Mission Statements

- **USDA** - Provides leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management.

- **Forest Service** - The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.
Importance of Imagery & Geospatial Data

The Forest Service has a huge land management responsibility which can only be accomplished through heavy reliance on spaceborne and airborne imagery. The acquired imagery feeds into the Forest Service GIS system for mapping and analysis.

Up-to-date imagery is required for:

- Forest inventory analysis
- Fire management
- Changes in forest health (pest & disease)
- Law enforcement
- Land cover change detection
- Engineering (building & maintaining infrastructure)
- Protection of critical watersheds (for fresh drinking water)
NAIP 2011

- Total Program Cost ~ $15,000,000
- FSA program, ~ $11,000,000 funding
  - Partners: USFS, NRCS, DOI/USGS @ $1,455,000 each
- 20 states collected: Washington, Oregon, Idaho, Montana, Colorado, Utah, New Mexico, Iowa, Illinois, Alabama, South Carolina, Virginia, West Virginia, Ohio, Maryland, Delaware, New York, New Hampshire, Vermont, Maine
- All 48 states covered every 3 years
- All CONUS has 4-band imagery over the three year period from 2009 to 2011.
- Coverage of 60 National Forests; 9,968,901 acres NF land (155,846 square miles)
NAIP 2011

Region 10 (not covered by NAIP, FS GMO program also supports the Region)

- $345,000 for LiDAR coverage of the Copper River Basin on the Chugach NF
- Partnership with state of Alaska, USGS, NRCS and others

Puerto Rico
- US Army Corps of Engineers Project – 1 foot resolution imagery
- Partners: USGS, NRCS, USFS
- $20,000 USFS share
FY2011 APFO Contracting Activities

$27,685,229.40 – Total amount of aerial photography & IT contracts awarded
  • Provided procurement services to support:
    • FSA partnering agencies with current NAIP digital imagery
    • NRCS with high resolution NRI and Stewardship Lands aerial photography
    • U.S. Forest Service with film aerial photography and high resolution digital imagery
    • APFO and WDC with IT requirements

1,281,837 – Total number of square miles of aerial photography contracted
  • Contracted 1,175,517 square miles of NAIP imagery
  • Contracted 91,507 square miles for NRCS programs
  • Contracted 14,827 square miles of U.S Forest Service lands

30% - Percent of all contracts awarded to small business concerns
  • Solicited sources for procurements under a 100% Set-aside for Small Business Concerns where applicable. This resulted in Small Business Concerns receiving 30% of the overall total contract dollar amount, with Large Businesses receiving 51% and NAFTA Businesses receiving 19%
History of APFO Contract Awards

Total Annual Contract Awards

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$7,382,612</td>
</tr>
<tr>
<td>2003</td>
<td>$27,949,208</td>
</tr>
<tr>
<td>2004</td>
<td>$37,664,569</td>
</tr>
<tr>
<td>2005</td>
<td>$33,566,550</td>
</tr>
<tr>
<td>2006</td>
<td>$38,622,514</td>
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<tr>
<td>2007</td>
<td>$19,093,005</td>
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<tr>
<td>2008</td>
<td>$24,423,958</td>
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<tr>
<td>2009</td>
<td>$42,687,880</td>
</tr>
<tr>
<td>2010</td>
<td>$41,187,151</td>
</tr>
<tr>
<td>2011</td>
<td>$27,685,229</td>
</tr>
</tbody>
</table>
National Agriculture Imagery Program (NAIP): Awarded contract task orders for one meter, 4-band, digital orthoimagery covering 1,175,517 square miles in 20 states, for a total contract value of $16,454,443.63. NAIP supports the mission of FSA programs as well as partnering agency programs.
NAIP Contract Awards
History of NAIP Contract Award Totals

- **Contract Awards**
- **Number of DOQQs Awarded**

Yearly Awards:
- 2003: $9,489,878
- 2004: $132,549
- 2005: $151,618
- 2006: $28,491,562
- 2007: $23,995,354
- 2008: $181,957
- 2009: $9,048,699
- 2010: $148,146
- 2011: $139,495

Yearly Totals:
- 2003: $9,489,878
- 2004: $20,057,879
- 2005: $23,995,354
- 2006: $28,491,562
- 2007: $29,903,406
- 2008: $14,330,249
- 2009: $30,168,473
- 2010: $16,454,444

Legend:
- **3 Year IDIQ Contract**
- **5 Year IDIQ Contract – Expires 2011**
National Agriculture Imagery Program (NAIP): The current NAIP IDIQ contract will expire at the end of 2011. FSA anticipates a new 5-year IDIQ contract will be awarded early in 2012 based on the 3-year acquisition cycle shown above.
National Resource Inventory (NRI) and Stewardship Lands Imagery (SLI) Contracts:
Awarded contract task orders for 91,507 sites and easements in the lower 48 states, Hawaii, and Puerto Rico & Virgin Islands, for a total contract value of $8,891,479.35. NRI and SLI imagery support the mission of NRCS programs.
2012 NRI/SLI Outlook

National Resource Inventory (NRI) and Stewardship Lands Imagery (SLI)

Task orders will be issued in December 2011 for the 2012 imagery requirements under the established 2-year IDIQ contract which expires at the end of 2012.

Task order requirements are estimated to be the same or slightly higher quantities as compared to 2011.
FY2011 APFO Contracting Activities

USFS Resource Aerial Photography Contracts: Contracted for 8 USFS resource projects (6 digital & 2 film) covering 14,827 square miles of national forest system land, for a total value of $628,969.38. Resource imagery supports U.S. Forest Service mission and programs.
2012 USFS Resource Outlook

2012 RESOURCE CONTRACTS

- Individual Requests for Proposals (RFP) will be issued during 2012 for requests for aerial photography (film and digital acquisitions).

- Resource requirements are estimated to be the same or slightly higher quantities as compared to 2011.
FY2011 APFO Contracting Activities

APFO & WDC Information Technology (IT) Contracts: Purchased computer hardware, software, other related equipment, and maintenance agreements, for a total amount of $1,710,337.04. APFO IT contracts amounts to $1,622,333.37 and contracts for Washington FSA Headquarters amounted to $88,003.67.

Small Business Concerns Program: Solicited sources for procurements under a 100% Set-aside for Small Business Concerns where applicable. This resulted in Small Business Concerns receiving 30% of the overall total contract dollar amount, with Large Business Concerns receiving 51% and Canadian (NAFTA) Business Concerns receiving 19%.

<table>
<thead>
<tr>
<th>Contract Program</th>
<th>Small Business</th>
<th>Large Business</th>
<th>NAFTA Business</th>
<th>Program Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAIP Contracts</td>
<td>5%</td>
<td>35%</td>
<td>19%</td>
<td>59%</td>
</tr>
<tr>
<td>Resource Contracts</td>
<td>2%</td>
<td>N/A</td>
<td>N/A</td>
<td>2%</td>
</tr>
<tr>
<td>NRI-SLI Contracts</td>
<td>21%</td>
<td>12%</td>
<td>N/A</td>
<td>33%</td>
</tr>
<tr>
<td>IT &amp; Other Contracts</td>
<td>2%</td>
<td>4%</td>
<td>N/A</td>
<td>6%</td>
</tr>
<tr>
<td>ALL CONTRACTS</td>
<td>30%</td>
<td>51%</td>
<td>19%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Imagery for the Nation (IFTN)

- The 1-meter portion of NAIP is basically agreed on
  - Yearly acquisition for CONUS
- The hi-resolution (1-foot) portion is still being decided
  - FGDC Executive Committee will study prioritization option
  - Funding is still a very big issue and has not been addressed
- IFTN remains an elusive creature
Fire Season – Support Summary

Operational Imaging Support

- This has been a typically busy fire season, with the National Planning Level reached PL4 in early September. With a rapid decrease in fire activity NIFC returned to PL3 on September 20.

- NIROPS received 723 infrared mapping requests (through Oct 25), and were able to service 541 requests. 61 requests were cancelled and 121 were UTF (Unable to Fill).

- Satellite Imagery: The Burned Area Emergency Response (BAER) Imagery Support Program mapped 5,262,829 acres on 70 incidents, providing critical and timely support to the rapid response BAER teams.

- The USFS Active Fire Mapping (AFM) Program continued to provide mapping support to our internal and external stakeholders via the http://activefiremaps.fs.fed.us/ web portal. During the 2011 fire season the site experienced 7,243,301 user sessions and saw 4.5 terabytes of mapping data transferred to interested users.
# IR Request Orders 2011 (YTD)

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Filled</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIROPS</td>
<td>144Z</td>
</tr>
<tr>
<td>NIROPS</td>
<td>149Z</td>
</tr>
<tr>
<td>VENDOR</td>
<td>Sky Research</td>
</tr>
</tbody>
</table>
Forest Service GIS Contract

- Categories of Services included are:
  - Spatial analysis and Modeling
  - Map Development
  - Enterprise GIS Design and Implementation
  - Tool and Application Development
  - Data Collection, Conversion, Processing, Integration
Forest Service GIS Contract Expenditures

- 2000-2004: $11 million
- 2005-2010: $16.8 million
- 2011 new contract award
GIS Contract Example Projects
Wetlands delineation – Manti-La Sal NF
Common Vegetation Unit (CVU) delineation and updates
Route realignment of level 1-3 roads – GMUG NFs
Vegetation mapping – Valles Caldera NM
Annotation geodatabase development – Ashley NF
Visitor map updates – Targhee NF
Python programming online tutorial development – GSTC
Lynx Habitat Display and Reporting System development – R2
Automated Lightning Mapping System development – WO
Fire Incident Mapping Tool (FIMT) updates – R2/NIFC
Timber Harvest Apparaisals system development
Onsite GIS support for Manti-La Sal/Eldorado/Allegheny NFs, Region 3/6, GSTC
Onsite Cartography support – R6
Metadata Mining Tool development – GSTC
Metadata online training development – R6
GIS Contract Example Projects (cont)

Nature Watch website re-design
Map symbology conversion from coverages to geodatabases tool development
Forest Plan Implementation support – Tongass NF
Timber operability analysis – Tongass NF
Historic map update – Umatilla NF
Change detection and classification – Northern Research Station
Forest visitor map development and updates – various forests
Legislative Map Tool development
Travel Route data conversion – R6
Species habitat GIS support – R6
Motor Vehicle Use Map (MVUM) development – White River NF
Wildlife Mapping and Analysis – R3
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