Town Hall Meeting Exercise
NCSS National Conference, Annapolis Maryland, June 2013

Stakeholder	Interest	Influence
Users, do they expect data and information for decisions they make, or do they want OUR recommendations	High	High
People living in high density populated areas	Low	High
Cattlemen's Association	High	High
Local governments (city, county)	Low	Low
Engineers using web soil survey for project estimates	High	Low
Civil engineers and geotechnical experts	High	High
NGOs	High	Low
Climate modeling groups	High	Low
Farmers	High	low
Homeowners	Low	Low
Urban planners	High	Low
Archeologists	High	Low
Universities	High	High
Ag producers	High	Low
House Agriculture Committee	High	High
Senate Finance Committee	Low	High
Tax assessors	High	Low
Precision agriculture	High	Low
The Nature Conservancy	High	Low
Consultants (engineering/wastewater)	High	High
Consulting soil scientists	High	High
Soil scientists in local/state government	High	Low
General public education	Low	Low
Universities		
Urban/rural		
Urban planners	High	High
Producers	High	High
Extension service	High	High
Engineers	Low	High
Politicians	Low	High
Business	Low	High
Land developers	Low	High
K-12 educators	High	Low
Master naturalists	High	Low
Master gardeners	High	Low
NGOs	High	Low
Environmental lobby	High	Low

Cooperators	High	low
Field office staff, resource assessment	High	Low
Local federal staff, extension, BLM, Forest Service	High	Low
Urban planner	High	Low
Reality people	Low	Low
Researchers, Ecology, Geography, Soil Science< Economics, Social Sciences		
Public		
Farmers and foresters		
Policy makers		
Federal agencies: EPA BLM		
NGOs		
USDA agencies (FSA, ARS)	High	High
Other federal agencies (BLM, DoD, BIA, NPS, USFWS, USGS)		High
State agencies		High
University cooperators		High
Pedologists in private sector		High
Wetlands community, made up of professional societies		
NGOs		
Consulting engineers		
Public		
Those who map flood plains and wetlands, and deal with sea level rise	High	

Technical and/or Societal Issues	
Issues	How to Address
Soil carbon network	
Soil quality index for the long-term	
70% of population lives along coast, but focus remains on agriculture in the central US	
Stakeholders shift and we need to shift with the times; most customers are not contacted by NRCS	
University research and public service are handled by more than NRCS	Time to look at public education not agency internal use
Urban users of soil information	Continue urban mapping a priority
Protection/zoning of prime farmlands	
Food security focus on vitamins and minerals, not calories	

Climate change	
Representative locations of regional soil survey offices (Denver does not represent the Great Plains)	
Loss of academic programs	
Loss of interest	
You cannot please everyone	Pick a few things and do them!
State resource assessments	
Urbanization	
Climate change	
Climate change	
Biodiversity loss	
Climate change	
Biodiversity loss	
Safety	
Develop and nurture local/state partnerships in addressing improvements in flood-frequency interpretations	
Educating the public to the multi-dimensional aspects of soils (beyond just farming/agronomy)	
People think that soils are just topsoil	
Lack of funding	
LiDAR	
Greenhouse gas emissions	
Carbon sequestration	
Help map flood plains and storm tide inundation areas	
Map areas that would flood if levees break	
Carbon sequestration in agricultural soils	
Climate change and loss of NPP	
Insufficient water (quality and quantity) for drinking and irrigation	
Resource losses (erosion, desertification, sea level rise, etc.)	
Improve spatial accuracy of maps	

Challenges, Obstacles, and/or Opportunities	
Items	Category and How to Address
Translate soil science to the urban public	Challenge
Soil quality index for the long-term	Challenge
Work with state-level and federal agencies on coastal issues	Opportunity
Internship or “shadow program” for university students	Spend time in field with soil survey personnel
NSSC research grants for university cooperators	Opportunity
Universities have been active in the past but have since waned	Obstacle
Expand stakeholders	Use ESD development and soil health initiative to expand
NCSS future	Invite broader range of scientists; invite more than on person/university
Change in NCSS	Invite stakeholders to regional meetings to discuss needs; consider new audiences, new tools, new avenues of communication
Complete a soil survey of all lands	Continue funding (staffing) for public lands
Partner with NGOs	Opportunity
Create many new partnerships	Opportunity
Soil systems approach to research	Opportunity
Recruitment of new employees	Opportunity
Acid sulfate soils	Challenge
ESDs bringing us new partners	Opportunity
Environmental education	Opportunity
Fiscal decline of soils division	Challenge
Communication with ourselves and stakeholders	Challenge
Education in light of the pseudoscience YouTube world	Challenge
Salesmanship skills to convince others	Challenge
Travel to conduct field work	Obstacle
Funding	Challenge
Workforce and retirement	Challenge
Matrix other than acres to be used to value soil survey program	Challenge
Congressional constituents served	Challenge
Dollar value of products associated with soils information	Challenge
Public benefit	Challenge

Challenges, Obstacles, and/or Opportunities	
Items	Category and How to Address
Translate soil science to the urban public	Challenge
K-12 education	Opportunity
Declining federal support	Challenge
Declining university enrollment in soil science	Challenge
Working with NEON	Opportunity
Conservation planning with NRCS field offices	Opportunity
Participate in cooperative conservation resource management planning	Opportunity
Partner with local BLM, extension service, fish & game	Opportunity
Soils R Us	Opportunity
General public	Opportunity
Food security	Opportunity
Fiscal austerity	Challenge
Apathy	Challenge
Increasing food production while sustaining biodiversity	Challenge
Create cadre of resource soil scientists to expedite more efficient use of soil survey information	Opportunity
Maintaining the institutional memory in a time of relative austerity	Challenge
Urban and suburban accurate soil survey	Opportunity
New technology and new tools	Opportunity
Doing more with less	Challenge
Attracting good people when opportunities are few	Challenge
Web soil survey is the future, improve the system for new customers	Opportunity
Delivery of state interpretations	Challenge
Flooding data	Challenge
Use of LiDAR data	Opportunity
People find soils fascinating when they learn what/where they are	Opportunity
Get soils into legislative rules and laws	Challenge
Lack of positive image for soil scientist profession in NRCS	Challenge
Wealth of data available for resource management	Opportunity
Wealth of experience in NCSS, use to train future soil scientists	Opportunity

Challenges, Obstacles, and/or Opportunities	
Items	Category and How to Address
Translate soil science to the urban public	Challenge
Enhancing database and interpretations	Opportunity
Consulting community needs	Opportunity
Changing our delivery to meet needs	Challenge
Making soil survey relevant to the general public	Challenge
Urban customers	Opportunity
Coastal mapping	Opportunity
Marketing of soil survey products	Opportunity
VNIR use for heavy metals, organic carbon assessment for soil health	Opportunity
Recruitment	Challenge
Soil health	Opportunity
Climate change	Opportunity
Ecological site inventory (in some regions)	Challenge
Soil Taxonomy, international committees, standards, NCSS	Opportunity
Soil Taxonomy, funding, complexity, unknowns, historical differences	Challenge
Improving NCSS, transparency and inputs	Opportunity
Improving NCSS, input opportunities not clear	Challenge
Hiring by NRCS	Opportunity
How many jobs for soil scientists	Challenge
Staffing, funding for dynamic soil properties	Challenge
Urban users	Opportunity
Climate change	Opportunity
Sol health	Opportunity
Low staffing and poor performers	Challenge
Consistent communication with all cooperators	Challenge
Funding	Challenge
Urban and densly populated areas	Opportunity
Mapping scal and resolution	Challenge
Benchmark soil properties	Challenge
Temporal changes	Challenge
Loss infield experience and needed training	Challenge
Partnering with local government	Opportunity
Nurturing partnerships with growing stakeholders, urgency	Opportunity

Challenges, Obstacles, and/or Opportunities	
Items	Category and How to Address
Translate soil science to the urban public	Challenge
How far should we venture into new areas of soils (anthropogenic, subaqueous, carbon network, climate, health risks	Challenge
Data and maps – information vs. decision or recommendations	Challenge
Federal role (declining budget) vs. private service (declining $)	Challenge
Interest of public (perhaps more worried and concerned, fear)	Opportunity
Lots of emerging issues when soils can play a role	Opportunity
Lack of funding to sustain NCSS efforts	Challenge
Lack of experience and trained soil scientists	Challenge
Perception of public (why haven't you fixed it yet?)	Challenge
Apathy of youth (need to put down iPhone and turn off American Idol)	Challenge
Maintaining relevance	Challenge
Survival and retention of soil scientists	Challenge
Stagnation due to lack of interdisciplinary collaborations	Challenge
Subsurface remote sensing	Opportunity
Education, not just data	Challenge
Raster-based soils information	Opportunity
Research	Challenge
Lack of staff, boots on the ground	Challenge