A DESKTOP APPLICATION FOR CHEYENNE & LARAMIE COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

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PENNSYLVANIA STATE UNIVERSITY - GEOG 596A



OVERVIEW



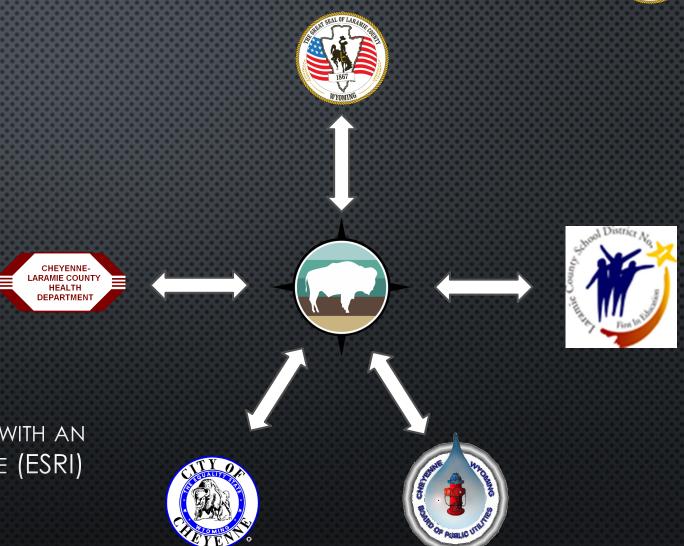
- OPERATING ENVIRONMENT
 - CHEYENNE & LARAMIE COUNTY GIS COOPERATIVE
 - CHEYENNE & LARAMIE COUNTY HEALTH DEPARTMENT
- PROBLEM
 - 5-YEAR TECH REVIEW
- SOLUTION
 - REQUIREMENTS & CHALLENGES
 - RESEARCHED SOLUTIONS
 - PROPOSED SOLUTION
- EXPECTED RESULTS



CHEYENNE LARAMIE COUNTY GIS COOPERATIVE (CLCGISC)



- LARAMIE COUNTY
- Environmental Health
- CITY OF CHEYENNE
- BOARD OF PUBLIC UTILITIES
- SCHOOL DISTRICT 1
- ASSESSORS
- PLANNING (CITY AND COUNTY)
- Public Works
- SHARES DATA AMONGST THEMSELVES ALONG WITH AN ENVIRONMENTAL SCIENCE RESEARCH INSTITUTE (ESRI) ENTERPRISE LICENSE AGREEMENT





5-YEAR TECHNOLOGY REVIEW



Investigates how the Cooperative implements and performs
GEOGRAPHIC INFORMATION SYSTEMS (GIS) AGAINST ESRI'S BEST
PRACTICES AND ESRI'S WAY-FORWARD

Review results

- MIGRATING FROM DESKTOP GIS SOFTWARE ARCMAP (10.7) TO ARCGIS PRO
- Transition from a centralized datastore environment to a federated environment between Cooperative participants
- CHEYENNE & LARAMIE COUNTY ENVIRONMENTAL HEALTH
 DEPARTMENT
 - SEVERAL AREAS NEEDING ATTENTION BEFORE THE DEPARTMENT CAN IMPLEMENT THE ENTERPRISE ENVIRONMENT



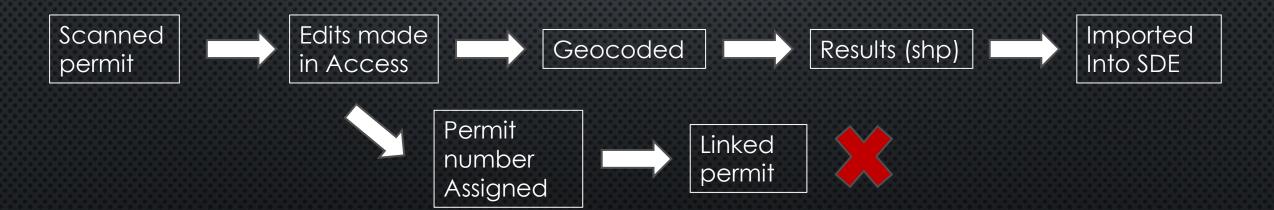


CLCEHD 5-YEAR TECHNOLOGY REVIEW RESULTS



- LACK OF SUPPORT FOR MDB & ACCDB DATABASES
 IN ARCGIS PRO
- MAN-HOURS
 - COORDINATION BETWEEN 3 OR 4 PEOPLE IS NEEDED

- ATTACHMENTS
- GEOCODING CONFLICTS
- CREATES DATA REDUNDANCY AT MULTIPLE LOCATIONS
- PERMIT DATA INTEGRITY





CHALLENGES & SOLUTION REQUIREMENTS



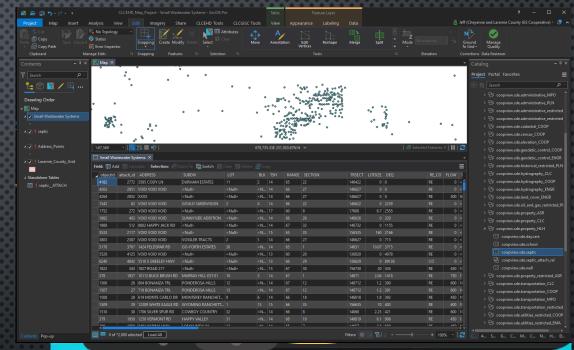
- Data migration from Microsoft Access mdb's and accdb's tables to a different format
- WORKFLOW & MAN HOURS REDUCTION
- SOLUTION REQUIREMENTS.
 - COMPLEXITY OF EDITING
 - CREATE METRICS & REPORTS FROM THE DATA BY QUERYING THE DATA
 - PERMIT PDF's
 - SOLUTION CAPABILITIES
 - Name, store, and retrieve multiple attachments
 - PROVIDE ATTACHMENTS HYPERLINKS FOR PUBLIC ACCESS
 - User friendly, responsive, and able to perform all previously available operations
 - Must not use Access or Excel
 - GEOCODING



SOLUTIONS EXPLORED



- MODIFICATION AND CONTINUATION OF CURRENT WORKFLOW
- WINDOW PRESENTATION FORMAT DESKTOP
 APPLICATION USING ESRI'S .Net RUNTIME SDK
- WEB APPLICATION USING WEB APP BUILDER
- COMMERCIAL OFF THE SHELF (COTS) SOLUTIONS
- Desktop application written in python
- COMPLETE MANAGEMENT WITHIN ARCGIS PRO
- A STANDALONE COREHOST APPLICATION FOR PRO USING ARCGIS FOR PRO SDK



Is not supported by PRO

Dunction

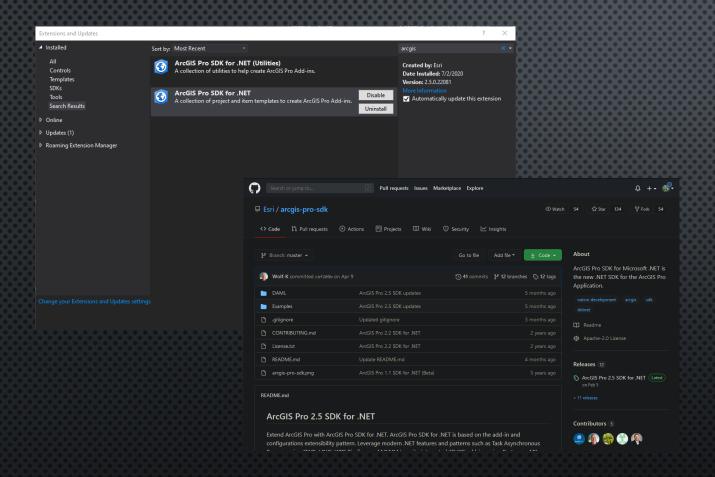
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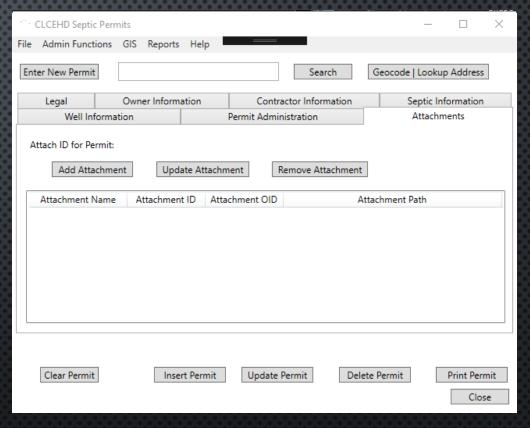
Geocoding
MENNIFERMANIMENTALISM MODEL
BENERALISM Versions managed by Pro
Related Table



SOLUTION – CUSTOM DESKTOP APPLICATION USING ARCGIS PRO SDK









EXPECTED RESULTS



Data stored in SDE



- SINGLE DATA STORE
- ATTACHMENT LINKING
- Maintains Data Integrity

Desktop Application

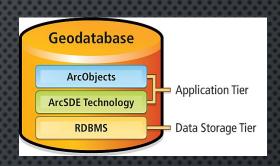


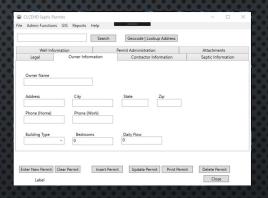
- FRIENDLY GUI
- INHERIT GEOCODING
- EDITING ATTRIBUTES
- ATTACHMENT MANAGEMENT

Web Map



 Public Access to Permit Attachments









CONCLUSION



- DIFFERENT TECHNOLOGIES
 - Modifications
- STANDALONE DESKTOP APPLICATION

Data migration from Microsoft Access mdb's and accdb's tables

Workflow & Man hours reduction

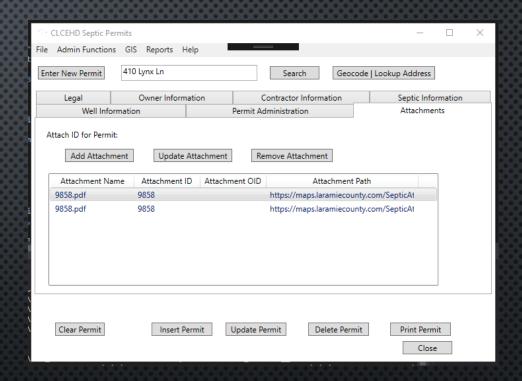
Complexity of editing

Create metrics & reports from the data by querying the data

Permit PDF's

Name, store, and retrieve multiple attachments Provide attachments hyperlinks for public access User friendly, responsive, and able to perform all previously available operations

Geocoding





QUESTIONS

