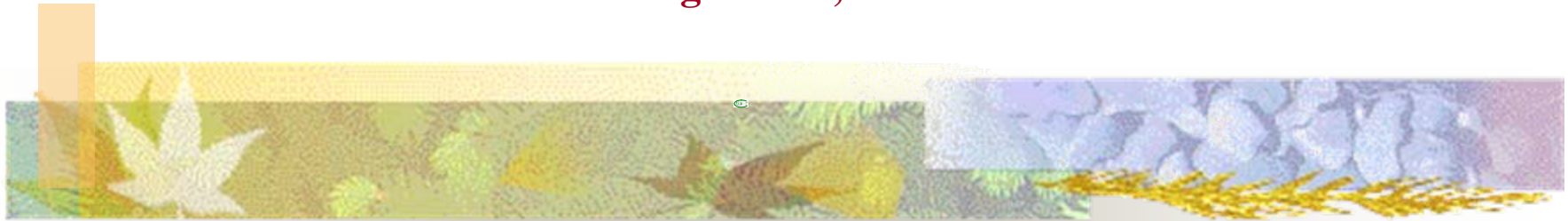




U.S. Forest Service

Summary for ERS Meeting

Washington DC, October 2007



W. Brad Smith

Associate National Program Leader, FIA



The Nation's Forest Census



Ruben's Questions

- 1) What is the coverage of your data set (types of land, etc.)?
- 2) What is the geographic level and scope of the data?
- 3) What year does the data represent (first year, most recent year)?
- 4) What is the source of the data (agency, vendor, etc.)?
- 5) How are the data collected and processed?
- 6) How often are the data updated and when is the next planned update?
- 7) Who may access the data? How are the data made available and in what format(s)?



The Nation's Forest Census

Forest Inventory and Analysis Research



FIA legislative mandate

“make and keep current a comprehensive inventory and analysis of the present and prospective conditions and requirements of the renewable resources of the forest and rangelands of the United States”

- 1928 McSweeney/McNary Act

- Replaced by 1978 Forest & Rangeland Research Act



Forest Inventory and Analysis Research

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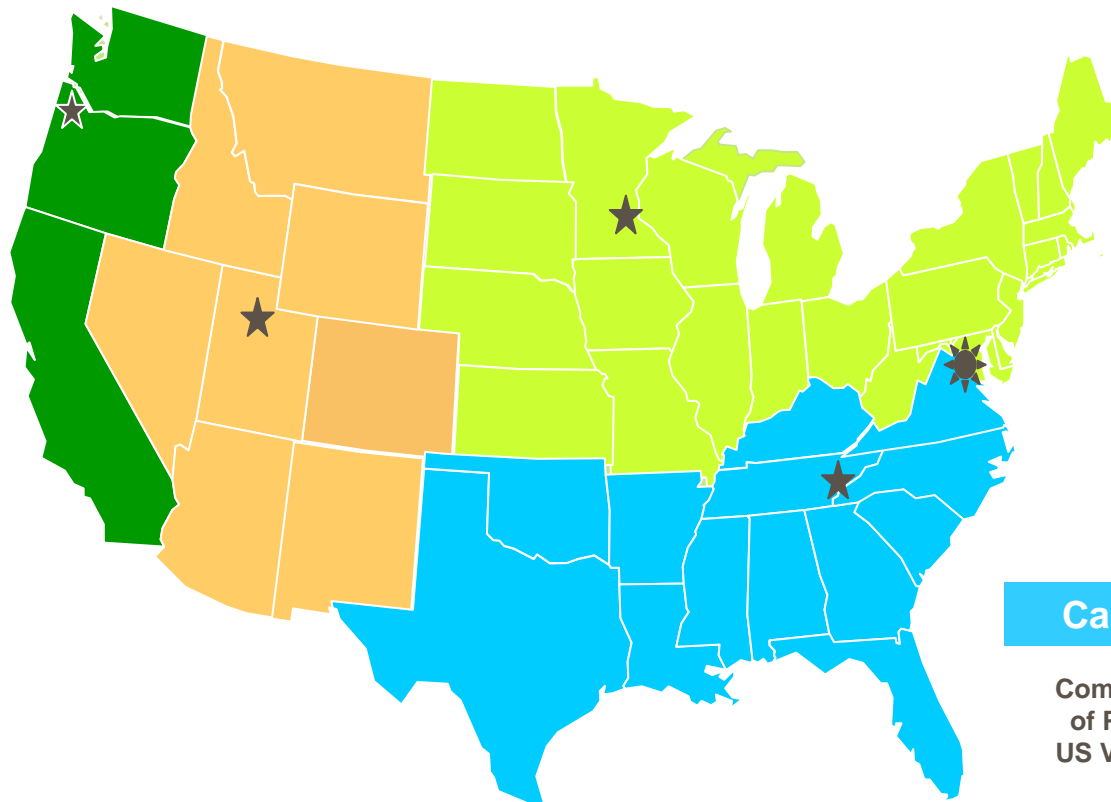


FIA Inventory Regions



Pacific

Hawaii
American Samoa
Commonwealth
of the Northern
Mariana Islands
Federated States
of Micronesia
Guam
Republic of Palau
Republic of the
Marshall Islands



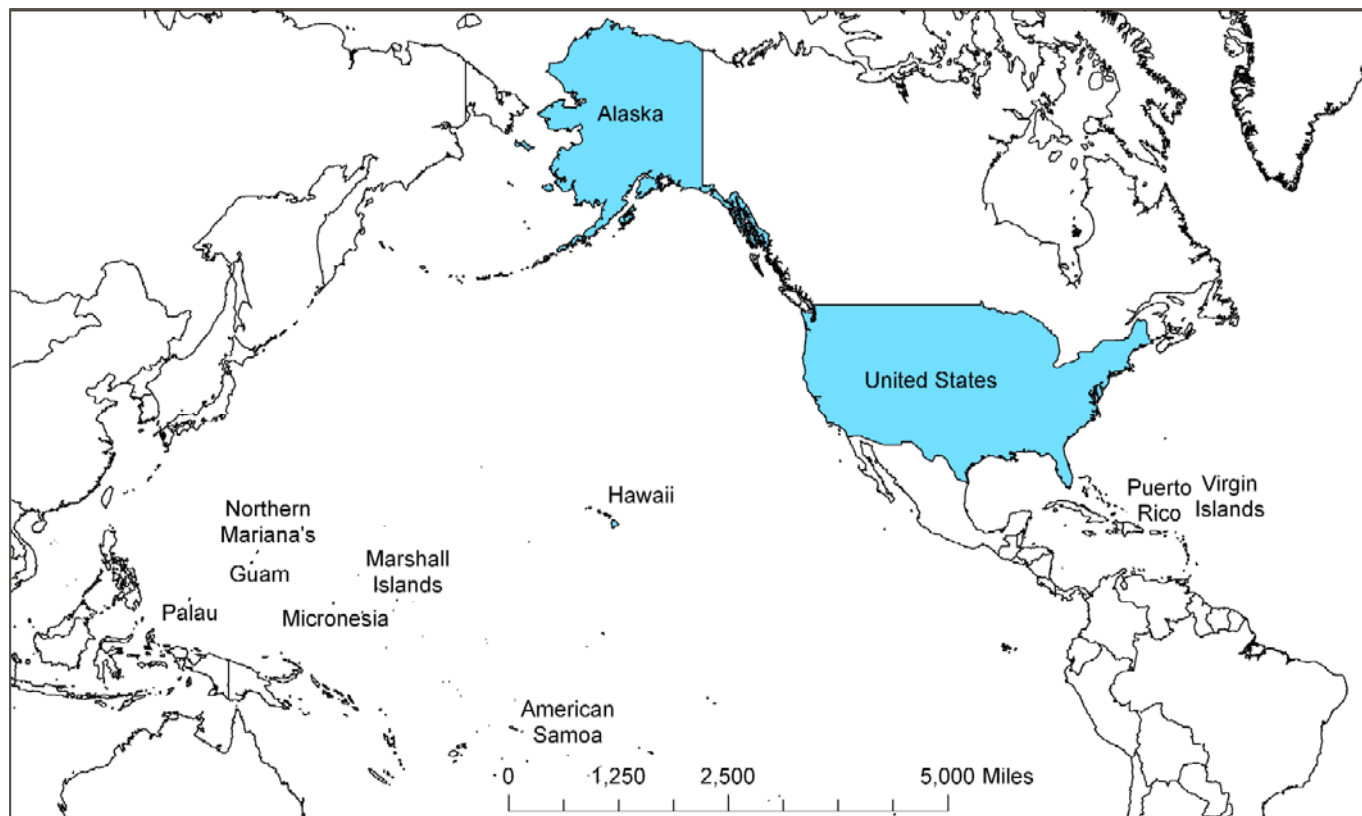
Caribbean

Commonwealth
of Puerto Rico
US Virgin Islands



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The Nation's Forest Census



Forest Inventory and Analysis Research

The Nation's Forest Census



A history of delivery since 1928

- 260+** STATE INVENTORIES
- 9** NATIONAL ASSESSMENTS
1953, 1963, 1970, 1977, 1987, 1992, 1997, 2002, 2007
- 3** NATIONAL OWNERSHIP STUDIES
1978, 1994, 2005
- 100's** PRIMARY MILL CANVASS AND
LOGGING UTILIZATION STUDIES
- 3** SATELLITE FOREST COVER MAP
1993, 1997 [*National Atlas*], 2007



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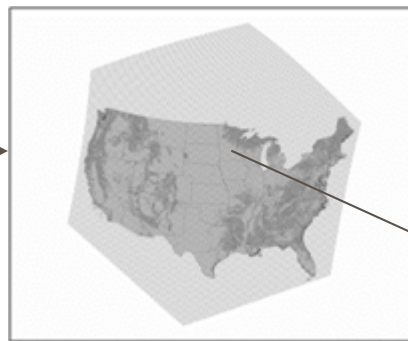
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Hexagon Grid and Plot System

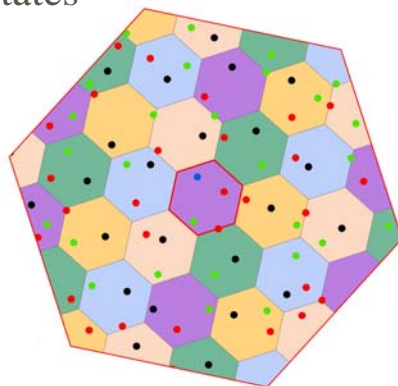


Base hexagon positioned over the conterminous United States



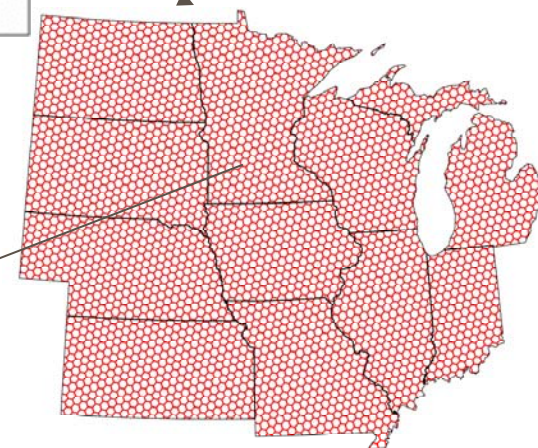
Base hexagon divided into 96,000 acre P3 grid cells for United States

**375,000
cells
nationally**



2004
2005
2006
2007
2008

P3 hexagons divided into paneled 6,000 acre P2 base sample grid – one panel sampled per year



**Basic FIA sampling
framework**

Assures uniform national coverage every year



FIA Program Perspectives

- *Only comprehensive forest inventory for each of the 50 States and 8 Caribbean and Pacific Island groups.*
- *Switched from periodic State by State cycle in 1999 to annualized system designed to operate in every State every year as directed by 1998 Farm Bill*



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Key requirements of the 1998 Farm Bill

which revised our legal 1928 mandate

- **Develop a Strategic Plan**
- **Operate collaboratively in every State every year**
- **Post all new core data annually**
- **Produce 5-year detailed reports for each State**
- **Seek opportunities for partners to enhance and leverage the program**



The Nation's Forest Census

Forest Inventory and Analysis Research



**New 2008-2012
Strategic Plan
developed
collaboratively
with partners.**

**Defines core
program and
identifies new
opportunities.**

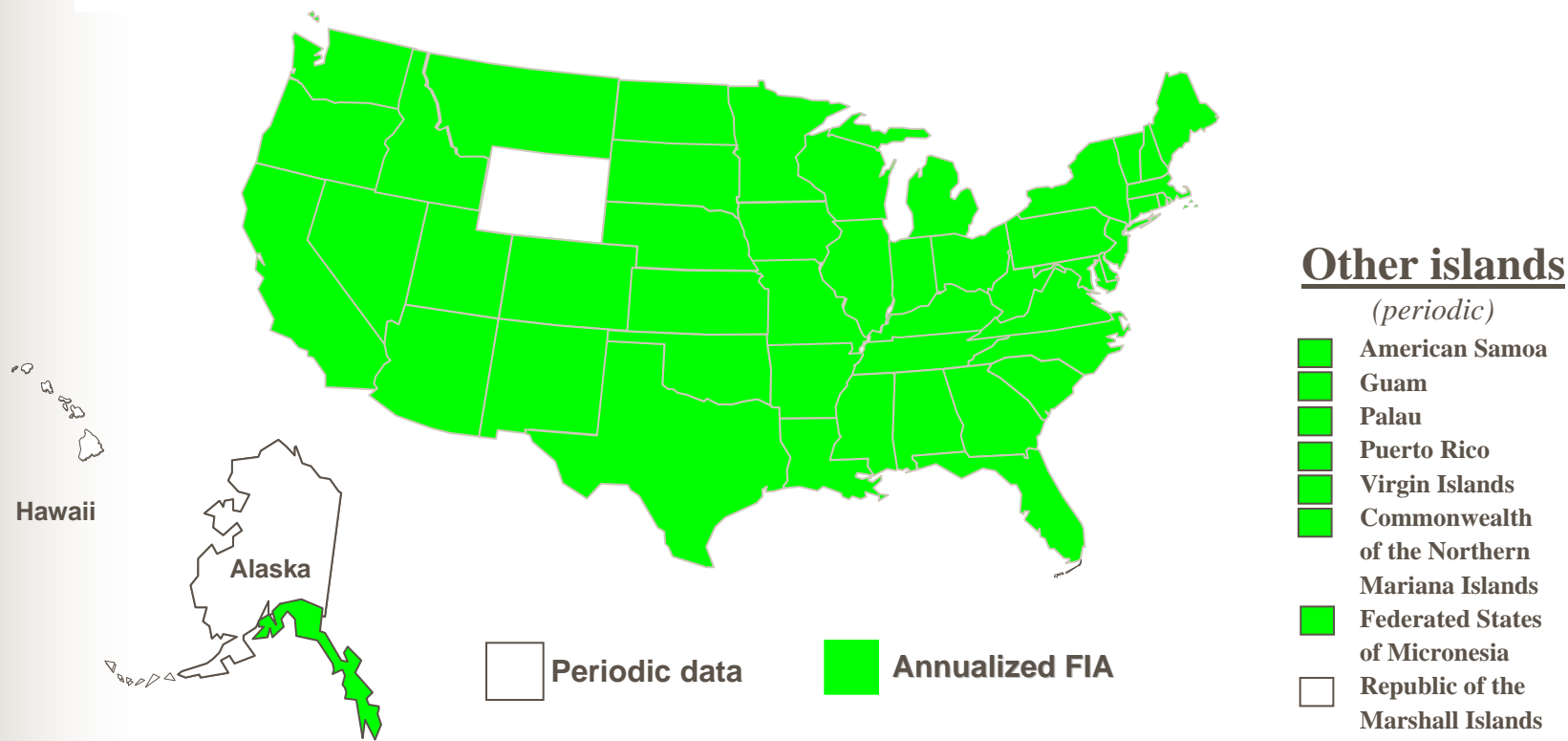


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Post 1999 implementation status

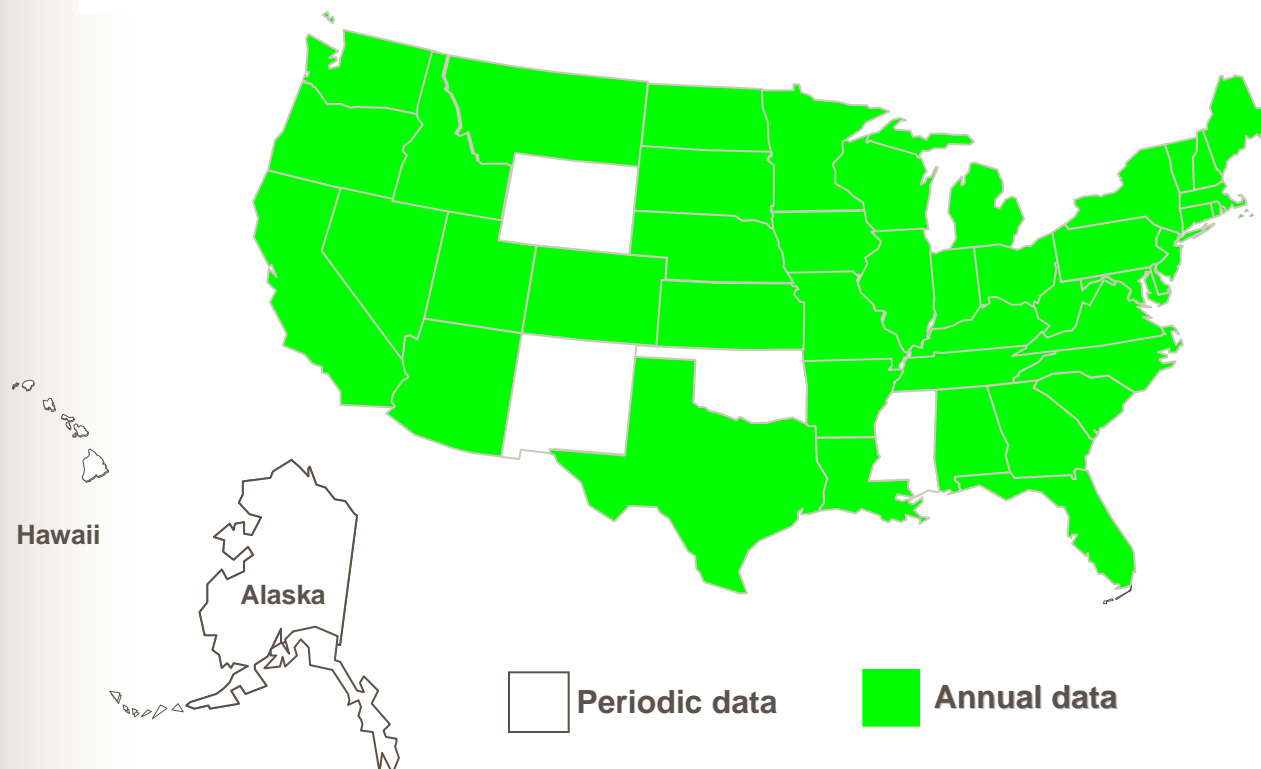


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Current data on web
at <http://www.fia.fs.us>



Other islands

(periodic)

- ☒ American Samoa
- ☒ Guam
- ☐ Palau
- ☐ Puerto Rico
- ☐ Virgin Islands
- ☐ Commonwealth of the Northern Mariana Islands
- ☐ Federated States of Micronesia
- ☐ Republic of the Marshall Islands



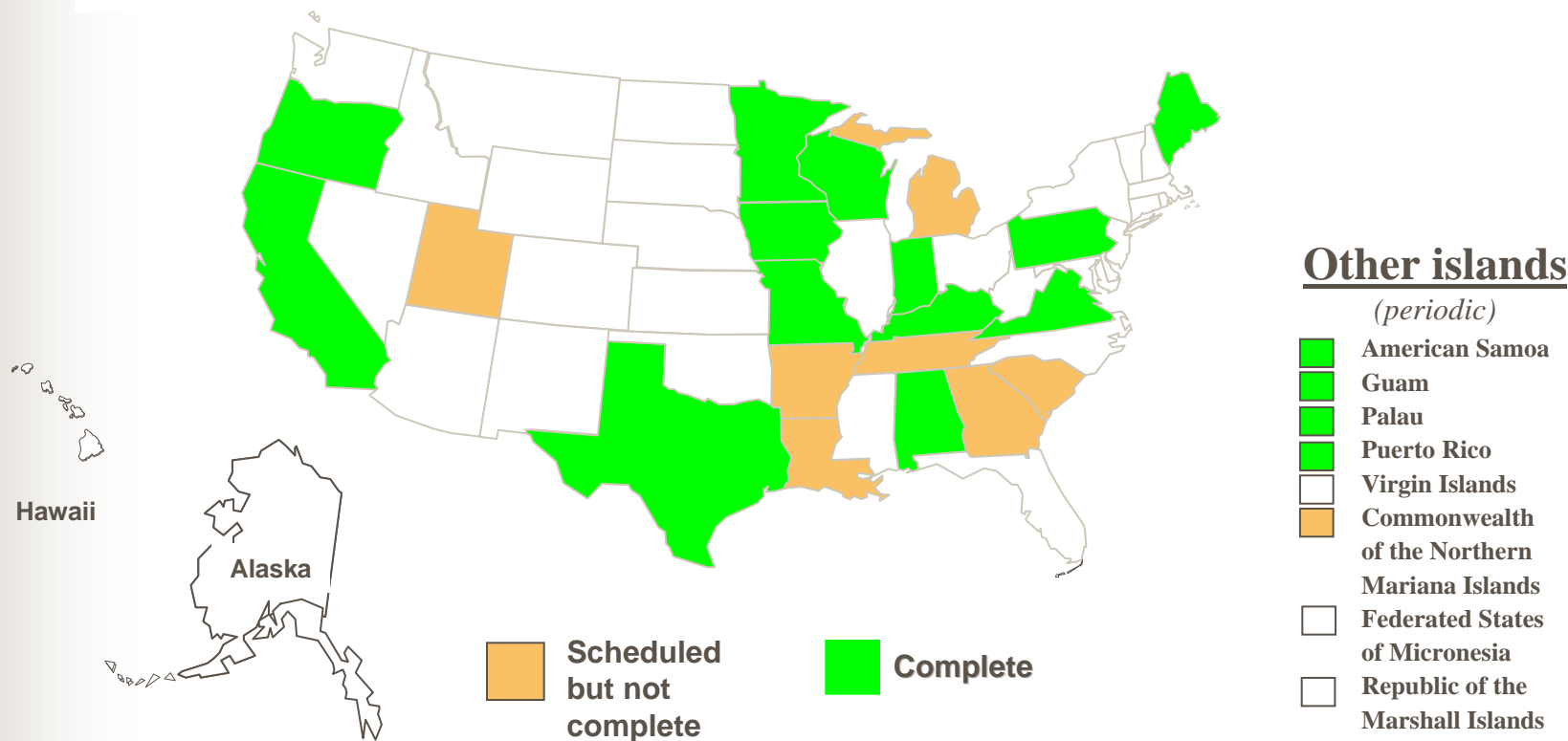
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5-year reports

65% accomplishment now – 90% by end of 2008

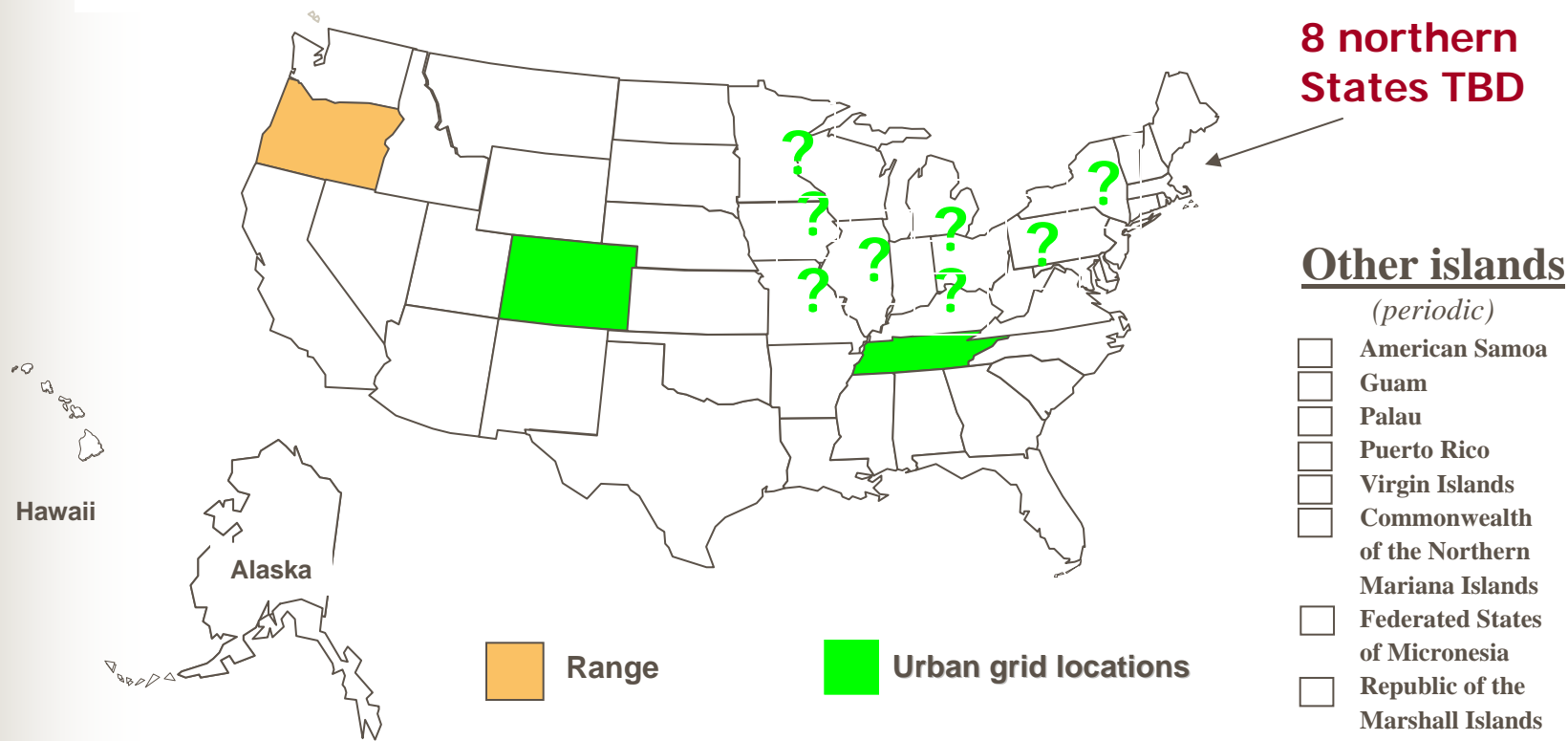


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New opportunities 2008: Urban implementation & Range pilot




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Data fusion: Forest Ownership

-  Public
-  0-20% corporate
-  20-60% corporate
-  60-100% corporate

Forest ownership map
produced using the
following layers:

- ESRI data and maps
- FIA plot data
- Managed areas database
- 30m TM data

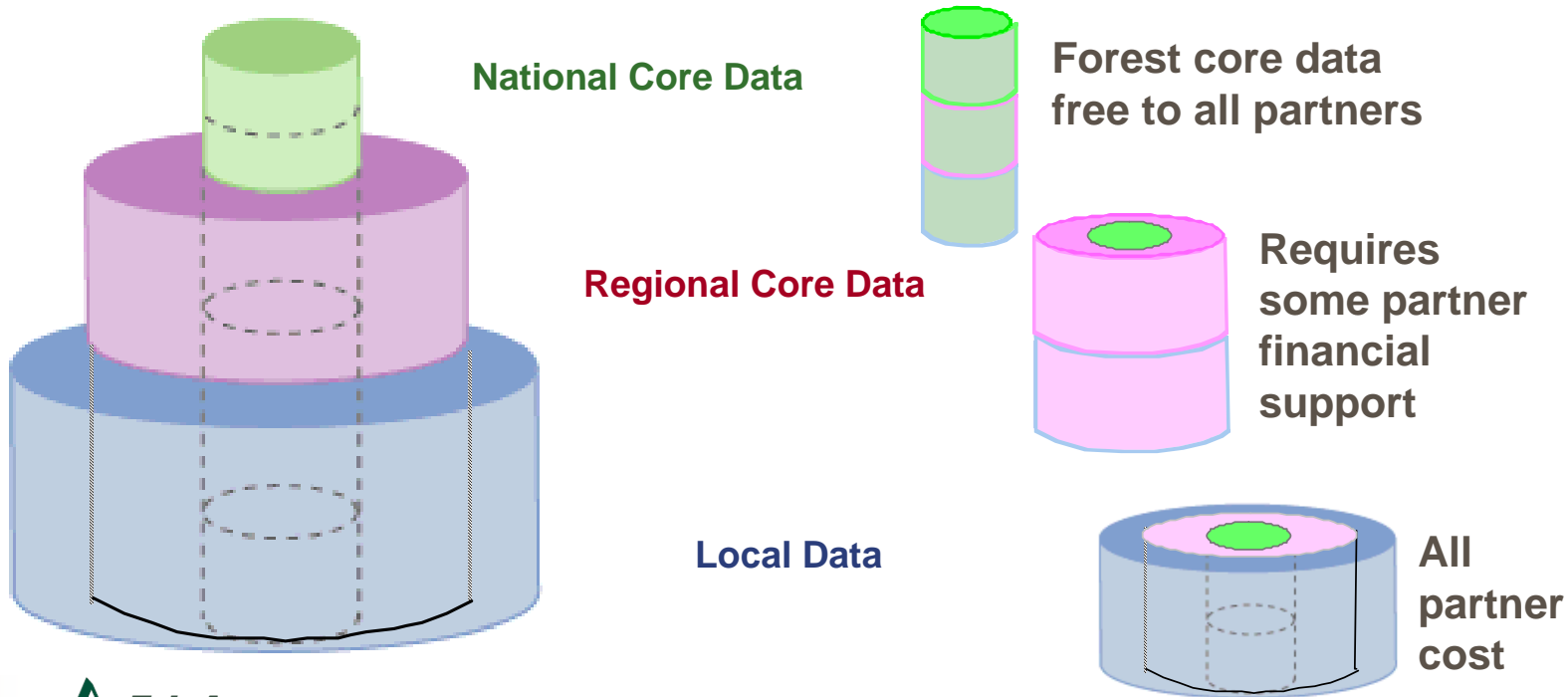


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Leveraging the grid – core layers



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Other reporting demands

- *RPA 5-year U.S. National Assessments*
- *Montreal Process - 18 of 28 biological indicators*
- *UN/FAO 5-yr Global Forest Resource Assessments*
- *UN/IPCC report on forest area trends and baseline input for U.S. forest carbon estimation*
- *EPA report on status of nation's ecosystems*
- *Heinz Center report on nation's ecosystems*

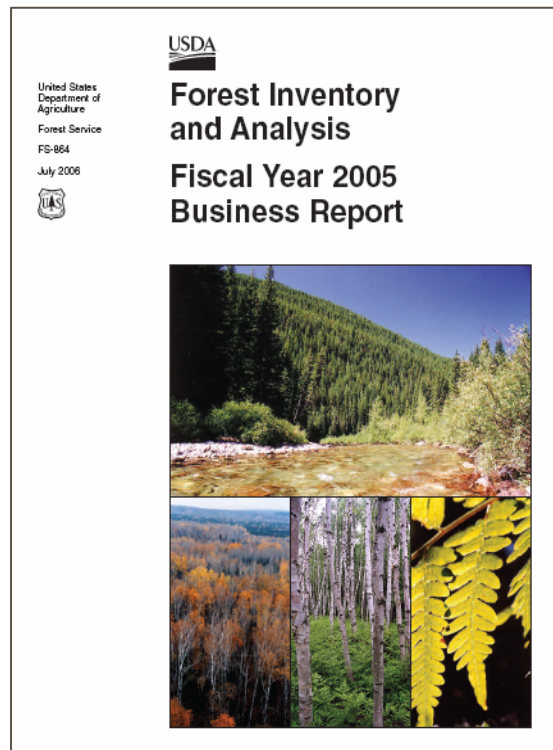


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The Annual Business Report continues to be praised by Congress and partners as a model for demonstrating program accountability.



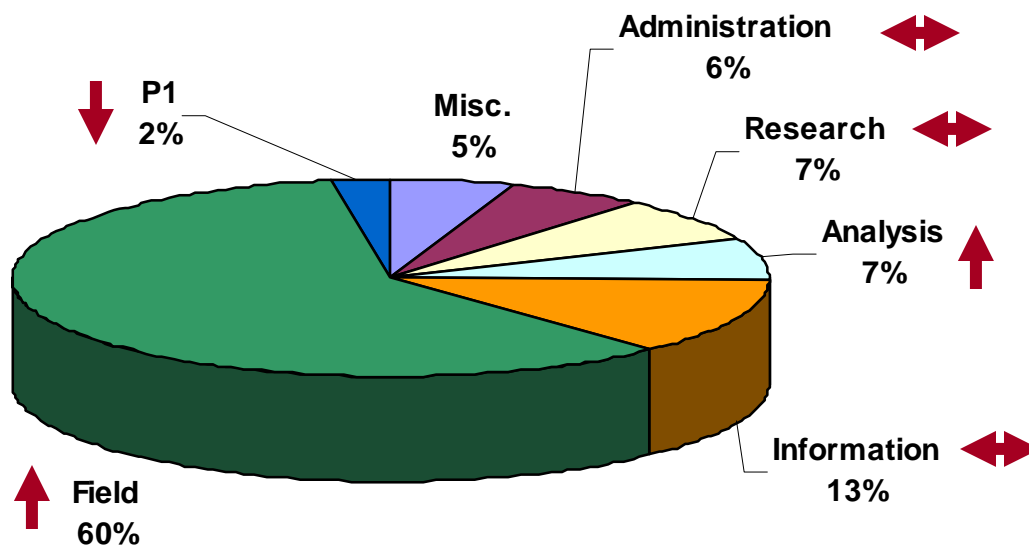
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Where the operating dollars go (8-year average, 1999-2006)

Annual
program cost
is 10 cents
per acre of
forest.



↔ ↓ ↑ = Recent trend

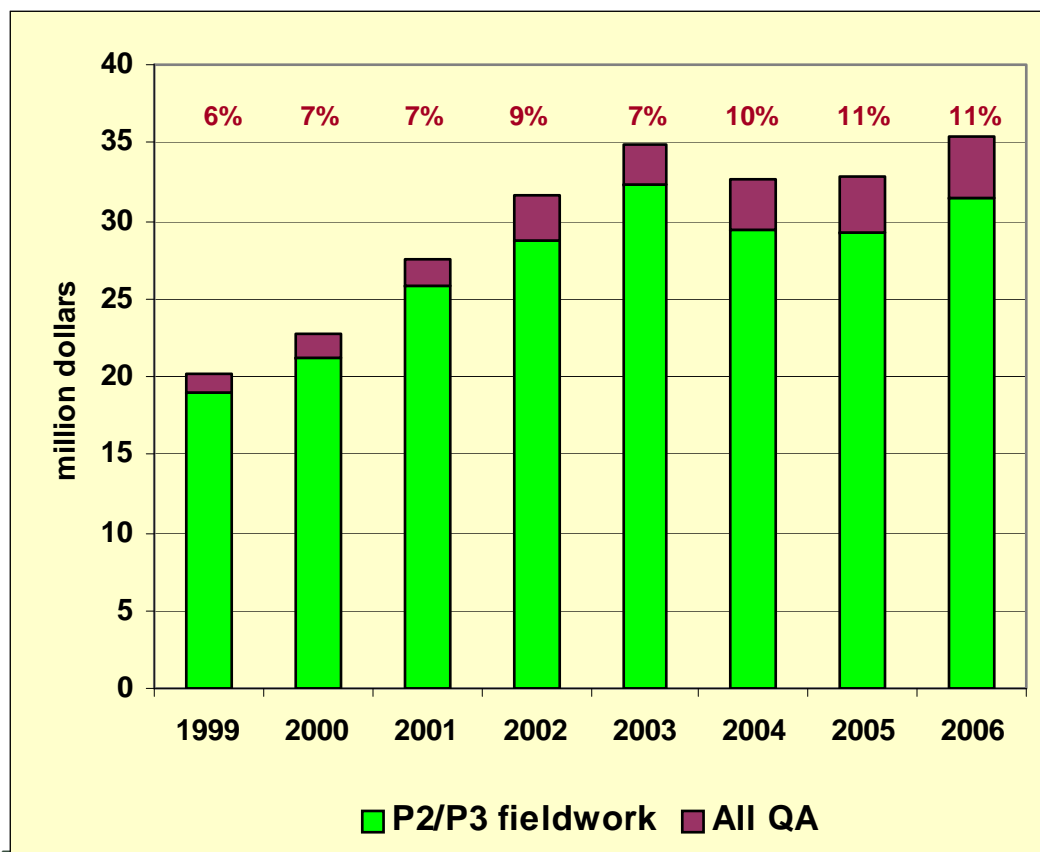


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Historic field cost distribution



< QA



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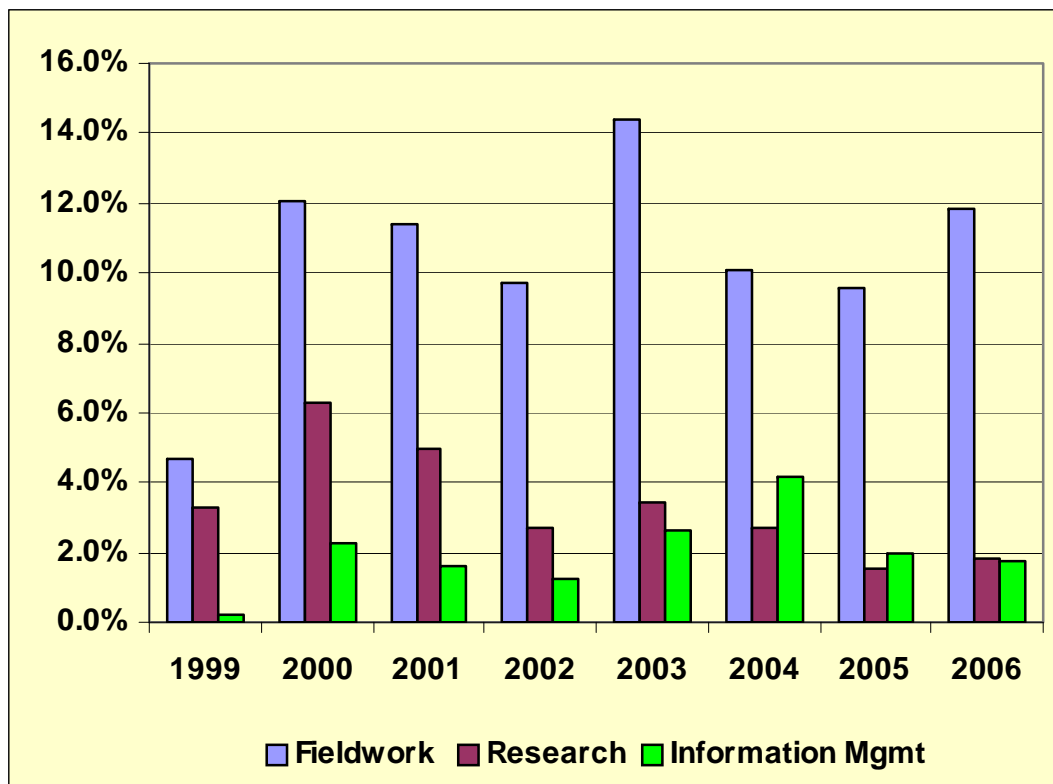
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Work accomplished by Grants

getting the most from our dollars

Since 2000,
FIA grants
have
averaged
\$9.5 million
annually-
mostly for
fieldwork



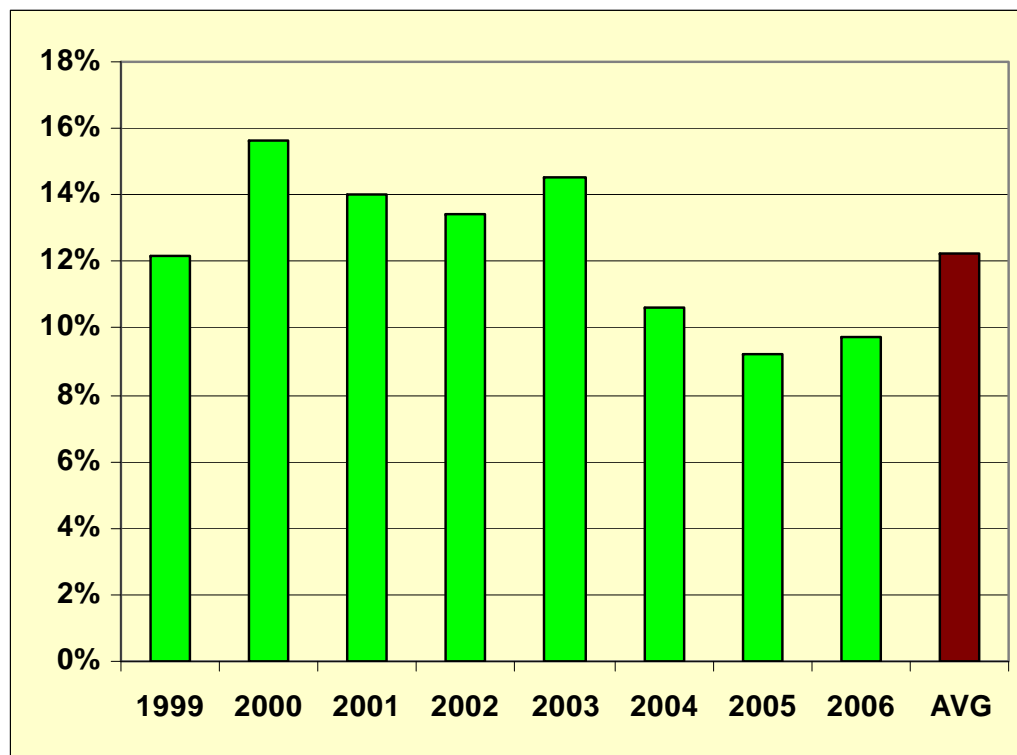
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Historic percent of total FIA program funded by partners

Since 2000,
partner
contributions
have averaged
\$7.9 million
annually or
12% of all
program funds



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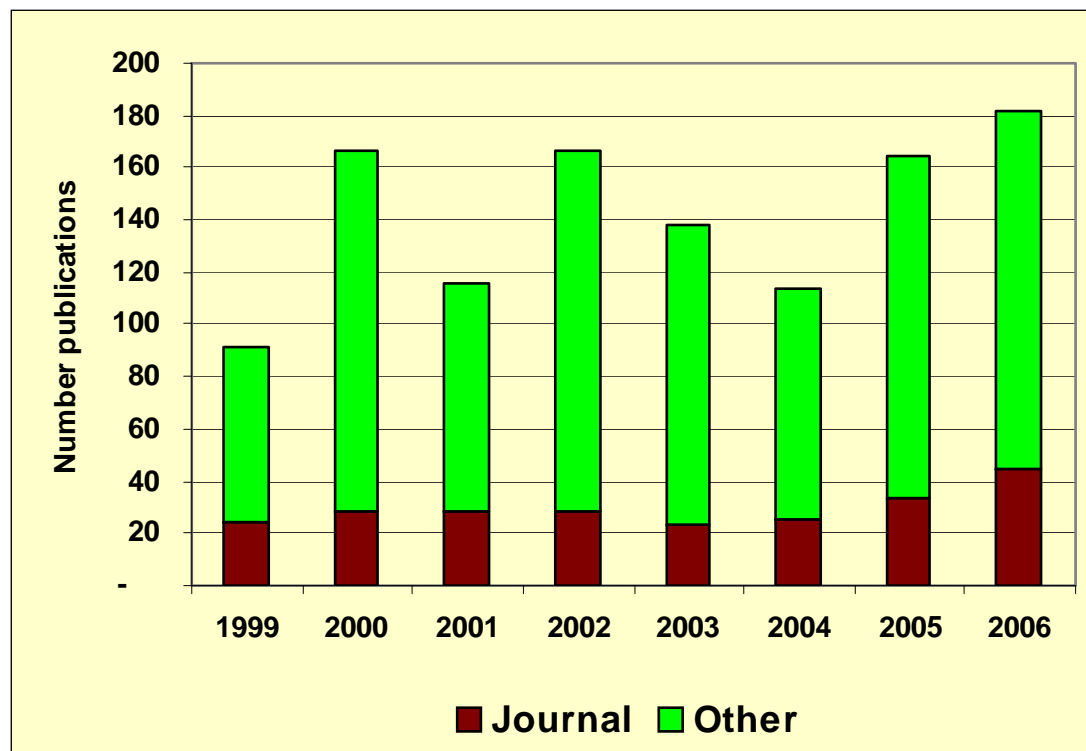
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Historic reporting of results

Easy data
access is
critical to all

After slowing
during
information
system
development,
publications are
on the rise



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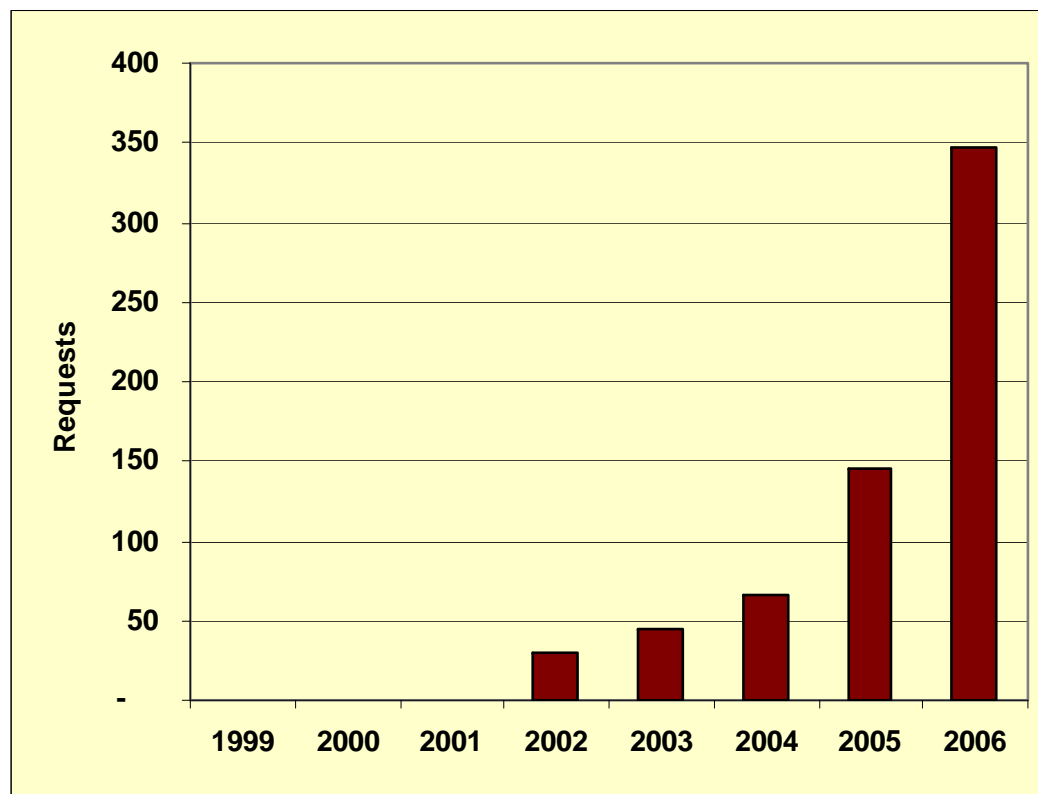
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Spatial data requests

Spatial data requests are expected to continue rising rapidly....

along with privacy issues




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Other recent items of note:

- *New U.S. Forest Type map (peer reviewed)*
- *New U.S. Forest Biomass map (peer reviewed)*
-  *New Forest Inventory Data Online (FIDO)*
to replace MapMaker
- *New 2007 National Assessment in final draft with map atlas*
- *Assisting Brazil and Russia with new national inventories*



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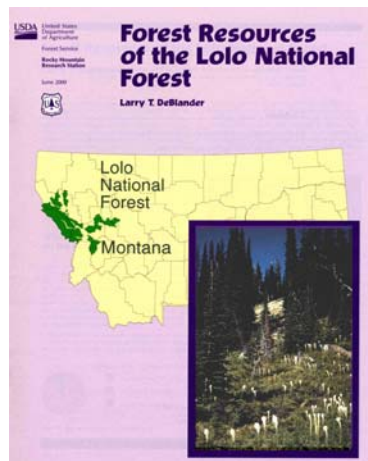


Forest Inventory and Analysis

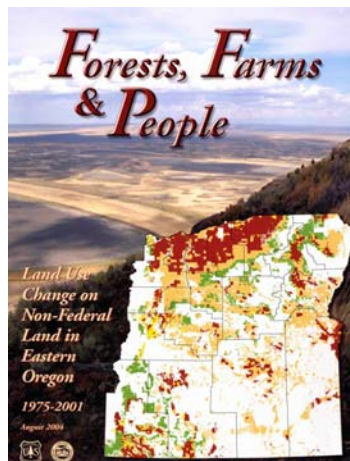
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➔ Main information flow
➔ Feedback loop

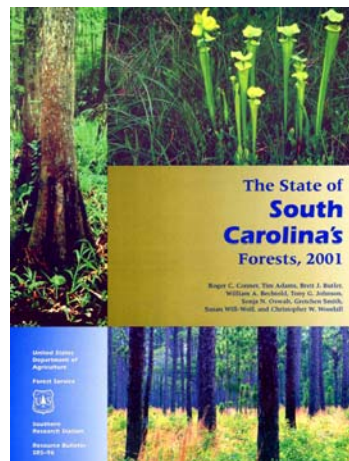
Reporting on U.S. forests from local to global



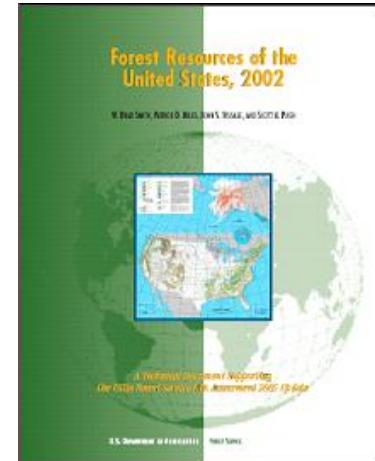
Local



Sub-State region



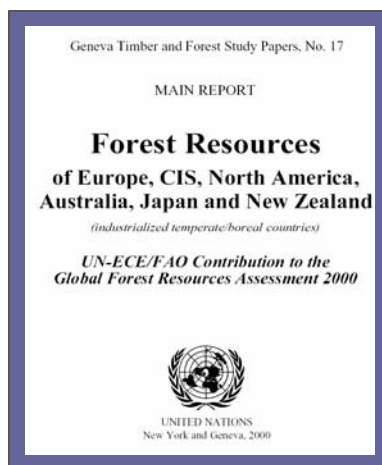
State



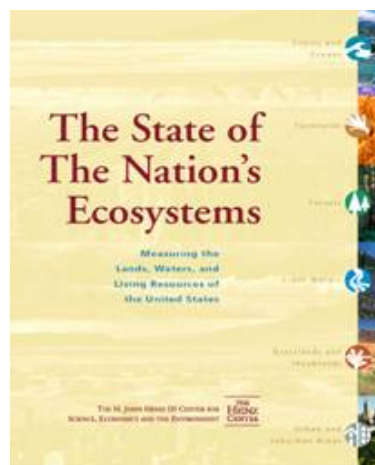
Regional/
National



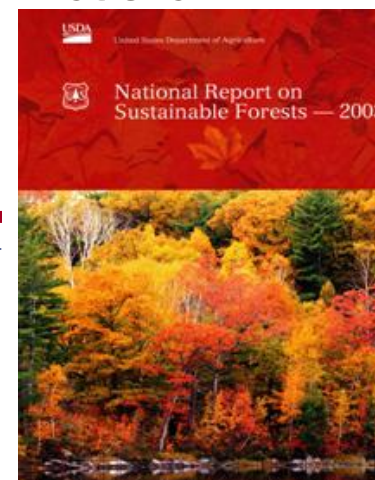
Global



International
multi-process



National multi-sector

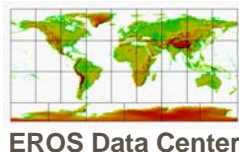


National sector C&I

Partners are key to new strategies



Forest Service
Research and
Development





Thank you

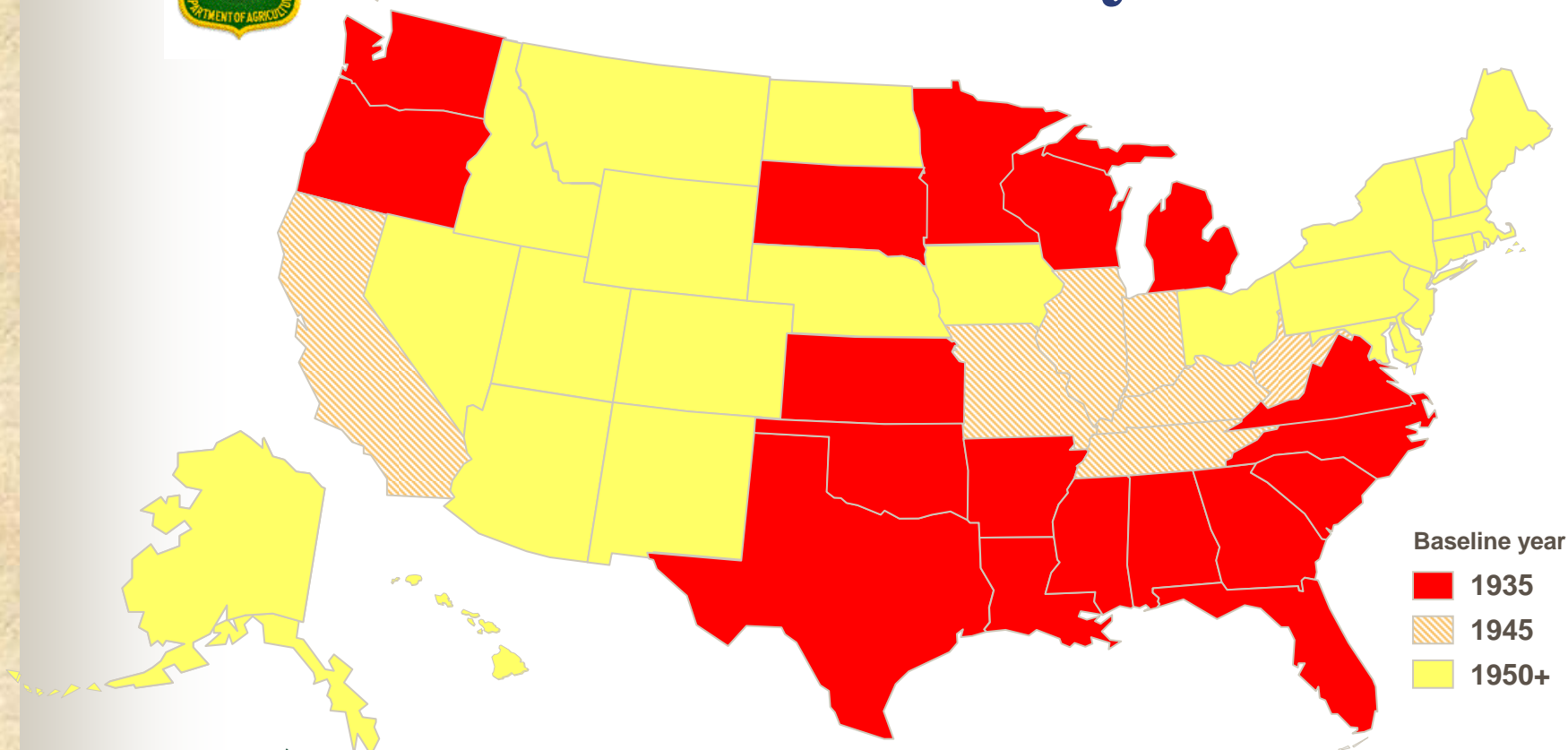


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Baseline Inventory Data



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PROGRESS

- FIA is in the 10th year of annualized transition
- Steady funding progress- currently at 91%
- 48 States will be implemented by 2008
- Accountability has been institutionalized
- Information systems continue to improve
- Analysis and reporting is catching up with the data
- Congress and partners continue to be supportive



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DATA FUSION

providing the most significant added value

is the ability to integrate field data with remote sensing data to provide statistically reliable spatial products for user-defined analysis

If you remember only one thing... this is it



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The Nation's Forest Census