

Using Local Review for Critical Facility Collection and Validation

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Geographic Information Officer

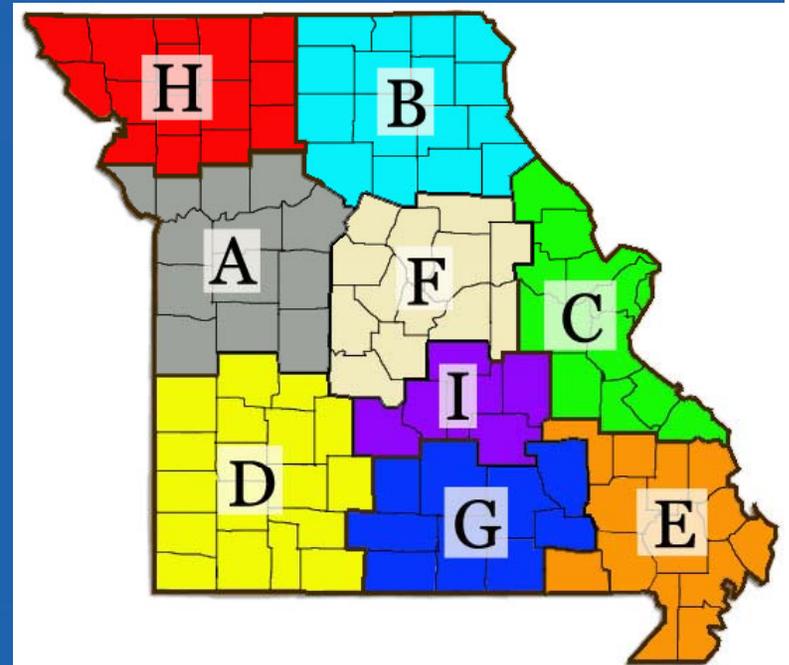
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Demographics

- Population: 5,800,310
- Area: 69,704 sq miles (18th)
- Population Density: 81.2 (27th)
- By the Numbers:
 - 114 counties
 - 1 incorporated place
 - 19 regional planning commissions
 - 9 homeland security regions
 - 2 UASIs (St. Louis, Kansas City)



Methods

- Regionalized local review
 - Parallels roles – transportation plans, homeland security plans, economic development plans, etc. (multipurpose)
 - Targeted layers and attributes derived from local review and EOC input (maintenance)
 - Incentives – data, standards, tools, and \$
 - State Homeland Security Grant funding
 - Built on existing relationships and data development partnering from prior FGDC CAP and USGS Partnership grants



Data Layers Reviewed

Commercial/Retail

- Wal-Mart Locations – Wal-Mart Corporate

Educational

- Public Schools – Health / DESE
- Private Schools - Health / DESE
- Higher Education Institutions - Health / DESE
- Handicap Public Schools - Health / DESE

Emergency Response / Law Enforcement

- Correctional Facilities – Adult – HSIP Freedom
- Correctional Facilities – Youth - HSIP Freedom
- EMS separate from Fire Stations – TechniGraphics (TGS)
- Fire Stations - TechniGraphics (TGS)
- Law Enforcement Agencies - TechniGraphics (TGS)



Data Layers Reviewed

Health / Medical

- Daycare – Adult - Health
- Daycare – Child - Health
- Dialysis Clinics - Health
- Hospitals – Health / TechniGraphics (TGS)
- Nursing Homes - Health
- Pharmacies - Health

Public Attractions

- Houses of Worship – Geographic Resources Center

Water

- Wastewater Facilities – Dept of Natural Resources



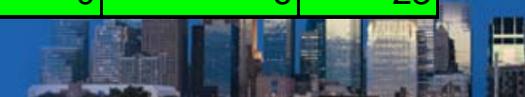
Active Participants

- Pilot – 2 Regional Planning Commissions
 - 13 counties in rural SE Missouri (New Madrid Seismic Zone)
- Rolling out to 3 more RHSOCs now – 28 counties
- Developing a separate IJ for State HSGP
 - Inventory
 - Data Layer Review
- Reviewed 14 data layers in seven months

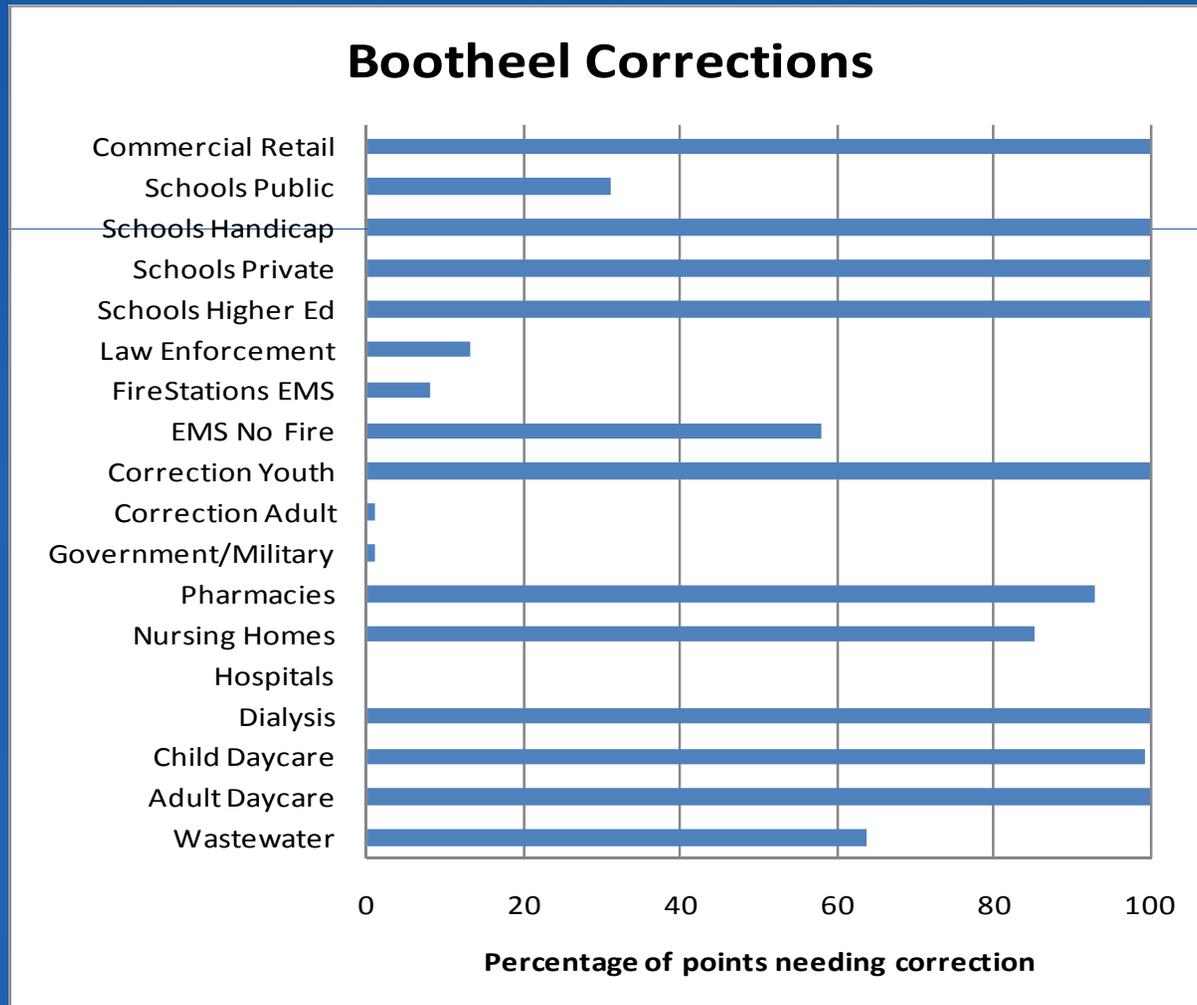


Results

Bootheel									
ORIG	Added	RETURN			Verified	Corrected	Remove	Average(m)	Max(m)
69	0	69		Wastewater	69	44		172	1970
565	1	566		Houses of Worship	49	5		137	3391
3	0	3		Adult Daycare	3	3	0	1042	1577
160	-1	159		Child Daycare	151	150	4	386	5917
3	1	4		Dialysis	4	4	0	269	378
4	0	4		Hospitals	4	0	0	0	0
45	-1	44		Nursing Homes	41	35		340	4135
42	0	42		Pharmacies	42	39		148	1203
6	17	23		Government/Military		1			
1	0	1		Correction Adult	1	0	0	0	0
2	0	2		Correction Youth	2	2	0	5968	6334
15	4	19		EMS No Fire	19	11	0	35	233
64	1	65		FireStations EMS	61	5	2	15	724
51	0	51		Law Enforcement	45	6	0	13	217
0	8	8		Schools Higher Ed	8	8			
13	1	14		Schools Private	12	12		318	2097
3	0	3		Schools Handicap	3	3		135	176
100	3	103		Schools Public	100	31		116	6737
5	0	5		Commercial Retail	5	5	0	6	23



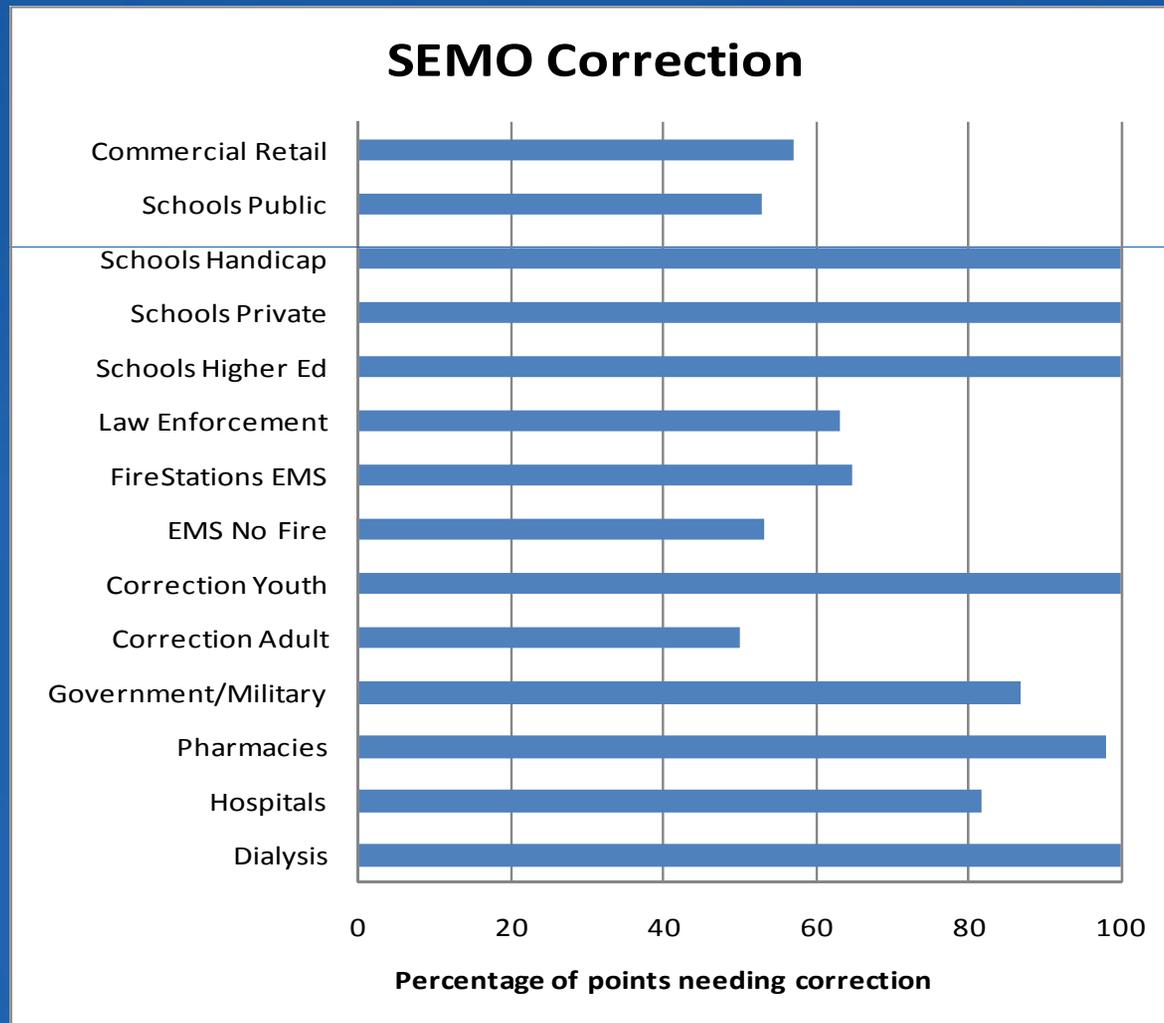
Bootheel Corrections



Results

SEMO			Layers						
ORIG	Added	RETURN			Verified	Corrected	Remove	Average(m)	Max(m)
152	0	152		Wastewater		0			
501	0	501		Houses of Worship		0			
6	0	6		Adult Daycare		0			
159	0	159		Child Daycare		0			
5	0	5		Dialysis	5	5	0	127	281
11	0	11		Hospitals	11	9	0	24	111
93	0	93		Nursing Homes		0			
52	0	52		Pharmacies	50	49	0	381	4030
7	23	30		Government/Military	30	26			
2	0	2		Correction Adult	2	1	0	2.5	5
2	0	2		Correction Youth	2	2	0	44	45
10	5	15		EMS No Fire	15	8		1611	15059
82	9	91		FireStations EMS	91	59	1	117	2032
38	0	38		Law Enforcement	38	24	0	168	3170
2	3	5		Schools Higher Ed	5	5	0	573	986
23	4	27		Schools Private	26	26		902	16037
2	0	2		Schools Handicap	2	2		188	190
82	1	83		Schools Public	83	44		97	3874
7	0	7		Commercial Retail	7	4	0	4	10

SEMO Correction



Data Shared & Access

- Data sharing agreement with CIO sign-off for the State
- Still obtaining 'interpretations' from legal counsels
- Provided CI/KR – CAP on CD or disk to lead RPC for each RHSOC for this review
- Once built it goes back to the region along with other geospatial data and - when completed –can support new 7.5 min 'USGS Quad-like' Geo-pdfs.



Funding

- State Homeland Security Grant funds
 - Initially from State's 20% portion
 - Transferring to Local's 80% portion
- USGS Partnership funds
- FGDC CAP grants
- University of Missouri – CASH programs
- Leveraging Broadband Mapping – Community Anchor Points



Pros

- Regionalization
- Determined through local input
 - Data layers of importance
 - Attributes of importance
- Tied to multi-purpose uses – it is relevant
- Locals know their areas and sites better
- Know that they will be using what THEY collected
- ‘It is where it is’
- ‘Unique ID’ built on National Grid
- Coding to USGS Structures best practice model
- Reasonable costs and time investments
- Temporal accuracy – decrease lag time of federal program



Cons

- Training requirements
- Incentives based
- Some errors will enter the process – still need comprehensive review
- Always more layers need reviewing than are willing to be dealt with
- Not clean crosswalk from USGS to CI/KR
- Not total agreement on ‘definitions’ – EMS between the State and the HSIP



Lessons Learned

- Cookbook and web-based training (GoToMeeting – see what they were doing on their computer)
- All data layers for an area at once
- ‘Corrected’ –vs- ‘Improved’
- Data collection specifications – HSIP, TGS, State, other (‘within block’, ‘block face’, ‘on entity’, etc.) – huge rural issues.
- State data is being assembled to meet state needs – not necessarily to be easily uploaded or updated back into national framework (didn’t belong in that layer, unique IDs)
- Data resubmission back to the state – issues with process
- Expectations of HSIP partnership – how formal
- Cycle of updates and State time



The 'ONE THING'

Goal is to provide to emergency responders, managers and planners the best possible data for their use – that's the bottom line.

In my opinion 90% of the time that will be local (or locally reviewed) data.

That review should be part of the process!

