



Innovation, Inference and Enforcement: SAS and Model City

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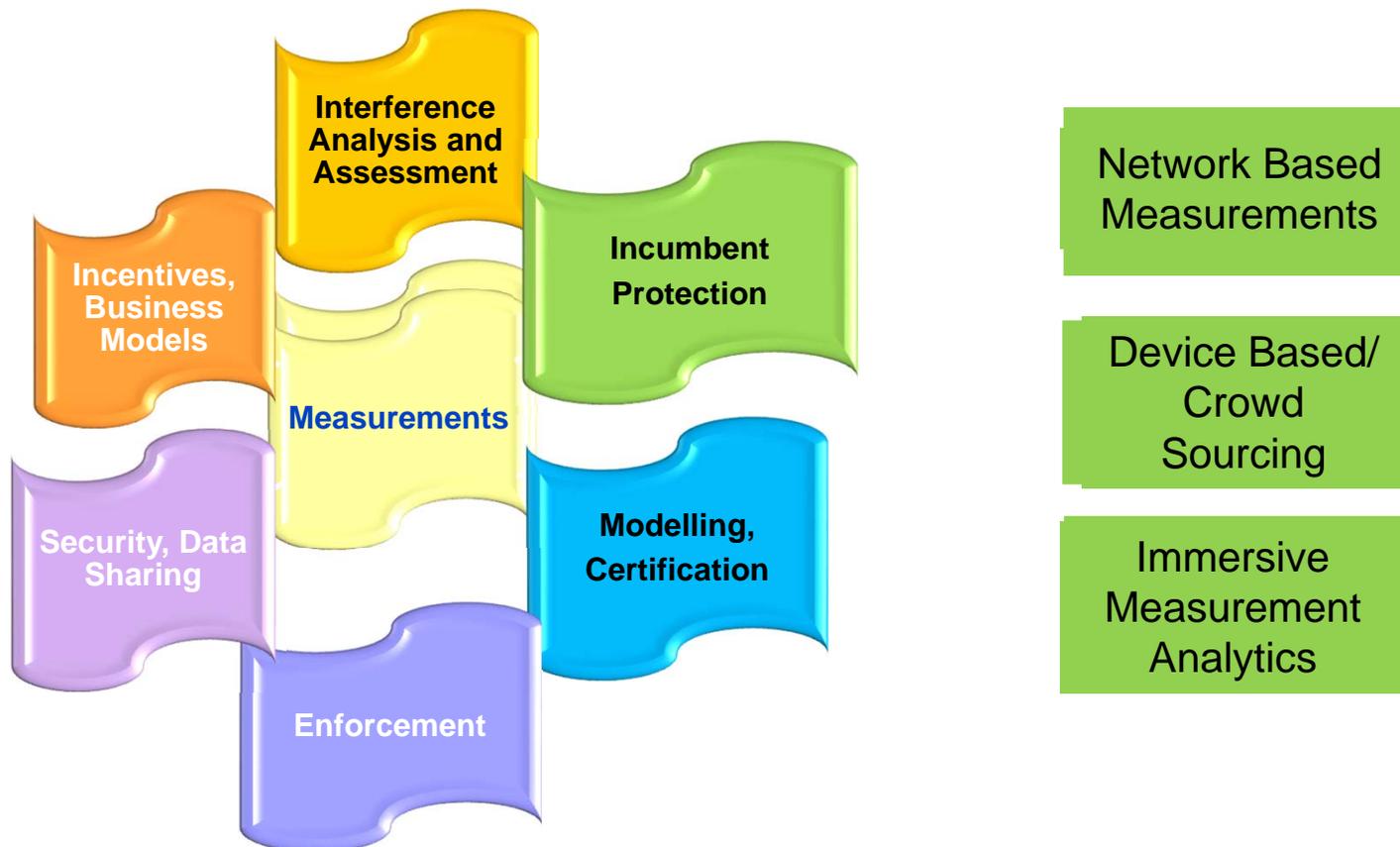
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Agenda

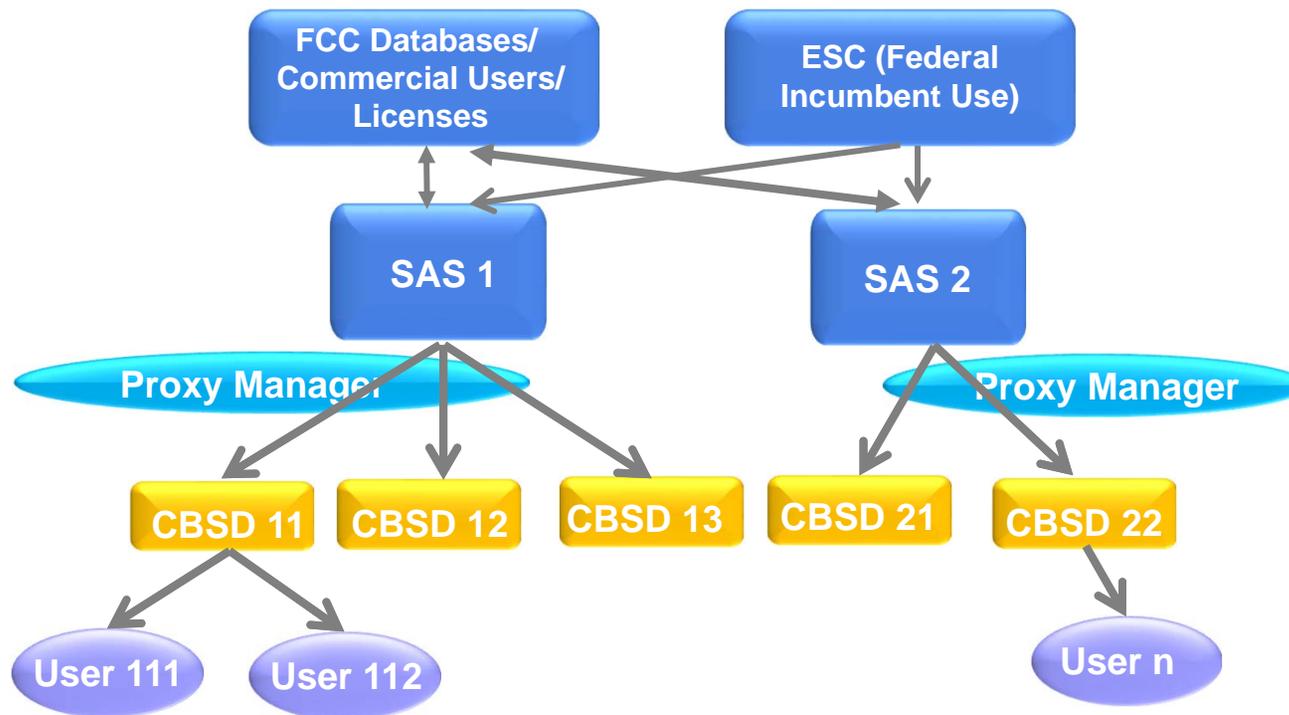
- Transforming Wireless World
 - Next Generation Wireless Requirements
- Spectrum Access Service
 - SAS Notional Architecture
 - Inference, decision making and enforcement
- Model City Program for Testing and Measurement
 - Model City framework
 - Current Status

Motivation to Measurements



Effective Dynamic Measurements are key to next generation Spectrum Sharing-based networking

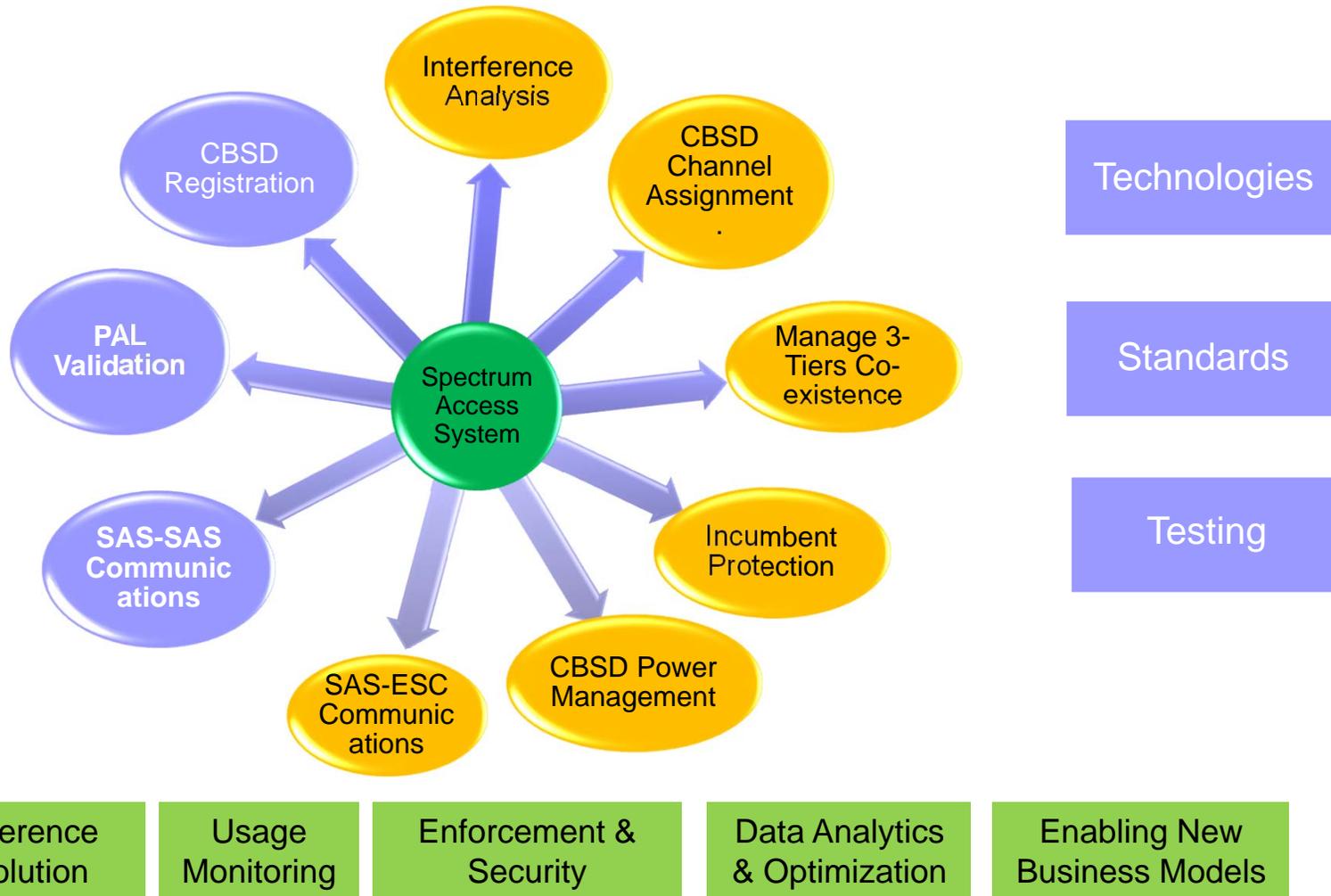
Spectrum Access System (SAS) Notional Architecture



SAS opens up new paradigms in spectrum sharing and network architectures for effective spectrum utilization - using measurements

SAS & Possible Network Innovation

- Inference, Decision Making and Enforcement



Model City Under Consideration

Spectrum Bands In Sharing Discussions

1675-1710 MHz

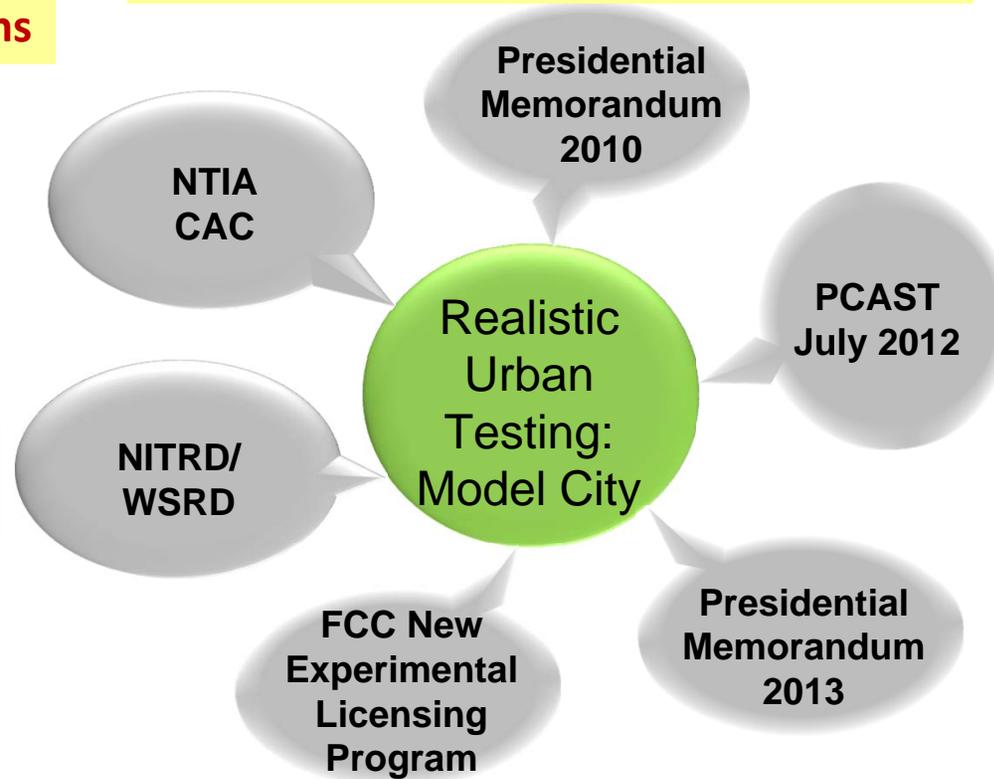
1755-1850 MHz

3550-3650 MHz

5350-5470 MHz
5850-5925 MHz

Others...

Key Events and possible contributors



Gaps to Address

Technology

Interference

Receiver Characteristics

Security

Spectrum Access Service

Monitoring & Enforcement

Modelling

Model City Test and Measurements can contribute Significantly to advancing spectrum Innovation & National Rule Making

Model City: Key Areas of Discussion

Governance

- Multi-stakeholder advisory
- Criteria to identify cities for testing
- Process for test infrastructure and coordination
- Test licensing
- Establishing processes
- Building collaboration
- Information availability and access

Testing

- Cities for testing
- Type of innovations to be supported
- Spectral bands for testing
- Technologies, tools, applications, use cases
- Test plan and execution
- Potential role of Govt./Industry interference coordination
- Data analytics

Collaboration

- Enabling testing collaboration
- Funding plan by collaborating entities
- CRADA/ Other agreement vehicles for coordination with government agencies as needed
- Incentives for Model City testing
- Outreach

There are several steps to the formation of the Model Cities; However, multiple cities and collaborators are already showing interest

Model City: Next Steps

