The Development of Web Mapping Application: Trails within State Parks





Chang-Heng (Hank) Yang

GIS Specialist changheng.yang@okstate.edu



Geography

Project History

- Resource Management Plan-Geographic Information System (RMP-GIS)
- Ongoing collaboration with Oklahoma State Parks (est. 2006)
- **Team**
 - Lowell Caneday
 - Original PI, ongoing contributor
 - Adam Mathews Follow @geoprofmathews
 - Current PI
 - Hank Yang
 - ▶ 1.0 FTE; 100% dedicated to project
 - GRAs (Amanda and Catherine)

▶ .5 FTE





Geography

Project History

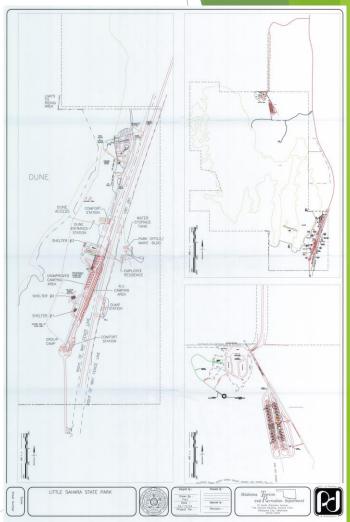
Two primary objectives

- ► RMP
 - Plan preparation and publication (see below)
 - Master file (CAD)
- ► GIS*
 - GPS data collection
 - ► GIS database management
 - Web GIS administration
 - Physical server
 - Web viewer

*Today's focus



geog.okstate.edu/resources/rmpgis



GPS Data Collection

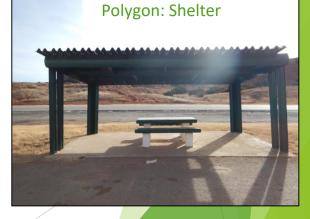
Global Positioning System (GPS)

- Fieldwork
- Data Inventory





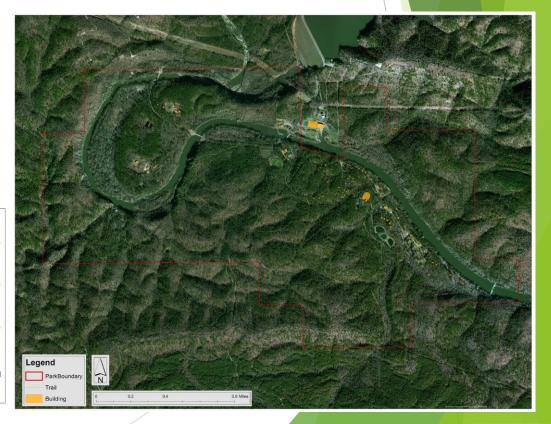




GIS Database Management

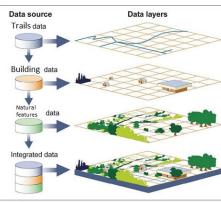
Geographic Information Systems (GIS)

- Data management
- Map creation
- Clients
 - Desktop
 - Web-based including mobile devices





	and the second se		
File Edt	View Insert For	mat Help	
PID",	"easting", "n	orthing"	
"DOQ:	", 538241.501	036265,43135	28.39981509
*poo:	",538918.344	184597,43125	79.68652137
	", 539749.702		
	", 540040.216		
	",540499.050		
	",541898.185		
	",542372.681		
*D005	",542281.961	725538,43096	391.41738078
"DO10	", 542113.745	100247,43095	\$77.83885433
"DO1;	",542367.198	764459,43088	73.70453042
	", 542 699.459		
	",543365.209		
	",544489.863		
	", 544890.900		
"DO1"	", 544661.221	903251,4305	202.71004963
	", 544135.123		
"D000	", 537581.122	200150, 43152	91,46854887
or Help, p	ress F1		
K			
K		\ r/	°(-
		١r	[G
C	J F	٩r	:Gl
C	J.F	١٢	G
		٩r	G



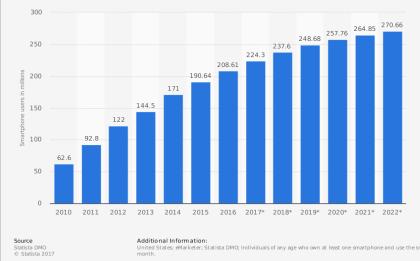
GIS Database Management

Geographic Information Systems (GIS)

- Data management
- Map creation
- Clients
 - Desktop
 - Web-based including mobile devices



The explosive growth of the mobile devices



Number of smartphone users in the United States from 2010 to 2022 (in millions)*

http://www.esri.se/Produkter/ArcGIS/mojligheter/Ej/Ej_enterprise-it

Web GIS Administration

• Web GIS viewers (old vs. new)



- Only Windows System
- Retired (June 1, 2016)



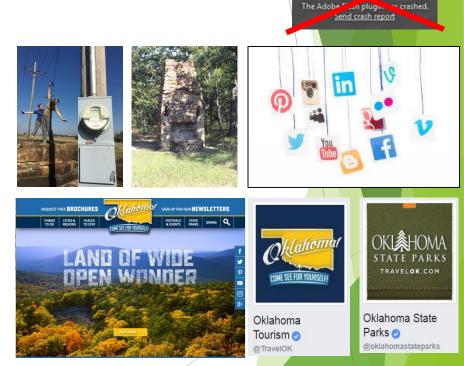


Web GIS Administration

Pros with new viewer

Compatible with social media





..

s crashed

The Adobe

Web GIS Administration

Pros with new viewer

- Desktop AND mobile-friendly!
- Additional resources







