1) The Oklahoma City Micronet Project

2) Network Design and Implementation

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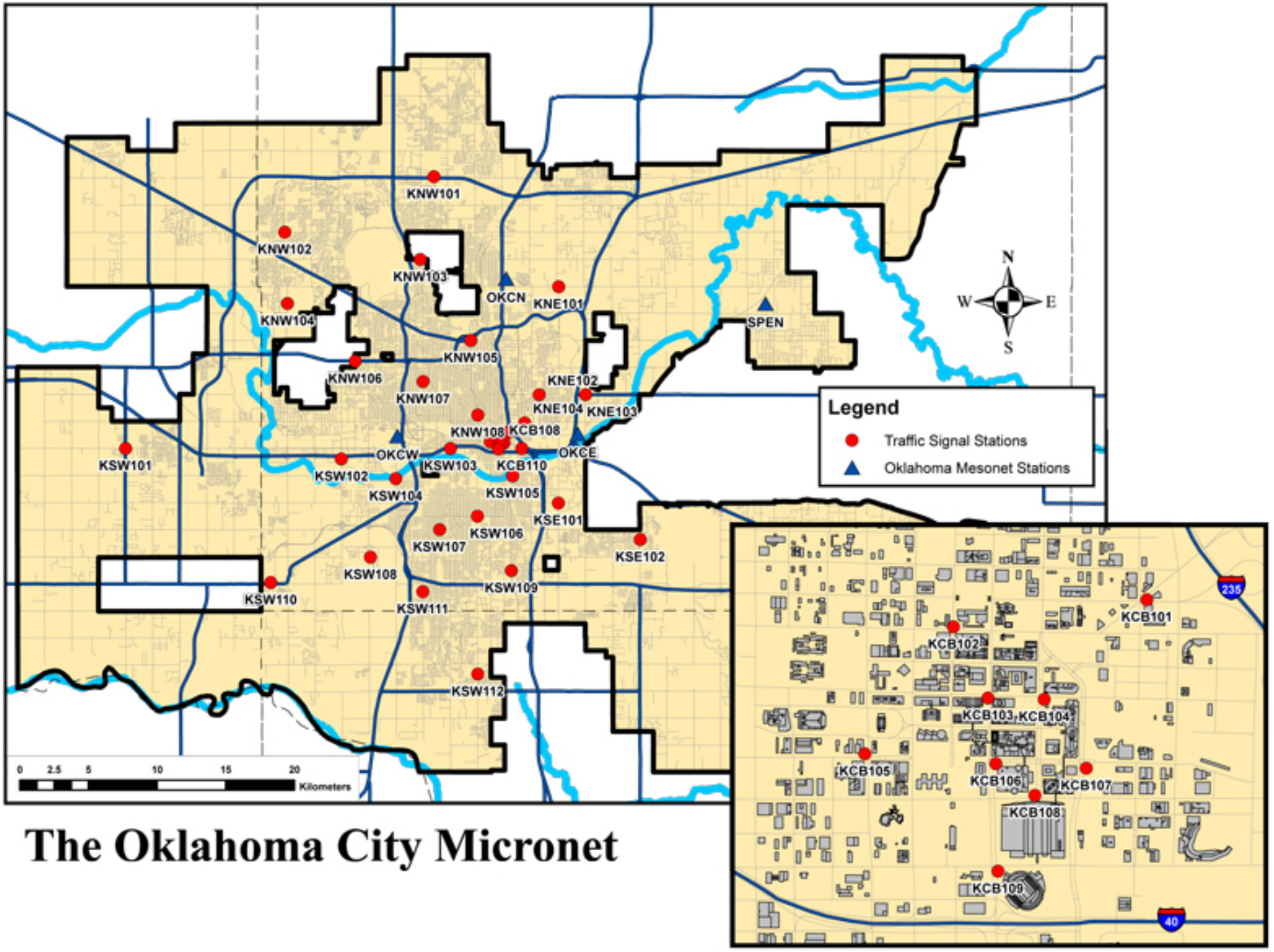
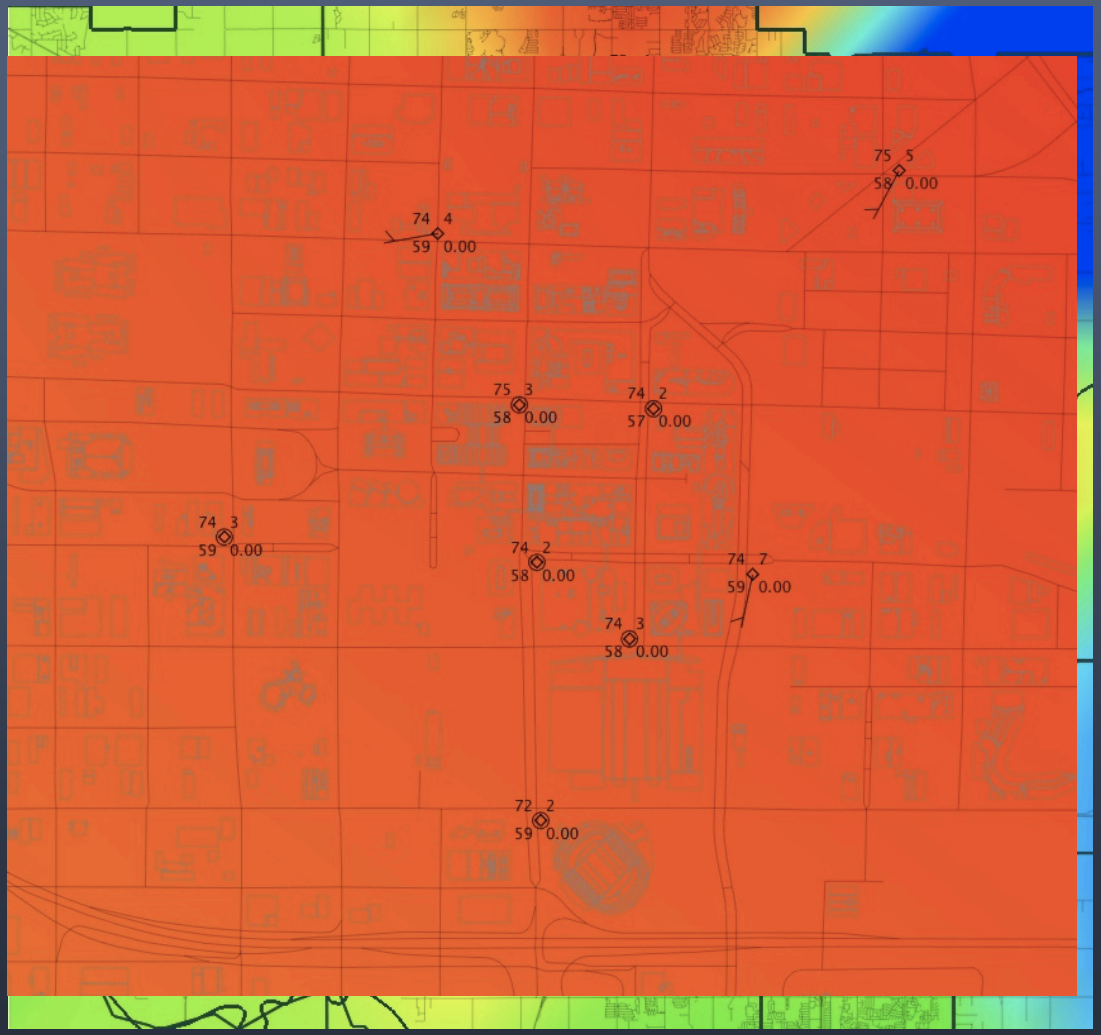


The Oklahoma City Micronet

Oklahoma City Micronet

30 June 2008, 3:30 am CDT



Traffic Signal Station

OKC Micronet – Lessons Learned

- Technology and Infrastructure are very different from rural areas (power, communications, station siting).
- K.I.S.S. – Standardize as much as possible.
- Political support is important, but not as critical as one might think.
- A plan for data products is very important – needs to be relevant to those supporting the efforts (especially city departments).

General Network Thoughts

- It is better to design and easier to implement a network that is simple/basic/robust than one that involves many complicated facets/components.
- Quality Assurance (QA) is better than Quality Control (QC).
- Sensors and hardware are relatively inexpensive compared to the long-term needs of operating a permanent, real-time network – long term support, calibration, and maintenance are critical to network survival and data quality.
- A plan for data products is very important – needs to be relevant to those supporting the efforts.

The Case for OKC as an Urban Testbed

- OKC Micronet
- Oklahoma Mesonet
- 17 Research Radar systems (NEXRAD, Phased Array, Polarized, Mobile, X-Band, C-Band)
- A historical urban dataset – JU2003
- Rapidly growing urban area (9.8% last year)
- Local geography
- Other observational capabilities (ARM, NOAA profilers, etc.)