

# Williams GIS Data Management

July 17, 2014



# Agenda

- > What we do
- > Vision
- > Challenges
- > Approach
- > Defined Future State

# The Williams Companies

est.1908

- § Provider of natural gas, petroleum, and electricity
- § 4,700 employees throughout 25 U.S. states and Canada
- § 30K miles of pipeline infrastructure, plus an additional 6K miles recently acquired.
- § \$7.4 billion in revenue (2012)
- § ~300 IT Systems – *CMS, GIS, etc.*



What we do...

Word for the day:

# Omphaloskepsis

The study of one's navel



# Enterprise GIS at Williams

Integrate systems with GIS & make available

GIS that supports internal and external customers

Make GIS easy to understand

Enterprise GIS

Vision...

# Vision

**Enterprise GIS**  
**quality**  
**dependable**  
**centralized**  
**secure**  
**supportive**  
**facilitated**  
**easy to use**  
**Understandable**  
**integrated**  
**Sustainable**  
**Foundation**

Vision



“...I **can't** find  
the data I need...”

“...Nothing is **organized**...”

“...**multiple** data  
access points...”

Our challenges...

## A partnered solution



Our approach...



# Approach

## **1. Capture 'Current State'**

- Data Discovery
- Data Analysis

## **2. Design 'Future State'**

- Policies & Standards
- Data Requirements
- Data Classification
- Data Modeling

## **3. Implementation**

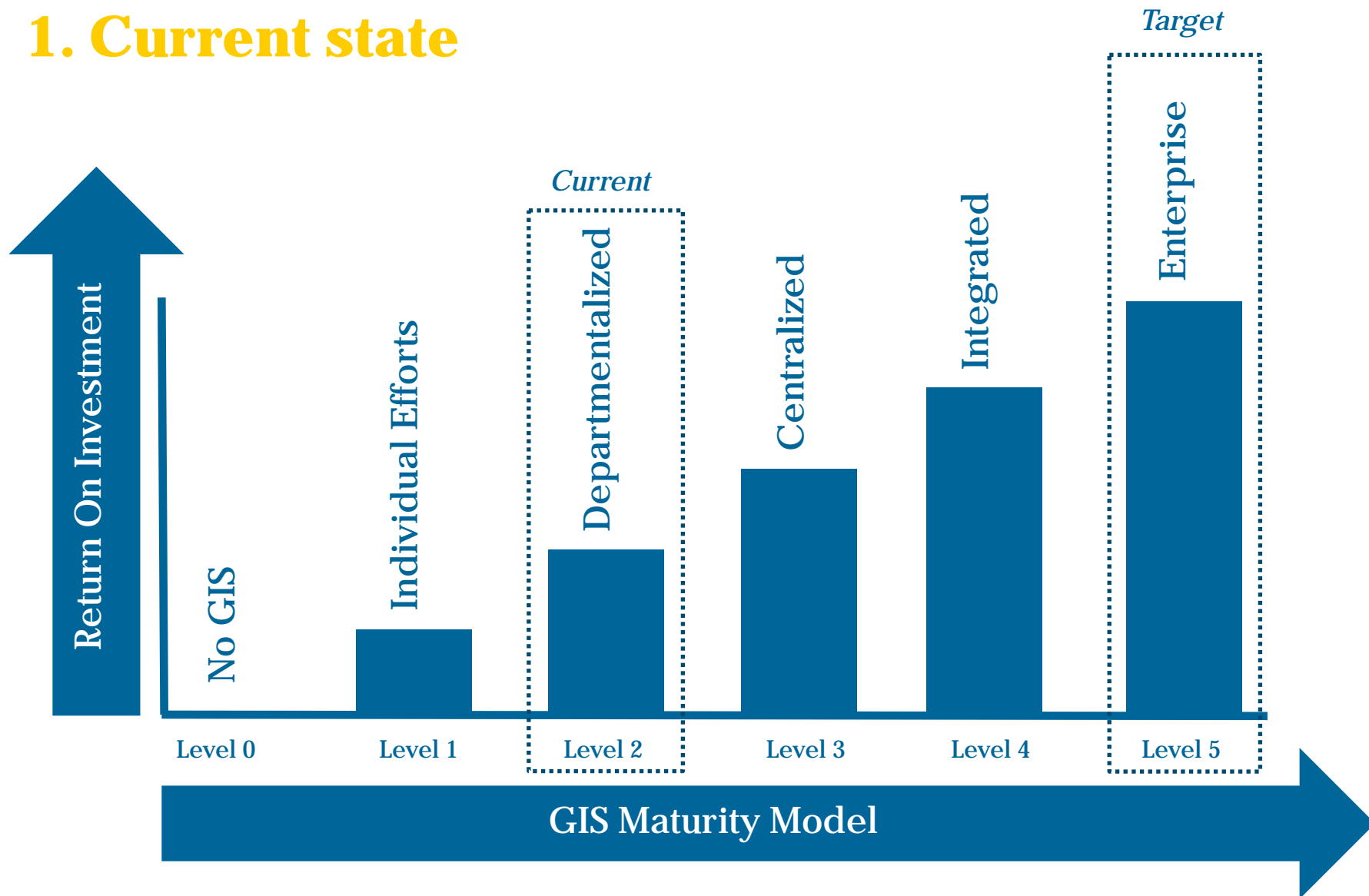
- > Data Migration
  - Data Mapping
  - Data Movement

## **4. Maintain & Audit**

- > Monitor Data
- > Audit Data

Our approach...

# 1. Current state



Our approach...

# 1. Current State: Catalog & Analyze

## Voyager

### > Discovery Application

- § Crawling specified data locations
  - ü Servers
  - ü File shares
  - ü Databases (GIS)
- § Sorts data in several ways, including geospatially
- § Isolates duplicate data

### > Cataloging Application

- § Data is inventoried and tracked
  - ü New data
  - ü Modified data
- § Beginnings of change management

Our approach...

# 1. Data Analysis

**Over 2,000,000 Files Found!**

## File Shares

- ü **Disconnected data silos**
- ü **Duplicate data**
- ü **Limited metadata**
- ü **No standards**
- ü **Low usage overall**

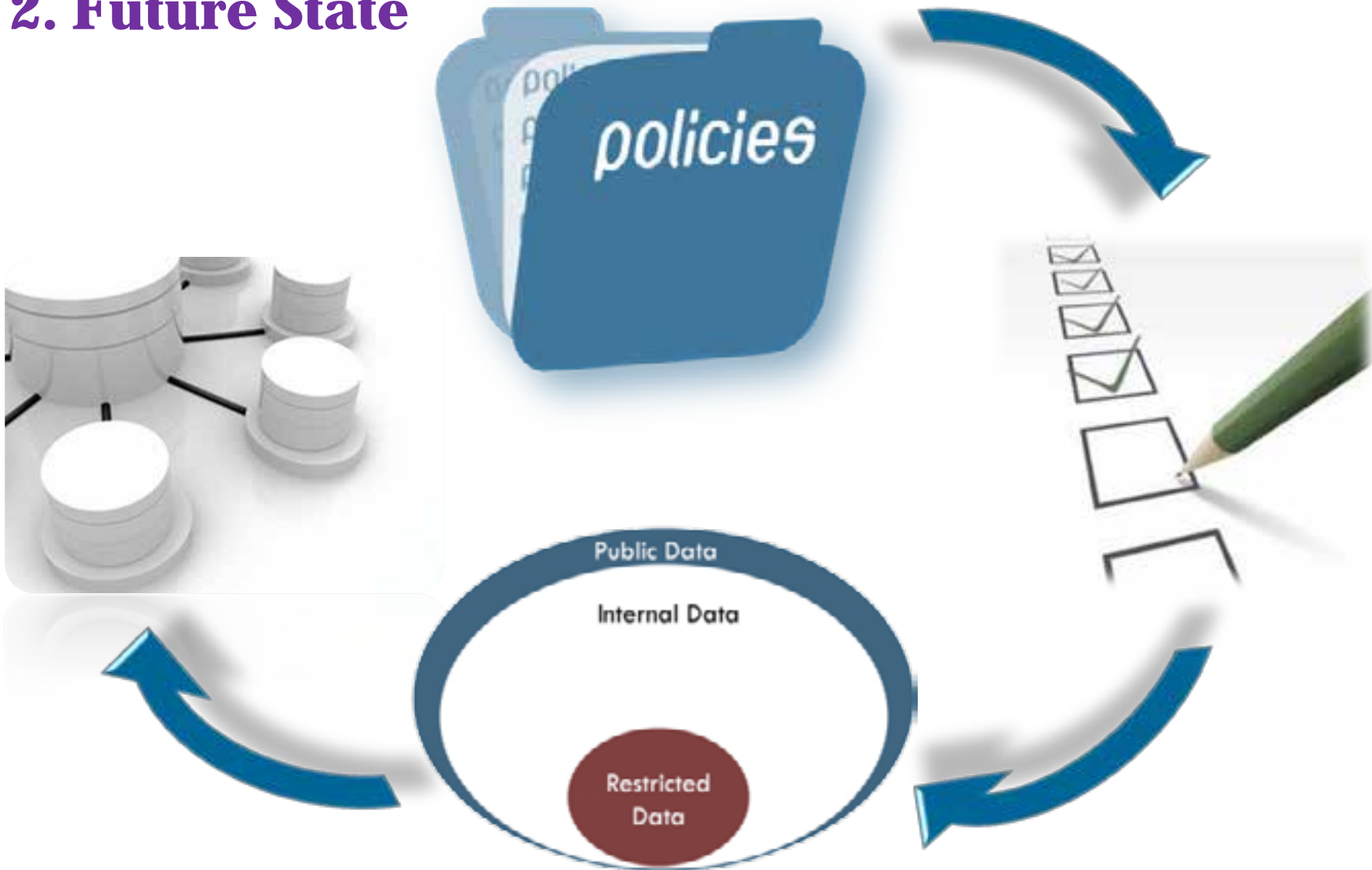
## SDE Instances

- ü **Minimal standards**
- ü **Duplicate data**
- ü **Limited metadata**
- ü **No naming standards**

Our challenges...



## 2. Future State



Our approach...

# 3. Implementation

## Data Mapping & Migration

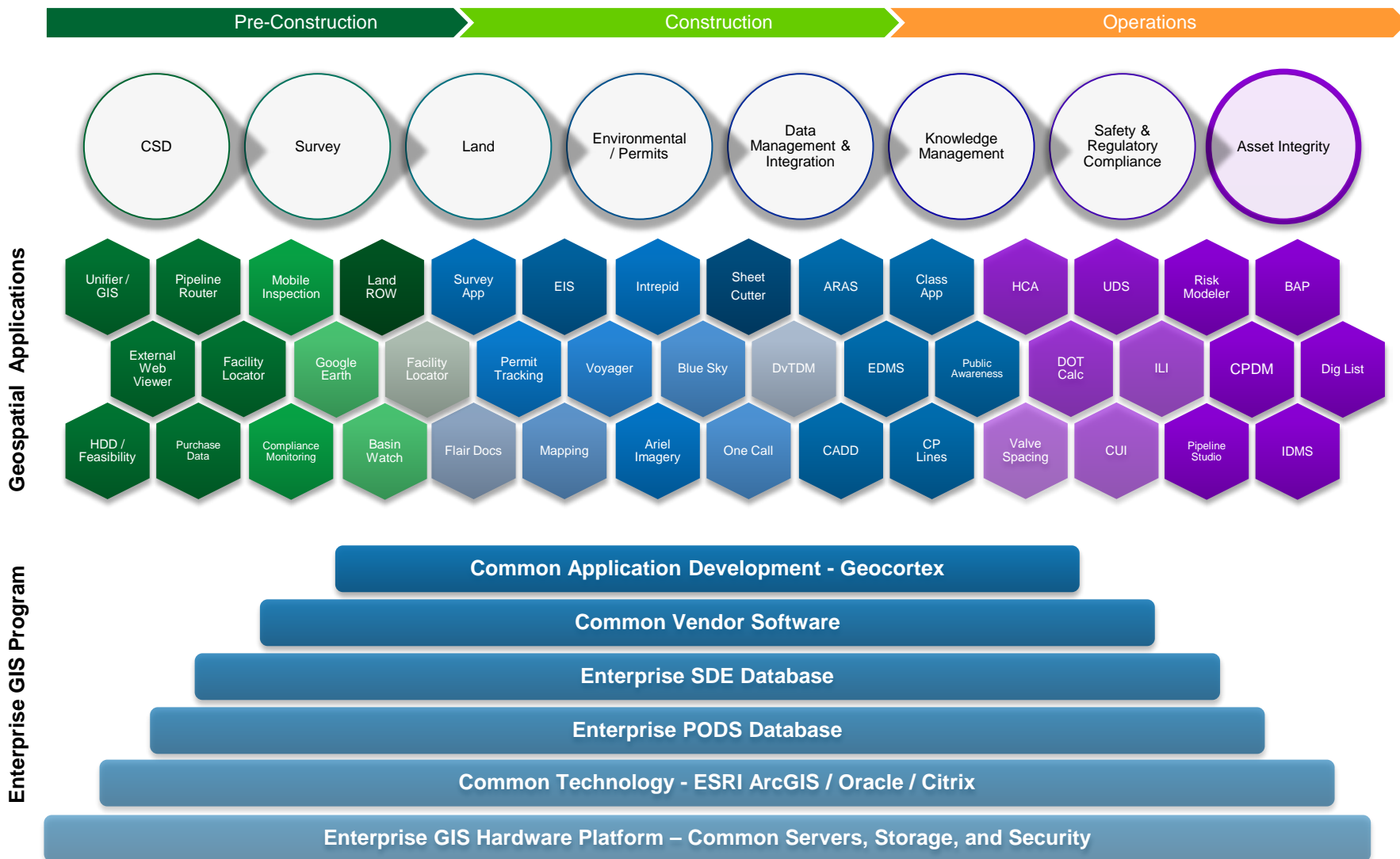


Our approach...

## 4. Maintain & Audit



# Enterprise GIS - Williams





# Questions??