

UCSD, GIS & You

Geographic Information Systems (GIS) @



UCSD Libraries

Here to help you explore our world...

Tracey Hughes, UCSD GIS Coordinator



“The application of GIS is limited only by the imagination of those who use it.”

Jack Dangermond, ESRI President & Founder

Image credit to Nature Magazine's 2020 Future of Computing

Our Plan of Action

Introduction

Why use
GIS?

GIS
Resources

The
End!



Introduction

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Me

- GIS Coordinator
- Librarian
- AICP Planner

You

- Name
- Year
- Hopes for GIS



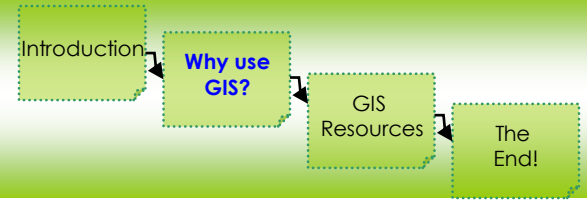
Introduction

**Why use
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See things in a new way...



Percentage of
population
below poverty
level viewed as
height

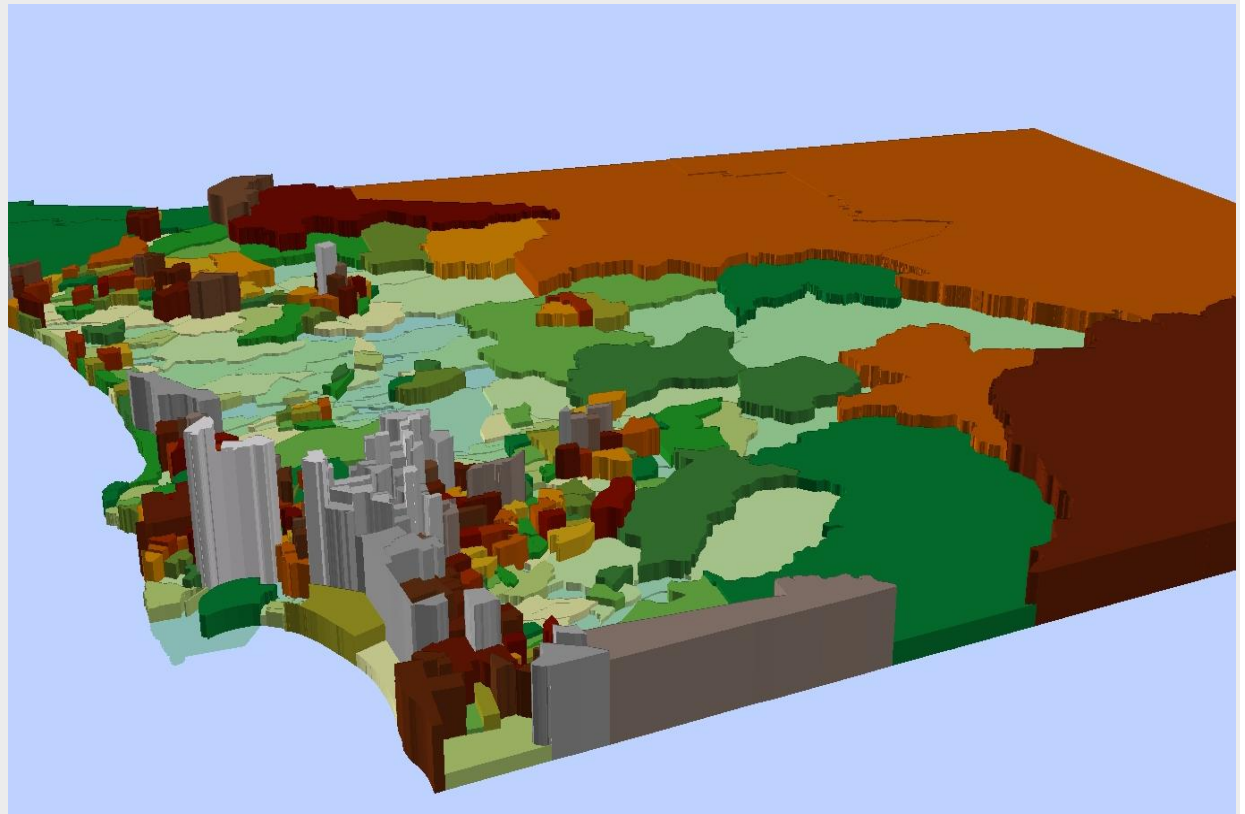
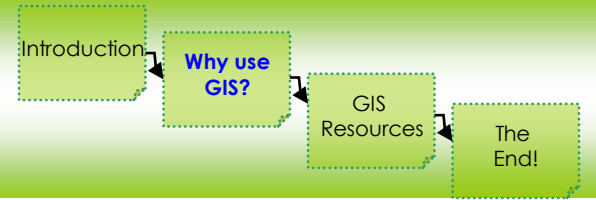
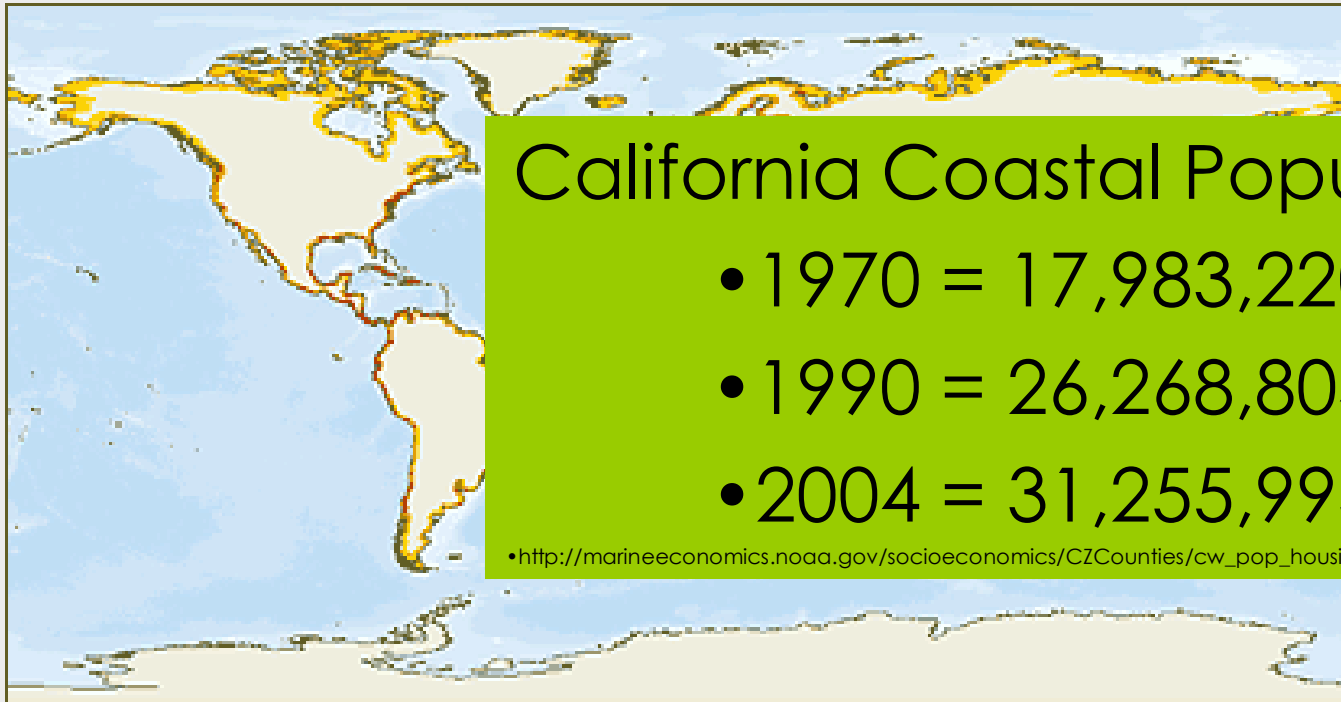


Image created by TELESIS with UCSD's Regional Workbench Consortium

Another perspective



- Global population w/in 100km of coast



California Coastal Population

- 1970 = 17,983,220
- 1990 = 26,268,804
- 2004 = 31,255,993

• http://marineeconomics.noaa.gov/socioeconomics/CZCounties/cw_pop_housing/cw_mainpage.html

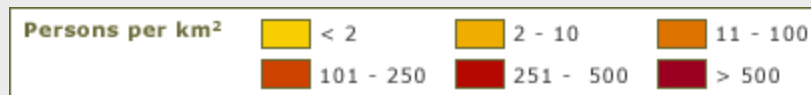
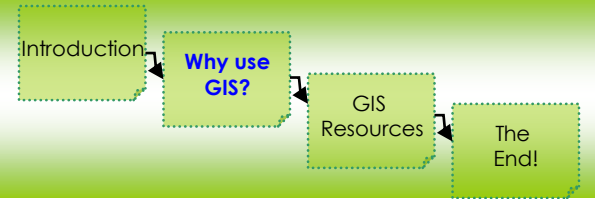


Image from http://earthtrends.wri.org/maps_spatial/maps_detail_static.php?map_select=196&theme=4

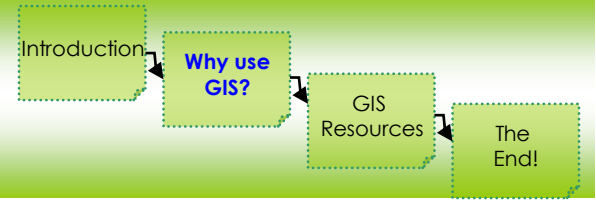
GIS Jobs!



“...People with the skill to use GIS are in demand across a broad range of professions, in government, business and nonprofit organizations nationwide. **”**

(University of Texas at Arlington School of Urban and Public Affairs website)

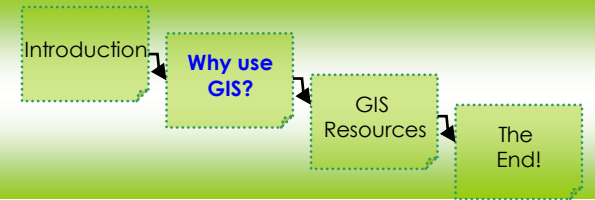
GIS Skills Required.



“...One common tool used in planning is Geographic Information Systems (GIS) that link data and electronic mapping. “

(American Planning Association Website @ <http://www.planning.org/careers/index.htm#1>)

GIS Mastery Wanted.

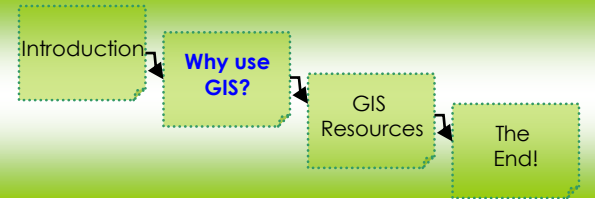


- What Skills Do Successful Planners Possess?

“Mastery of geographic information systems and office software.”

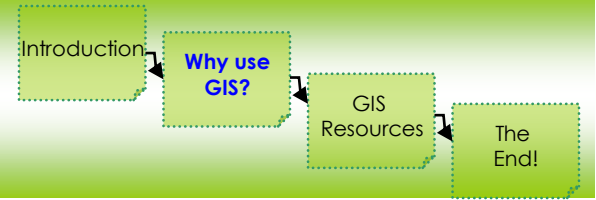
(American Planning Association Website
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GIS is cool.



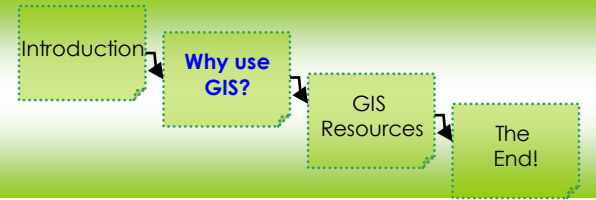
- Maps of War (<http://www.mapsofwar.com/>)
- Social Explorer: Quick maps at Census tract level & race time series of LA (<http://www.socialexplorer.com>)
(<http://www.socialexplorer.com/pub/maps/map3.aspx?g=2&animation=true>)
- CensusScope: Maps, trends , rankings and racial segregation based on Census data (<http://www.censuscope.org>)
(http://www.censuscope.org/us/map_65plus.html)
- Historical Census Mapper: Can create maps easily (<http://fisher.lib.virginia.edu/collections/stats/histcensus/>)

More & Different.



- SANDAG & UCSD's Regional Workbench:
(http://www.regionalworkbench.org/databank/project_files/24/sandagmorph.htm)
 - Visualization of urban change over time for San Diego region
- David Rumsey:
(<http://www.davidrumsey.com/>)
 - Rare maps from 17th & 18th century...all in all a cool site!

The Final Reasons...



Communicate.
Sell your position.

...as the saying goes, a picture is worth a thousand words!

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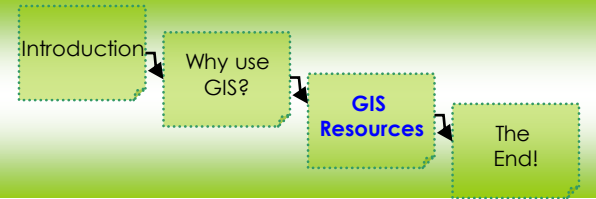
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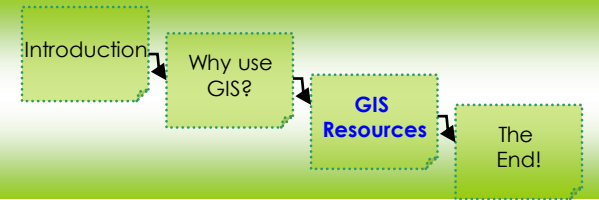


GIS Resources



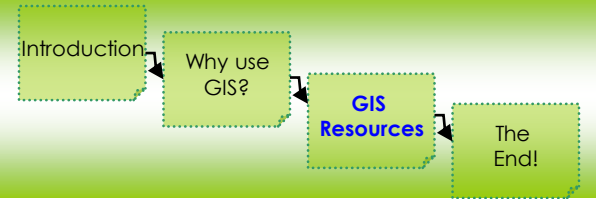
- **Geisel GIS Lab**
 - Computers, printers, scanner
- **Instruction**
 - Online & workshops
- **Software**
 - ArcGIS Desktop & Google Earth PRO
- **Data**
 - Some already there, some in progress
- **Community**
 - Lunches (mark your calendar for May 15!)
- **Me!**

GIS Resources (cont.)



- **Excel files and tables**
- **Census Resources**
 - American FactFinder
 - National Historical Geographic Information System (<http://www.nhgis.org/>)
- **Lots of San Diego data available!!**
 - <http://www.sandag.org>
 - <http://www.sangis.org>
 - In the Geisel GIS Lab – the X drive

GIS Resources (cont.)



- **Examples from SANDAG**
 - Land Use (mid 1980s – Present)
 - Community Planning Areas
 - Transit Routes & Stops
 - Hospitals
 - Schools
- **Examples from SanGIS**
 - Zoning
 - Parcels
 - Parks
 - Business Enterprise Zones

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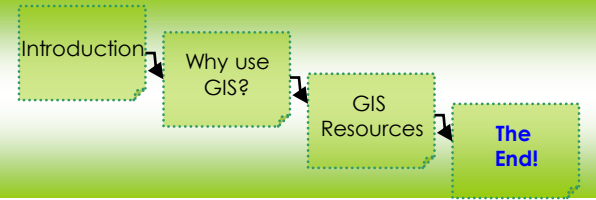
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It's up to you.

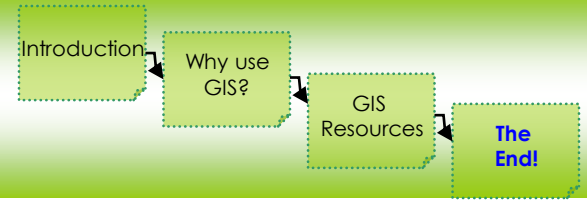


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You have help!



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