



Natural Resources Conservation Service



National Cooperative Soil Survey

# USDA-NRCS Data Collection

## Soils Division

## Using Adapx Pens and Capturx Software

September 20, 2011

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National Leader for Soil Business Systems

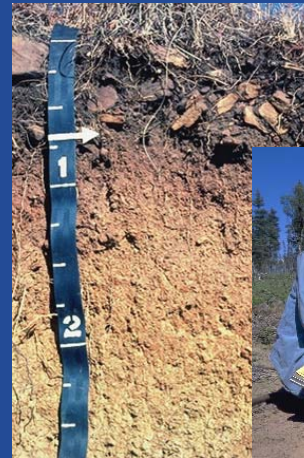
National Soil Survey Center

USDA-NRCS

# Main Research Areas for Digital Pen Use

- Soil Survey

- Inventory, collection, analysis and delivery of soils data



- Ecological Inventory

- Collection of plant and habitat data to support development of ecosystem information tools



# The Digital Pen

(but I already have a desk drawer full of pens!)

Basically this is a pen with a camera!

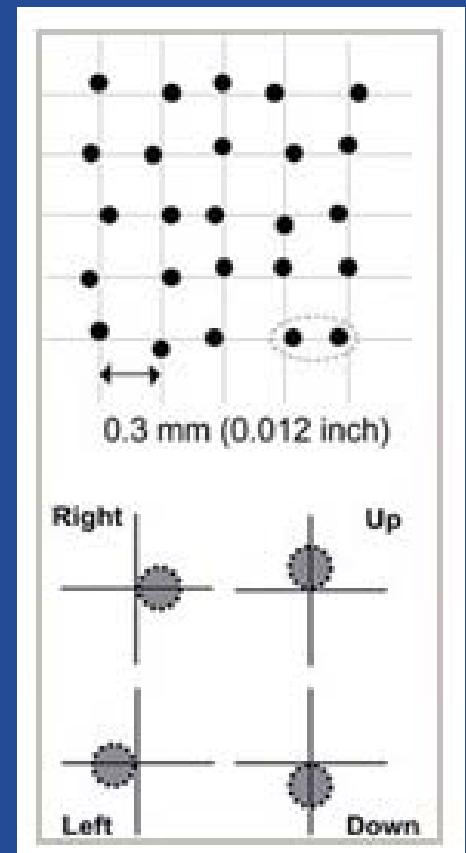


Utilizes a docking station



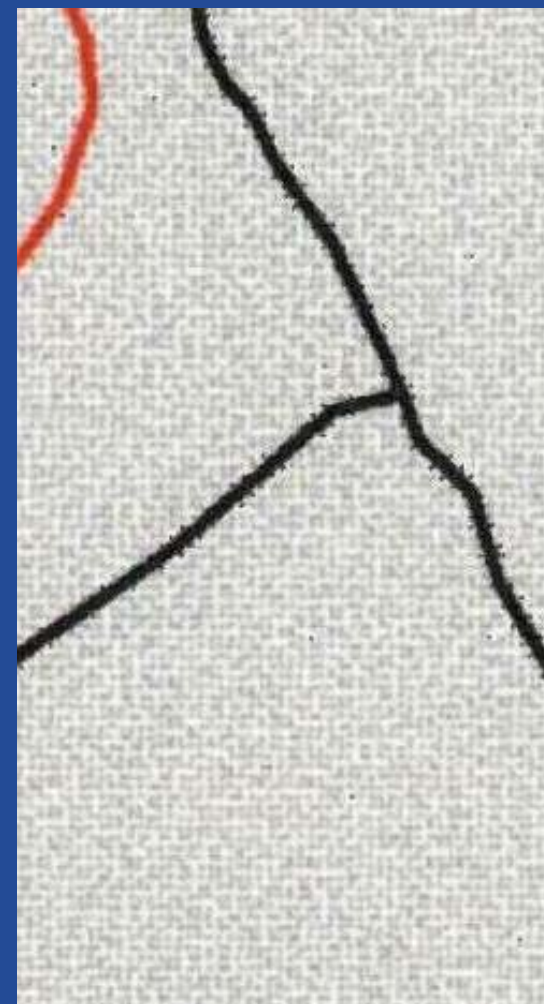
# Micro-dot Pattern

- Unique pattern of tiny, closely-spaced dots that are printed on a paper map or form
  - Printed with high precision using black (carbon-based) ink
  - Registered to:
    - Spatial layers in an ArcMap map document (.mxd file)
    - Worksheet in an Excel spreadsheet



# Digital Pen

- Build-in infrared sensor
  - Activated when pen touches the paper map or form
- 'Reads' the micro-dot pattern at the tip of the pen 75 times per second
  - Records the precise shape and location of markup





# Completed 'Plot Master' Field Form

RaCA 2.14		Field form -- PRINT with Capturx Print Tool						Plot Master -- pg. 1	
Collector(s) <b>AKM, JRT, MSL, MDJ</b>							Date	<b>5/18/2011</b>	
User site id	<b>G1303F03</b>	MO Office	1st Char	Soil Grp ID	Landuse	Plot #	1st Char: C   F		
Plot layout	<b>Chain</b>	<b>MO13</b>	<b>C</b>	<b>13037</b>	<b>F</b>	<b>3037</b>	Landuse: C   F   P   W   X		
LOCATION	RaCA site id	<b>C1303F03</b>		Offset azimuth	<b>90°</b>		Offset distance	<b>500'</b>	
LATITUDE				LONGITUDE					
Degrees	Minutes	Seconds	Direction	Degrees	Minutes	Seconds	Direction	Datum	
<b>38</b>	<b>022</b>	<b>21.9</b>	<b>N</b>	<b>80</b>	<b>00</b>	<b>49.5</b>	<b>W</b>	<b>WGS84</b>	
EcoSite id									
EcoSite Name									
State id									
State name									
Phase id									
Phase name									
Land cover	<b>Forest</b>	Drained?		<input type="checkbox"/>					
% bare soil	<b>2</b>	Distance to disturbance	<b>25'</b>	Disturbance type	<b>SKID TRAIL</b>				
Plantation?	<input type="checkbox"/>	Bedded?	<input type="checkbox"/>	Stage					
Dominant species information							BAF	Nmbr In	
Canopy position	Nat'l plant symbol	Local plant name		Order of Dominance	<b>10</b>	<b>4</b>			
<b>OVER</b>		<b>SUGAR MAPLE</b>		<b>1</b>	<b>First 4 'In' trees</b>				
		<b>BIRCH</b>		<b>2</b>	DBH	Height			
<b>UNDER</b>		<b>STRIP MAPLE</b>		<b>1</b>		<b>65'</b>			
						<b>57</b>			
						<b>45</b>			
						<b>72</b>			
Codes -- enter terms in <b>BOLD</b>									
Plot layout: <b>CHA</b> (chain)   <b>CIR</b> (circular)   <b>ROT</b> (rotated cluster)   <b>SHI</b> (shifted cluster)   <b>STA</b> (standard cluster)   <b>TRI</b> (triangular)									
Land cover: <b>CROP</b> (crop cover)   <b>GRASS</b> (grass/herbaceous cover)   <b>SHRUB</b> (shrub cover)   <b>TREE</b> (tree cover)									
Stage: <b>EARLY</b> (early, 2 to 25%)   <b>MID</b> (mid, 26 to 75%)   <b>LATE</b> (late, 76 to 100%)									
Canopy position: <b>OVER</b> (overstory)   <b>UNDER</b> (understory)									
Check boxes ( <b>Drained?</b> , <b>Plantation?</b> , and <b>Bedded?</b> ) -- checked = "Y"; not checked = "N"									
EcoSite Type	EcoSite MLRA	EcoSite LRU	EcoSite Number	EcoSite State					



# 'Plot Master' Worksheet with Imported Data

RaCA 2.14		Field form -- PRINT with Capturx Print Tool					Plot Master -- pg. 1	
Collector(s) AAKMJRT, MJL, MD 5						Date 5/18/2011		
User site id	C1303E03	MO Office	1st Char	Soil Grp ID	Landuse	Plot #	1st Char: C F	
Plot layout	TRI	MO13	C	1303	F	03	Landuse: C F P W X	
LOCATION	RaCA site id C1303F03		Offset azimuth	900	Offset distance	5000		
LATITUDE				LONGITUDE				
Degrees	Minutes	Seconds	Direction	Degrees	Minutes	Seconds	Direction Datum	
38	22	219.00	N	80	0	49.50	W WGS84	
EcoSite id								
EcoSite Name								
State id								
State name								
Phase id								
Phase name								
Land cover	Forest		Drained?	<input type="checkbox"/>				
% bare soil	2	Distance to disturbance	250	Disturbance type	St: i D Trail			
Plantation?	<input type="checkbox"/>	Bedded?	<input type="checkbox"/>	Stage				
Dominant species information							BAF	Nmbr In
Canopy position	Nat'l plant symbol	Local plant name		Order of Dominance	10	4		
Over		SUGAR MA PLF		1	First 4 'In' trees			
		BIRCH		2	DBH	Height		
Under		STRIP E MAPLE		8		650		
						57		
						4115		
						72		

Codes -- enter terms in **BOLD**

**Plot layout:** CHA (chain) | CIR (circular) | ROT (rotated cluster) | SHI (shifted cluster) | STA (standard cluster) | TRI (triangular)

**Land cover:** CROP (crop cover) | GRASS (grass/herbaceous cover) | SHRUB (shrub cover) | TREE (tree cover)

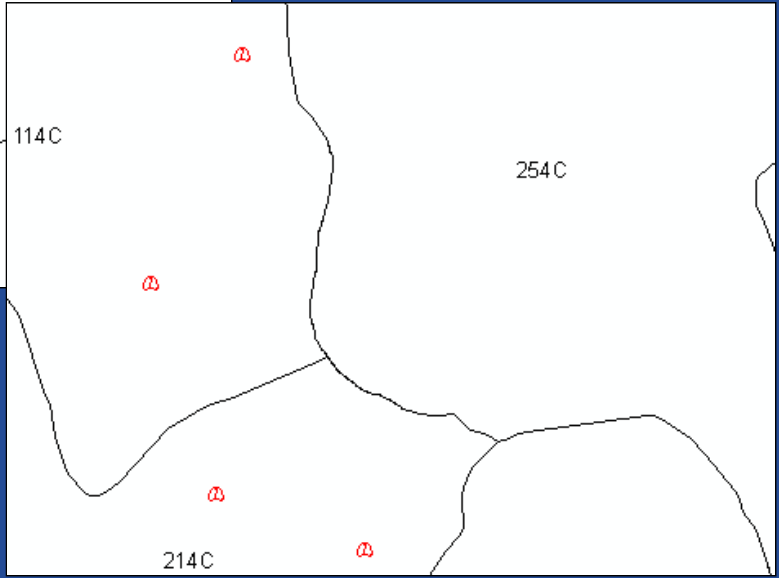
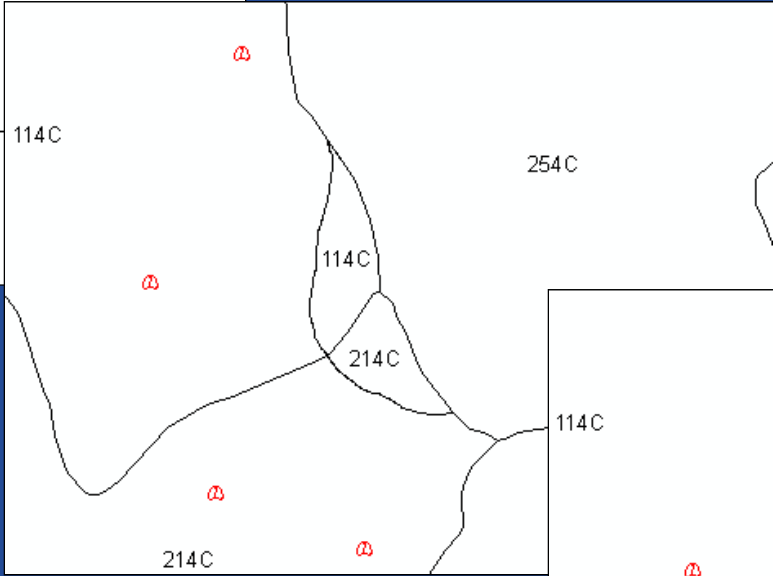
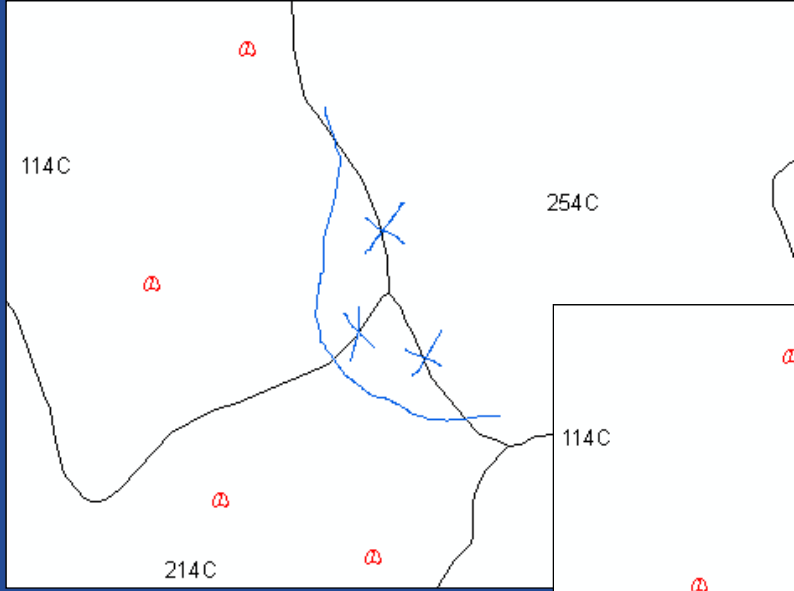
**Stage:** EARLY (early, 2 to 25%) | MID (mid, 26 to 75%) | LATE (late, 76 to 100%)

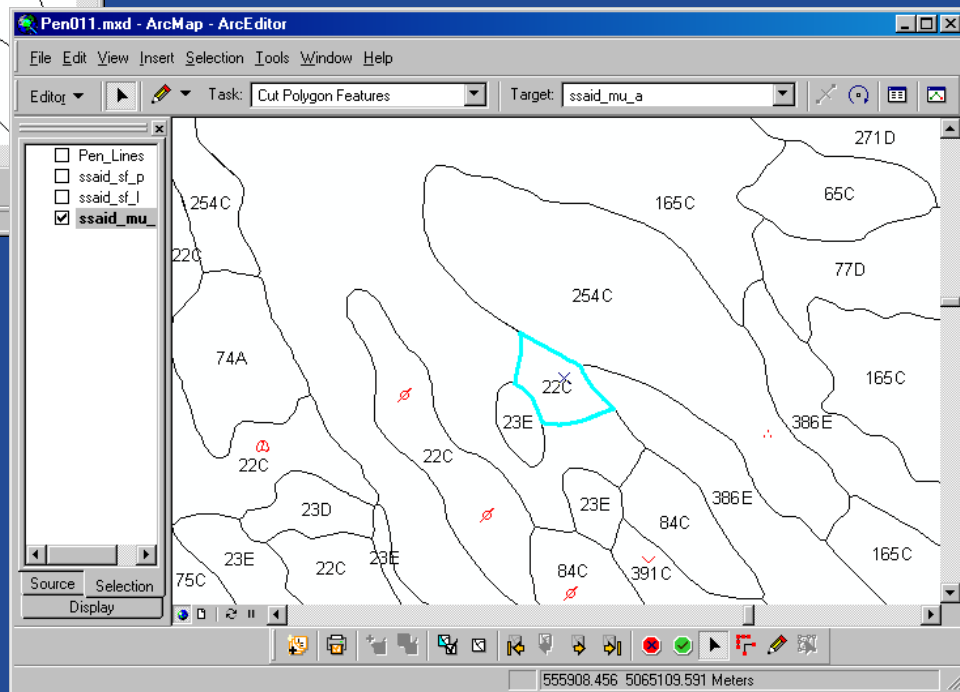
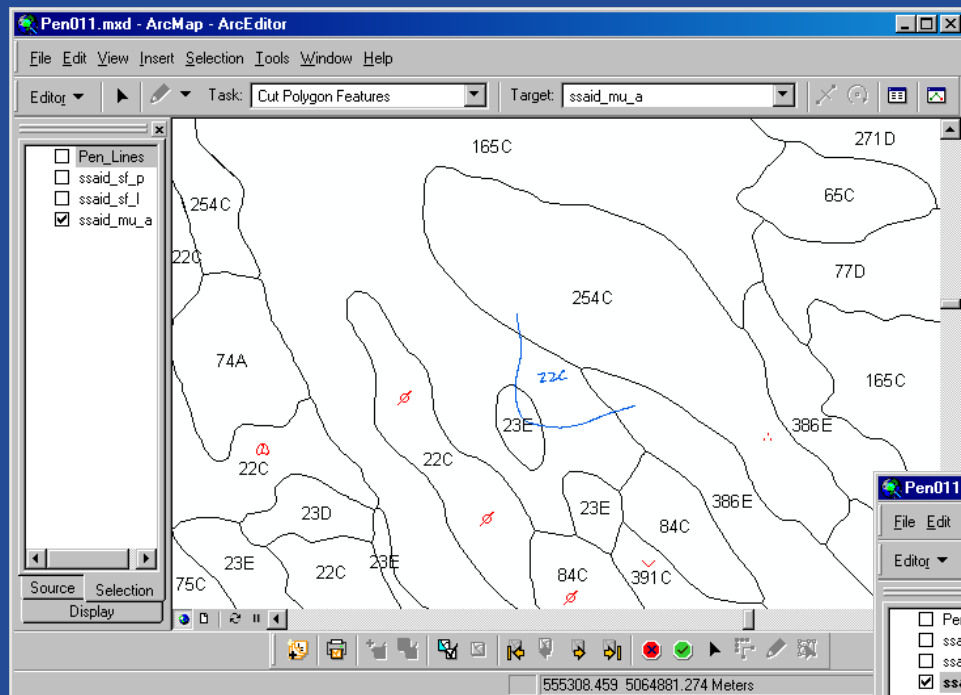
**Canopy position:** OVER (overstory) | UNDER (understory)

Check boxes (**Drained?**, **Plantation?**, and **Bedded?**) -- checked = "Y"; not checked = "N"



EcoSite Type	EcoSite MLRA	EcoSite LRU	EcoSite Number	EcoSite State
F	177	V	123	WV





# BLANKET PURCHASE AGREEMENT

For Adapx Pens and Capturx Software



BLANKET PURCHASE AGREEMENT

**AG-3144-B-11-0004**

FOR

ADAPX AUTOMATED DATA COLLECTION TOOLS

WITH

SOFTWARE INFORMATION RESOURCE CORPORATION

**Contract: GS-35F-0149N**

# **AWARD UNDER GSA FSS**

- **Federal Acquisition Streamlining Act**
- **Software Information Resource Corporation (SIRC)**
- **GSA FSS Contract No. GS-35F-0149N**

# TYPE OF AWARD

- Each BPA Call (Delivery Order (OF-347) or Government Purchase Card order) will be issued based upon the BPA's discounted firm-fixed price list.
- Funds will only be obligated upon issuance of BPA Calls against the BPA.
- The total amount of funds obligated against any single-award BPA (i.e., the total amount of all BPA Calls) shall not exceed \$10,000,000.00 over the term of the BP
- All orders under this BPA will be issued on a firm, fixed-price basis.

# Place of Performance

- Products will be provided world-wide from the vendor site. No permanent space will be set-aside or available for vendor personnel at government facilities.
- Government administration of the agreement will primarily be from:
  - Fort Collins:
  - ITS-OCIO
  - 2150 Centre Ave. Bldg. A
  - Fort Collins, CO 80526

# Agreement Ceiling

- This agreement's ceiling is \$10,000,000.00 inclusive of all calls.
- The minimum single order is \$3,000.00. If a USDA agency wishes to procure products covered under this agreement but the total order is not over \$3,000.00 the vendor must offer this agreement's standard or better pricing, however the transaction will be handled at the local level via the Government Purchase Card.
- The maximum single order is \$500,000.00. If an order is placed for an amount larger than this, the vendor may, at its discretion, deny the order or negotiate delivery terms outside of this agreement.

# Ordering Instructions

- This agreement is open to all USDA agencies and orders may be issued via the Integrated Acquisition System with this agreement noted as the base document.
- Prior to ordering services under this agreement in excess of \$100,000.00 the procuring contracting officer must notify the contracting officer at the USDA Procurement Operations Division, ITS Contracting Branch.

# Products Offered

SKU	Description	Level 1* \$1.00 - \$999,999.99	Level 2* \$1M - \$1,999,999.99	Level 3* \$2M +
ASMO-4211E	Capturx for OneNote Bundle- 1 Capturx for Microsoft OneNote Software - 1 Digital Pen Kit	\$ 295.51	\$ 279.70	\$ 274.5
ASMO-4210EM	Capturx for OneNote -Software Only	\$ 126.16	\$ 119.41	\$ 117.19
ASRU-C211	Capturx Remote User	\$ 845.87	\$ 800.63	\$ 785.73
ASRU-CMBB	Capturx Mobile for Blackberry	\$ 126.16	\$ 119.41	\$ 117.19
ASMO-3211A	Capturx for Excel Bundle - 1 Software Extension as a download, CD, or both, 1 Dig Pen, 5 Blue Ink Cart, 1 Dock, 1 USB Cable, 1 Pen Connection Lic, 1 Pattern Credit	\$ 1,265.85	\$ 1,198.14	\$ 1175.85
ASMO-3211-S	Capturx for Excel Software only	\$ 973.73	\$ 921.64	\$ 904.5
ASMO-521	Capturx Forms Service -Hosted on a Shared Server	\$ 4,232.75	\$ 4,006.35	\$ 3931.81
ASHMO-2110	Capturx Forms Service Digital Pen Kit	\$ 253.17	\$ 239.63	\$ 235.17
ASMO-525	Capturx Forms Service Pen Access License -MONTHLY FEE (Per User)	\$ 66.89	\$ 63.31	\$ 62.14
ASMO-500	Capturx Forms Service Non-Pen User Login MONTHLY FEE (Per User)	\$ 41.49	\$ 39.27	\$ 38.54
ASMO-5213	Capturx for SharePoint "on premise"	\$ 12,700.80	\$ 12,021.45	\$ 11797.8
ASMO-5211-P	Capturx for SharePoint User	\$ 1,265.85	\$ 1,198.14	\$ 1175.85
ASAP-6211A	Capturx Markup for PDF Bundle - 1 Capturx Markup for PDF Software CD, 1 Capturx Pen Manager CD, 1 Digital Pen kit – with Enterprise Pen Access License, 1 Shelf of Digital Pattern, Red Ink Cartridges (5 pack), Markup Pen Utility Card (3 pack)	\$ 1,265.85	\$ 1,198.14	\$ 1175.85
ASAP-6210-S	Capturx for Markup PDF Software only	\$ 973.73	\$ 921.64	\$ 904.5
ASEA-1211A	Capturx for ArcGIS Bundle - 1 Software Extension as a download, CD, or both, 1 Dig Pen, 5 Blue Ink Cart, 1 Dock, 1 USB Cable, 1 Pen Connection Lic., 1 Pattern Credit	\$ 1,265.85	\$ 1,198.14	\$ 1175.85
ASEA-1211-S	Capturx for ArcGIS Software only	\$ 973.73	\$ 921.64	\$ 904.5
AHBD-6212-N2	Capturx JL Darling Rite in Rain Notebook(5x7)	\$ 24.55	\$ 23.24	\$ 22.81
AHLN-4500	Letter size Journals	\$ 16.09	\$ 15.23	\$ 14.94
AHHM-2111	Adapx Digital Pen replacement – 1 Replacement Pen	\$ 253.17	\$ 239.63	\$ 235.17
AHHM-5210	Docking Station	\$ 25.36	\$ 24.00	\$ 23.56
AHFP-1250-5	Fisher Blue Ink Cartridge replacements(5)	\$ 8.42	\$ 7.97	\$ 7.83
AHFP-2250-5	Fisher Red Ink Cartridge replacements(5)	\$ 8.42	\$ 7.97	\$ 7.83
AHHM-5311	Replacement Cap	\$ 10.97	\$ 10.38	\$ 10.19
AMEA-GSASA	Maintenance and Software Assurance	\$ 243.43	\$ 230.41	\$ 226.12
ALCD-1210-H	Capturx Forms for Excel 2007 -Form Design (per hour)	\$ 190.51	\$ 180.32	\$ 176.97
ALCS	Adapx Support and Consulting (per hour)	\$ 190.51	\$ 180.32	\$ 176.97
ALCT	Adapx Customer Training (per hour)	\$ 190.51	\$ 180.32	\$ 176.97
ATCUH-1210	Adapx Tech Support (per hour)	\$ 190.51	\$ 180.32	\$ 176.97

# Services Offered

<b>Labor Category</b>	<b>Hourly Rate</b>
<b>Network Engineer</b>	\$131.97
<b>Senior Principal</b>	\$138.31
<b>Program Manager II</b>	\$146.76
<b>Software Engineer III</b>	\$105.08
<b>Software Engineer IV</b>	\$ 95.55
<b>Technical Manager</b>	\$116.14
<b>Functional Analyst III</b>	\$111.91
<b>Senior DBA</b>	\$159.37
<b>Data Modeler</b>	\$101.07

# BPA Products and Services

- **Dedicated Account Management**
- **Quarterly Training Webcasts**
- **Government Marketing**
- **Dedicated Phone Lines**
- **Dedicated BPA Website** (<http://www.sirc.net/bpa.html>)
- **Dedicated Email Address**
- **Trial/Demo Software Licenses**
- **Executive Sponsorship**
- **Contractor Management Services**

Questions?

