How GIS is Used in Garland ISD

2015 ESRI User Conference
San Diego, CA

Garland ISD

Jess Hudson
• How often are you asked .....  

• For a current floor plan?

• Something about a building that is not a “secret”?  

• How many of _____ and where are they located?

• I need a quick way to look at all of district facilities on a computer or hand held device?

........... so we began down the path of GIS
What is GIS (geographic information systems)?
How is Garland ISD using GIS?

- Floor Plans from AutoCAD
  - AutoCAD for floor plan printing
  - GIS for data presentation

- District Parcels - Appraisal District data
  - All addresses & ownership
  - Schools sites & jointly owned

- Student Information
  - Choice of School
  - Student locations @ home & school
  - Demographics

- Transportation Routing
  - Developed our own streets & sidewalk network
  - Integrated routing solution with Seon

- Technology
  - Mapped district owned fiber locations
........continued

β Facilities
  β Historical information (data)
  β Flooring
  β Roofing
  β HVAC
  β Grounds
  β Custodial
  β Food Service
  β Asset management i.e. portables

β Building Capacities
  β Official Room numbering
  β Room Types & Descriptions
  β SF

β Security
  β Emergency Management Plan
  β Device and camera locations
Base Floor Plan in AutoCAD
Room Layer - identifies all spaces within the building.
Building History.
Roof plan layer only, from CAD.
Roof plan with aerial image, roofing data & SF.
Legend
Students to Rooms

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5 = Room Number
RO2 = Regular Ed 2nd Grade
20 = Number of Students

Campus & Room capacities by grade with demographics.
Student assignments by classroom & grade level.
Sample of Grounds Department - Irrigation, Trees and Landscape areas
District Fiber Optic Network

Detail Map Book 1
Part 2, Sheet 47

Legend
- GISD Border
- Streets
- GISD Fiber Network

GISD
Street network for Transportation routing.
Campus room type & capacity.
Custodial assignments with SF.
## GIS Application and Department Matrix

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<th>GIS Application</th>
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<th>Maint</th>
<th>Grds</th>
<th>Trans</th>
<th>Sec</th>
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**Regular Use:** X

**Occasional Use:** X
Lessons Learned...

- Start with developing your floor plans in AutoCAD, they become your “source” data.
- Begin assembling/collecting data, know what you have and begin to collect what you don’t.
- Determine what is the most useful to the end-users, then develop.
- Consume and Present.....Don’t try to “duplicate” & manage data that exists in another system.
- Be patient, this will be a journey and not a race.
Online examples
Questions?

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