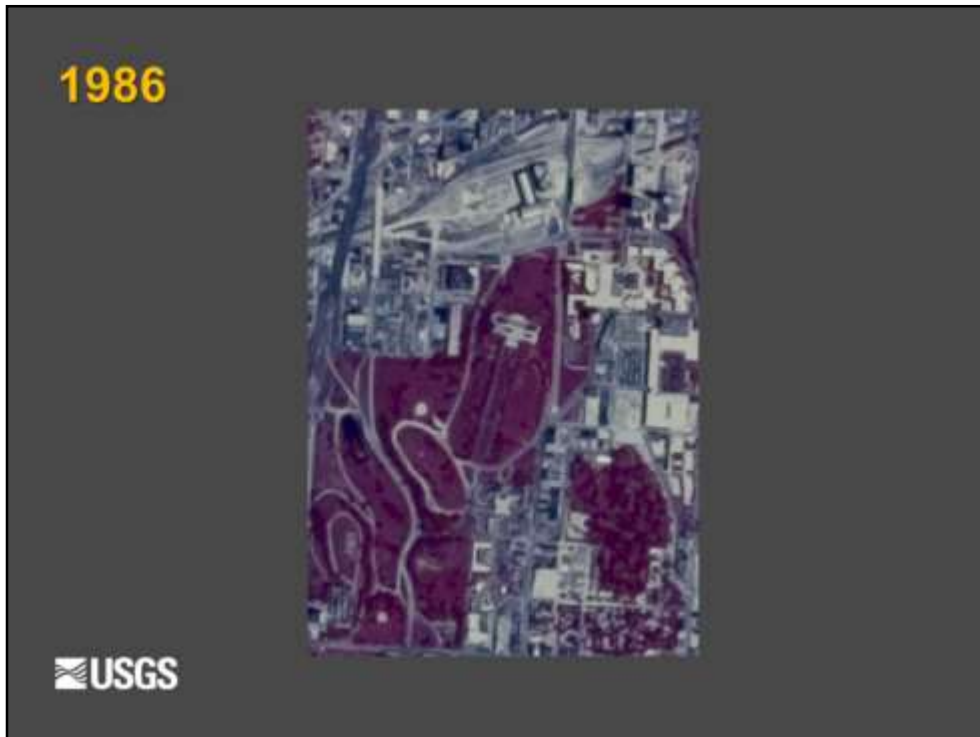
 USGS

1983 – National High Altitude Photography (NHAP) program, which was a cooperative Federal and State endeavor. This image has better detail than the previous CIR. Recall that the red color is indicating vegetation – grass, shrubs, trees – vitality. (May)

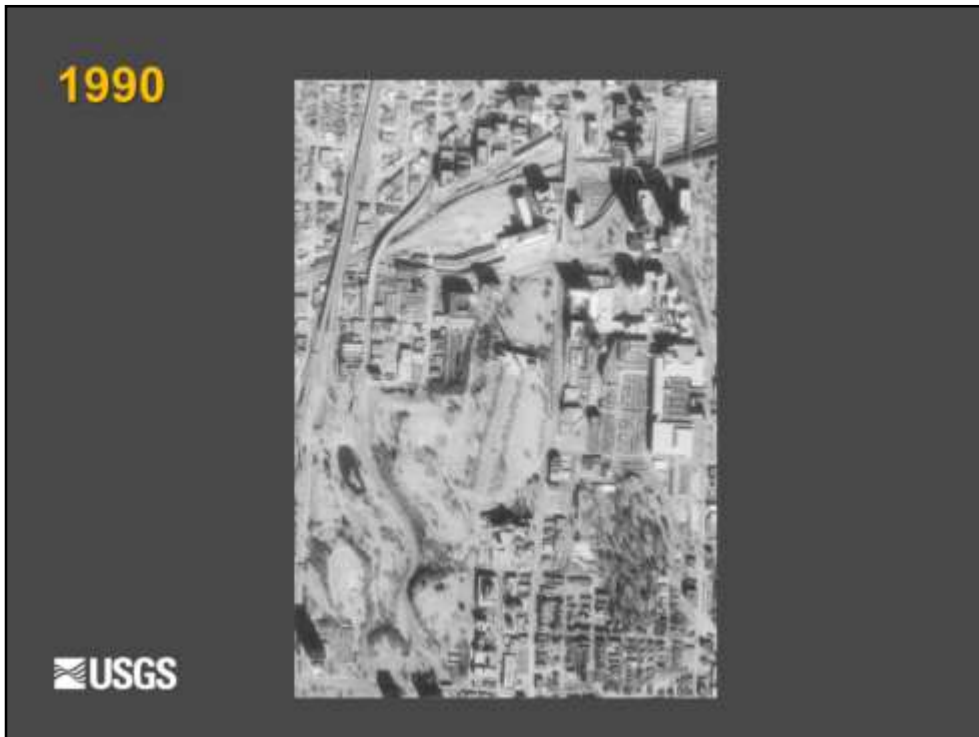


1985 NHAP just two years later in July. I'll speculate that this was a dry summer. This could be confirmed by investigating National Weather Service (NWS) records.





1986 NHAP. Third coverage year since 1983 – a bit unusual for so many missions over the same area. June –reveals very vibrant red. Maybe a wetter spring and not so hot of a summer yet. (scroll back and forth between this image and the previous one)



1990 NAPP B&W. A bit hard to go back to black-and-white after looking at color. Still very useful. Again, the building shadows show up plainly indicating the sun angle.



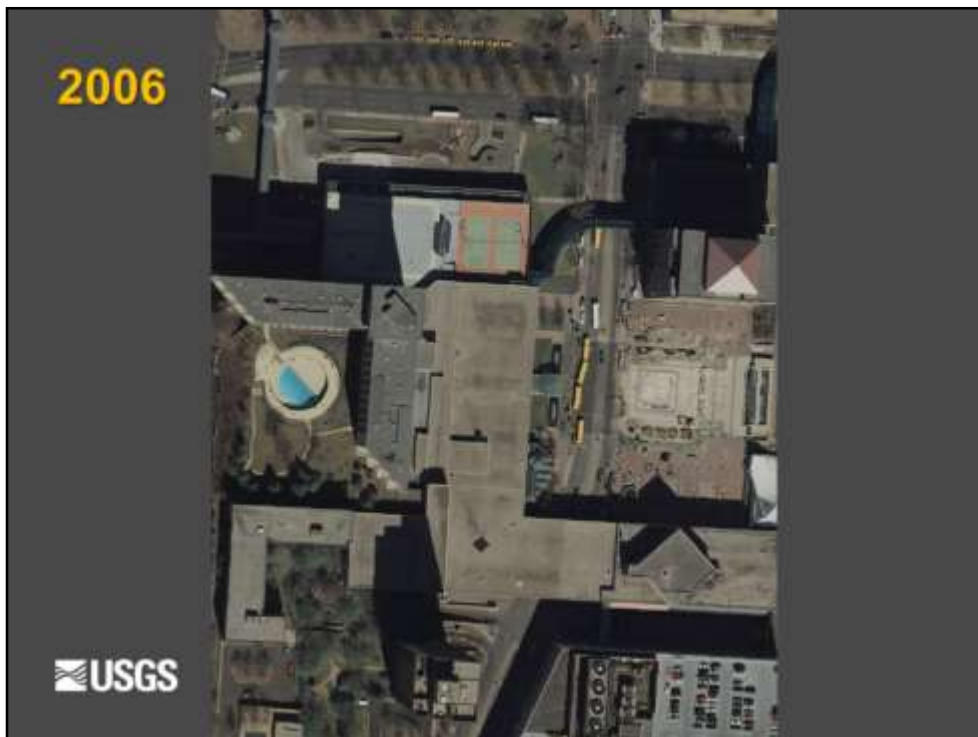
1991 Digital Orthophoto Quad (DOQ). This is a very detailed photo.



1996 DOQ shadow direction indicating a different time of day from previous photos. Maybe afternoon. The roof of the hotel is highly reflective. In 1996, a historic bi-state initiative was passed to fund the Union Station's renovation, which was completed in 1999. The following photos will show the extensive development of Union Station.



2002 DOQ. Shadow direction orientated similar to most of the other photos viewed.



2006 High Resolution Orthophoto (HRO). This collection was created after 9/11 in response to the need for better metropolitan maps across the US. This was one of our cultural reactions to that tragedy. Note the school buses – touring the Hallmark building, perhaps. Also, the taxis outside the Westin waiting for fares. You can even count cars in the parking lot in the lower right hand corner or the number of blades on the HVAC system of the building in the lower right corner.



2007 US Department of Agriculture (USDA) natural color which may be easier for you to relate to. This is in July and the grass looks a little parched. This image shows the Union Station complex well.





2008 HRO (9/11). Notice the colored table umbrellas in the open gathering area. Just three taxis waiting this day. This image was taken in March so the pool is probably just showing melted snow or rain accumulation.





Same year as HRO, but taken by USDA. Again, your eyes may feel robbed with the B&W, but notice detail in the park and Union Station areas.



2009 USDA again. Interesting that the USDA was flying this area so regularly.

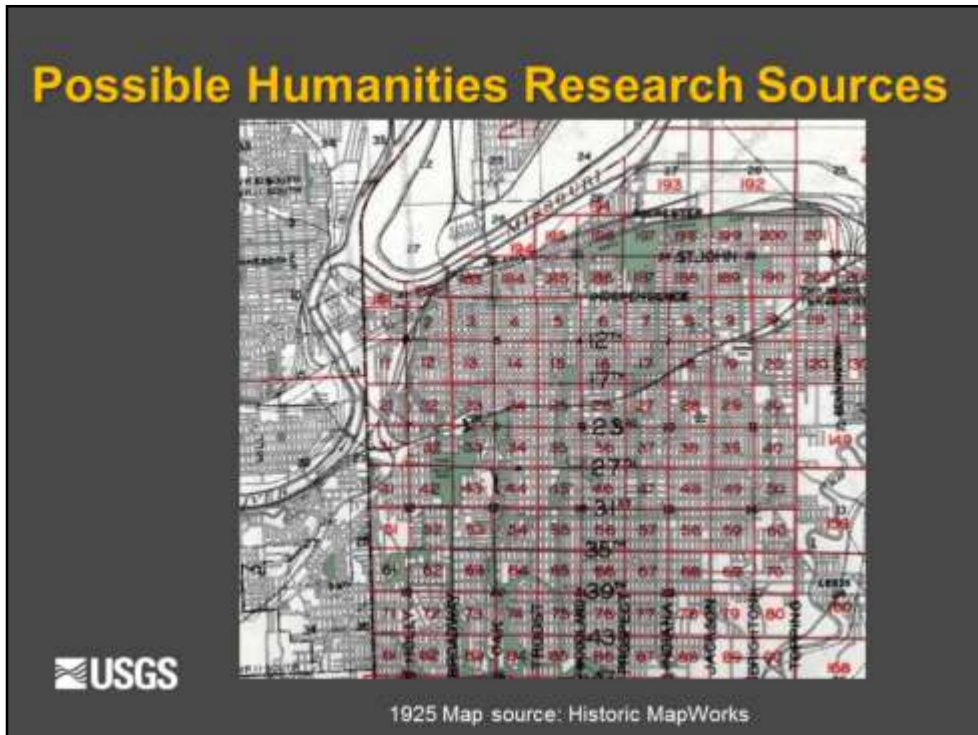


2011 HRO. November, but still good foliage in the open area to the point that the trees obscure the colored umbrellas. Quite a few taxis waiting on this day.



2012 Another USDA image. Note how trees and the parking area in the upper right hand corner show up very well. Malls sometimes use images such as these to count cars.

## Possible Humanities Research Sources



Sanborn Fire Maps... Exist from the 1800s which could be used to extend the record from aerial sources back even farther in time.



2013 from Google - We've come full circle. While most of my focus was on the Westin Hotel, one could have easily tracked Union Station, the new NARA building, the National WWI Museum at Liberty Memorial, the Washington Square Park, the Hyatt Regency Crown Center Hotel, or other cultural or historical sites. Hopefully, my goal of bridging the humanities and observational science was somewhat successful today.

**Thank you!**

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