

A Research Paper by



**The Tongass National Forest  
and the Transition Framework:  
A New Path Forward?**

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# The Tongass National Forest and the Transition Framework: A New Path Forward?

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## ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions in the West.

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## Introduction

In 2010 the Forest Service announced a Transition Framework for the Tongass National Forest, proposing a “new path forward in the region that enhances economic opportunities to communities while conserving the Tongass National Forest.”

This important announcement, from an agency historically focused on the production of old growth timber, recognized the decades-long decline of the timber industry in southeast Alaska and the subsequent rise of other economic sectors, such as tourism and fishing, which rely on intact and pristine Tongass National Forest resources.

The Transition Framework sought to support the well-being of the region’s communities and economy by shifting to young growth harvests and restoration as well as investing more heavily in other program areas like recreation, wildlife, fish, and watershed protection.

This report examines whether such a transition has begun. It provides detailed budget and staffing information for the Tongass National Forest, examines how these resources were used programmatically, and reviews whether there has been a shift in budget and staffing in line with the proposed Transition Framework.

The report also explores whether Tongass National Forest resources now are being utilized to support significant and promising southeast Alaska economic sectors; and whether the Tongass National Forest timber program has moved beyond a historic emphasis on harvesting old growth timber and below-cost timber sales.

## Executive Summary

In 2010 the Forest Service announced a new direction for the Tongass National Forest. Called the “Transition Framework,” the Forest Service proposed a “new path forward in the region that enhances economic opportunities to communities while conserving the Tongass National Forest.”

Four years since this commitment, it is fair to ask if a transition is in fact occurring, and whether it is improving economic opportunities for communities in southeast Alaska. To understand if change is taking place, this report examines the Tongass National Forest budget and staffing, as well as the economy of southeast Alaska and proposed timber sales.

### Summary Findings:

- The Tongass National Forest has made no meaningful shift in its budget and staff allocations since announcing the Transition Framework in 2010.
- The Tongass National Forest continues to invest disproportionately in a timber industry that provides relatively few jobs while neglecting more economically important industries to the region such as tourism and fishing.
- The Tongass National Forest remains predominantly focused on old growth harvests at a significant cost to U.S. taxpayers.

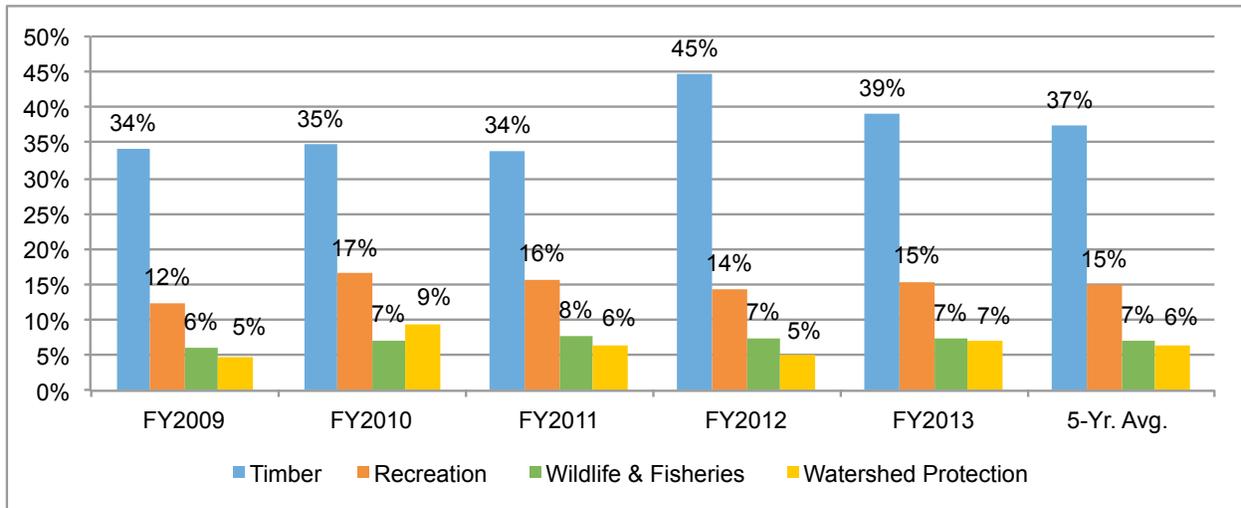
### More Detailed Findings:

#### Tongass National Forest Has Failed to Shift Resources from Timber Program

The Tongass National Forest budget and staffing were examined in detail because they provide an indicator of agency priorities. Forest Service spending on timber continues to account for the largest portion of the Tongass National Forest budget—roughly 34 to 45 percent of the budget. Since the transition was announced, expenditures on timber production show no particular trend, though timber’s share of the overall budget has increased. Despite overall staff cuts on the Tongass National Forest from FY2011 to FY2013, timber FTEs have largely held steady.

Recreation budget expenditures fell during the analysis period, though they were partially offset by increases in recreation receipts. In 2014 the Tongass National Forest announced its intention to enact future budget cuts in the recreation program—despite growing public demand for recreation activities on Forest Service lands. From FY2011 to FY2013, recreation staff declined more than any other major program on the Tongass National Forest, falling from 60 to 47 FTEs.

**Tongass National Forest Budget by Program, Share of Total, FY2009 to FY2013 and 5-Yr. Avg.**

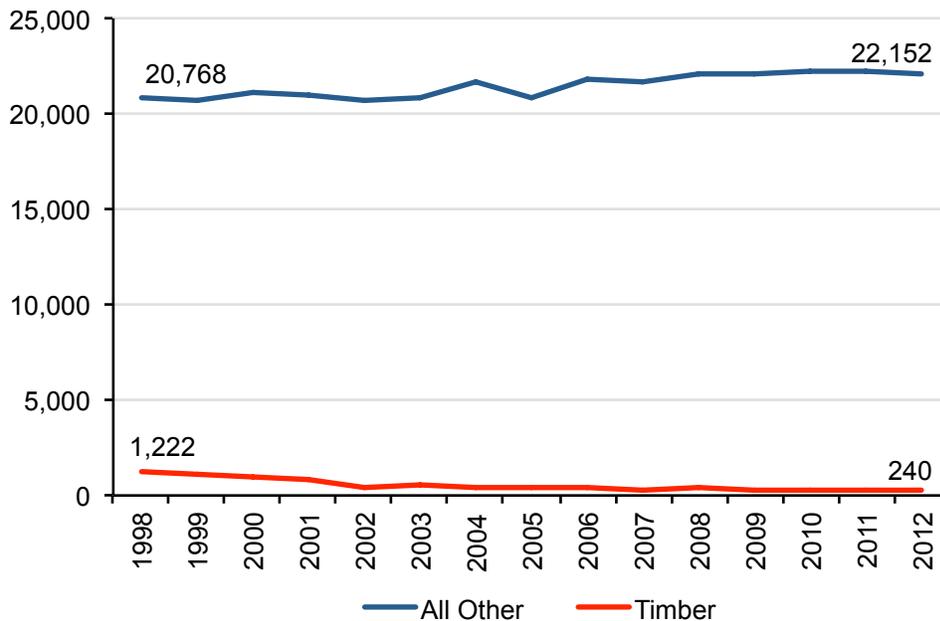


Source: U.S. Forest Service

Tourism and Fishing, Rather than Timber, Drive Southeast Alaska Economy

The southeast Alaska economy is no longer driven by the timber industry, which has steadily declined as a share of all private sector jobs. From 1998 to 2012, according to the U.S. Department of Commerce, regional timber jobs declined by more than 80 percent (-982 jobs), while all other private sector jobs grew by nearly seven percent (+1,384 jobs).

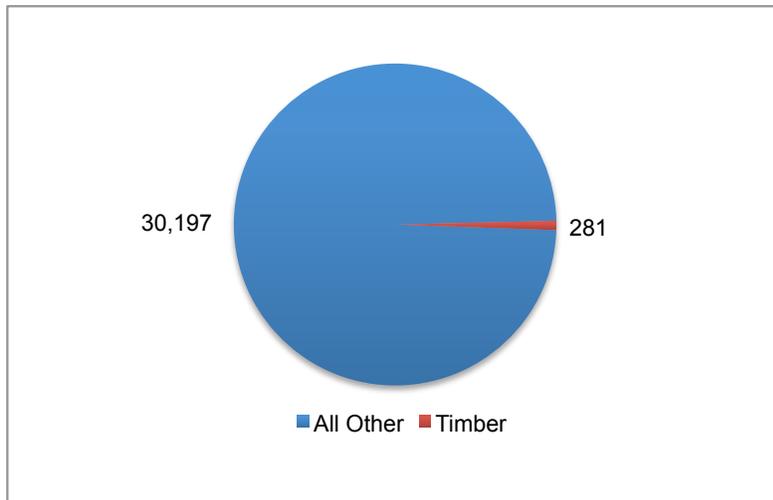
**Private Sector Employment Trends, Timber vs. All Other, Southeast Alaska, 1998 to 2012**



Source: County Business Patterns

In addition to a declining number of jobs, economic data from all sources indicate that timber industry employment in southeast Alaska today is small proportion of the regional economy. According to the U.S. Department of Commerce, regional timber industry jobs accounted for 1.1 percent of total private employment in 2012. An additional 41 self-employed individuals worked in the timber industry in 2012, or 0.5 percent of all self-employed people in the region—for a combined 0.9 percent of all private jobs and self-employed in southeast Alaska.

#### **Private Sector Timber Jobs & Self-Employed vs. All Other Private Sector Jobs & Self-Employed, Southeast Alaska, 2012**



Source: County Business Patterns, Nonemployer Statistics

By comparison, the two largest private sectors in the region’s economy—the tourism and fishing industries—are growing. Southeast Conference reports that in 2013:

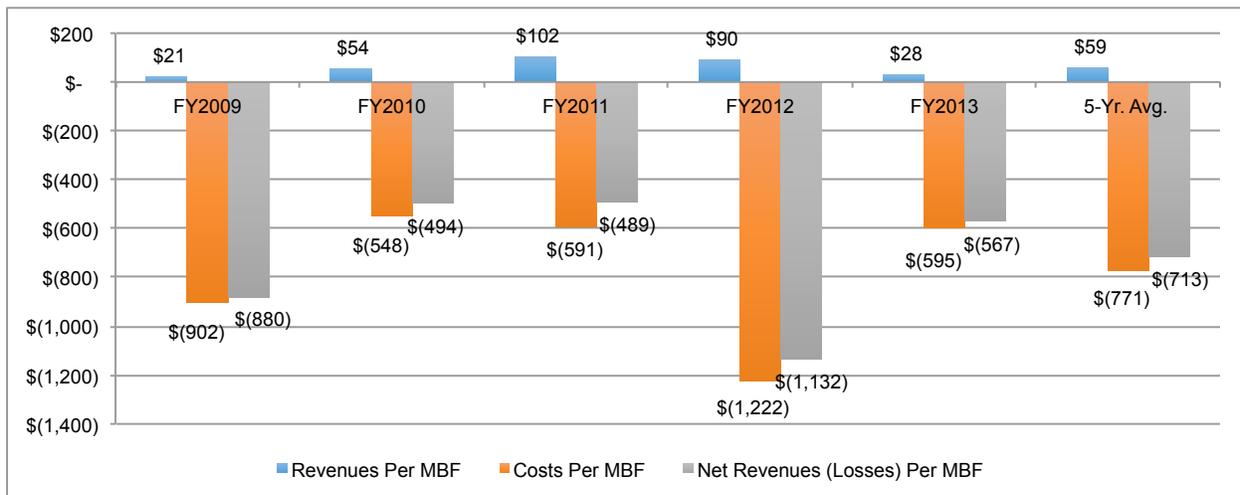
- The southeast Alaska visitor industry employed 6,707 people, is growing (+332 jobs, 5.2% change from 2012 to 2013), and accounted for 15 percent of total regional employment.
- The southeast Alaska seafood industry employed 4,252 people, is growing (+148 jobs, 3.6% change from 2012 to 2013), and accounted for nine percent of total regional employment.

The tourism and fishing industries both rely on land and water resources managed by the Tongass National Forest and directly benefit from enhancements to natural resource health, along with services and infrastructure provided by the Forest Service. Activities that degrade the pristine nature of the land, such as old growth harvesting, are likely to have adverse impacts on these important regional industries.

#### Narrow Focus on Old Growth Timber Sales with Subsidies Persists

Since the Transition Framework announcement, 87 percent of timber sales proposed by the Tongass National Forest have been old growth by volume. Timber sales have consistently cost much more to prepare, access, and administer than the federal government receives for the timber. The net loss to the U.S. taxpayer has ranged from \$489 to \$1,132 per thousand board feet—or more than \$100 million—during these years.

### Tongass National Forest Timber Sale Revenues and Costs, FY2009 to FY2013 and 5-Yr. Avg.



Source: Costs are from the budget table in this report; revenues and cut volume are from U.S. Forest Service Cut and Sold reports.

Earlier this year, the Forest Service awarded a 97-million board foot timber sale contract as part of the Big Thorne Project that was reportedly worth more than \$6 million. But at the FY2013 average Tongass National Forest cost of \$595 per MBF, the preparation and administration costs of the sale would be more than \$57 million, with a net cost to the U.S. Treasury of \$50 million—a nearly 10:1 expense-revenue loss ratio.

In summary, the allocation of scarce Tongass National Forest budget and staff resources to a minor economic sector represents a large opportunity cost for the regional economy: these resources could be repurposed, using the logic of the Transition Framework, to larger and more vibrant industries that support more jobs and communities in southeast Alaska. The casualties of this failure to seize a more promising economic trajectory are southeast Alaska’s businesses and communities, as well as the U.S. taxpayer.

## Methods

### Forest Service Data

We requested budget and staffing data for the Tongass National Forest from the Forest Service's Region 10 Regional Office for the past five fiscal years—FY2009 through FY2013. In response, the Regional Office required the submission of two Freedom of Information Act requests for these and supplemental data.

We received FY2009 through FY2013 budget data. We also received FY2014 data, but these data were preliminary and incomplete, and thus are not used in this analysis. In addition, because the budget data did not include recreation-related mandatory spending accounts (as discussed below), we identified recreation fees retained and used by the Tongass National Forest in its annual *Recreation Program Fee Accomplishment Report* and included these funds in the Total Budget as well as under the Recreation Accounts in calculations. Be aware that the Total Budget exceeds the total of the accounts shown, since many programs (*e.g.*, land management planning, wildland fire management) are not shown in the summary table in this report.

In one fiscal year (FY2009) the Tongass National Forest budget was significantly larger than in subsequent years. This may have been due to short-term or one-time American Recovery and Reinvestment Act funding (see CRS Report 40537), but this was not verified. Requests to the Region 10 Regional Office for clarification and review on this and other topics were not responded to.

As noted, we also requested workforce data for the past five fiscal years—FY2009 through FY2013. We received data only for three fiscal years (FY2011 through FY2013). The data are measured in FTEs, full-time equivalents; this aggregates part-time and temporary employees to the equivalent of full-time employees, to reflect total workloads. The data include total FTEs for the Tongass National Forest and for each of the categories used for the budget allocation.

### Budget Explanation

A significant portion of the Tongass National Forest annual budget is from mandatory spending accounts. As a result, it is important to understand the distinctions between annual appropriations and mandatory spending.

All federal spending comes from appropriations enacted by Congress. The majority is from annual appropriations, enacted in one of 10 annual appropriations acts. Forest Service annual funds are provided in the Interior, Environment, and Related Agencies Appropriations. The Forest Service funds are provided in four major accounts: Research; State & Private Forestry; National Forest System; and Construction; plus several minor accounts. Within each account, Congress provides details for the spending, both through budget line items and through written direction. For the Forest Service, such congressional guidance rarely provides funding direction for specific national forests. The agency's Research Branch administers research appropriations to research stations. State & Private Forestry funds are for assistance programs administered by the Forest Service Regional Offices, except in the Northeast Area.

National Forest System and Construction appropriations are provided in numerous budget line items to each national forest through the regional offices. In general, the budget line items correspond to the various agency programs, such as timber, recreation, range management, watershed and wildlife protection, etc. A comprehensive list and description of each budget line item is included in the agency's annual budget justifications (available through the Forest Service's website, <http://www.fs.fed.us/aboutus/budget/>).

In addition to the annual appropriations, Congress has enacted laws that provide funding for specific purposes, funded from specified sources. These are commonly called permanent appropriations or mandatory spending. The term "trust fund" is also used occasionally, but this often leads to misconceptions, since in federal parlance, "trust fund" indicates the disposition of interest on the balance in the account, and does not indicate whether the money is available with or without an annual appropriation.

The Forest Service has numerous mandatory spending accounts. They are shown in the agency's annual budget justifications to Congress (see above), although this is not required since the accounts do not need annual appropriations. (The history and purposes of Forest Service mandatory spending accounts are described in more detail in CRS Report RL30335.) The Forest Service often includes some, but not all, of its mandatory spending accounts in reported budget data.

Many of the Forest Service mandatory spending accounts have been funded from timber sale receipts; their magnitude and relative importance have declined with the widespread decrease in Forest Service timber sales since 1990, but many still provide substantial funds for agency operations. In recent years, Congress has created mandatory spending accounts funded from recreation fees, and their magnitude and importance have been increasing.

### Program Categories

The categories we use to show the Tongass National Forest budget and staffing allocations generally include more than one account—one or more budget line items of annual appropriations and one or more mandatory spending accounts. For a description of acronyms that follow, see the Appendix at the end of this report.

*Timber* includes two budget line items—NFTM, Forest Products; and CMRD, Roads Capital Improvements & Maint—and three mandatory spending accounts—CWKV and CWK2, K-V Projects; RTRT, the Reforestation Trust Fund; and SSSS, Salvage Sales. Forest Products is the budget line item used to pay for timber sale preparation and administration. Road Construction and Maintenance is substantially for timber access. (See below) To the extent that some road construction and reconstruction is for other purposes (recreation, administration, etc.), this may overstate total timber expenditures on the Tongass National Forest. The Knutson-Vandenberg (K-V) Fund is a mandatory spending account funded from timber sale receipts for reforestation, timber stand improvements, and mitigation and enhancement of other resources in timber sale areas. The Reforestation Trust Fund is another mandatory spending account, funded from tariffs on imported wood products for reforestation and timber stand improvements. The Salvage Sale Fund is a third timber-related mandatory spending account. It is funded from the receipts of designated salvage sales for preparing and administering further salvage sales.

Some would doubtless dispute all these costs as entirely timber-related. For example, roads are used for other purposes, and thus some would attribute road costs to other resources. However, timber has been the primary reason for road building in the national forests; the primary purpose for road construction, reconstruction, and maintenance is no longer reported, but even in the years of relatively low timber sale levels since 1990, more than 90 percent of new roads and more than 80 percent of road reconstruction was for timber removal. (CRS Report 97-706)

Similarly, attributing reforestation costs to current timber sales could be disputed. The U.S. Internal Revenue Service (IRS) generally prohibits private landowners from such expensing of reforestation costs, and requires them to capitalize the costs for deduction from future income. However, the National Forest Management Act of 1976 (NFMA; 16 U.S.C. 1600, *et al.*) mandates reforestation within five years of timber harvesting in the national forests, making reforestation a requirement of harvesting. Furthermore, private landowners would expense reforestation costs if the IRS allowed it, because it would reduce taxable income without altering cash flow. Thus, it seems appropriate to include reforestation as a cost of timber harvesting.

*Recreation* includes four budget line items—NFRW, Recreation, Heritage, & Wilderness; FDRF, Deferred Recreation—Recreation; CMTL, Trails Capital Improvements & Maint; and Recreation Receipts. The first three of these accounts clearly relate to various aspects of recreation in the national forests. The fourth, Recreation Receipts, is not shown in the budget data received from the Regional Office, but is clearly both an income from and expenditure on recreation management activities. As noted above, these data are from the annual Tongass National Forest *Recreation Program Fee Accomplishment Report*.

*Wildlife and Fish* includes one budget line item—NFWF and NFWF Subsistence, Wildlife & Fisheries Habitat Mgt. NFWF Subsistence, which is combined with NFWF in the Tongass National Forest budget allocations, provides support for Native American subsistence uses of wildlife and fish.

*Watershed Protection* includes two budget line items—NFVW, Vegetation & Watershed Management; and CMLG, Legacy Roads & Trails. The first item includes activities to protect and improve watershed conditions, such as reforesting sites after wildfires and landslides. Legacy Roads and Trails is an account created by Congress to provide for reconstructing or obliterating roads and trails that were in poor condition due to lack of planning (*e.g.*, roads created by recreation users, without planning and engineering) or inadequate maintenance.

Examining the Legacy Roads & Trails retrospectively, it could be considered a timber account, since many of the roads were used for timber harvesting. However, examining the line item prospectively, it is a watershed protection account, since the intent is to halt or prevent watershed damages from roads (and bridges and culverts) in poor condition. To the extent that timber roads are the cause of poor road conditions, the inclusion of Legacy Roads funding as watershed protection understates the expenditures related to timber harvesting in the Tongass National Forest.

*Other Accounts* are also included in the Tongass National Forest budget allocations, but are not shown in the budget table in this report. Some of these accounts are for other resource purposes

(e.g., NFMG, Minerals & Geology Management; and NFRG, Grazing Management) or for purposes that support all resources (e.g., NFIM, Inventory & Monitoring; CMFC, Facilities Capital Improvements & Maint; and WFWF, Wildland Fire Management). Hence, the total annual Tongass National Forest budget allocation exceeds the sum of timber, recreation, wildlife and fish, and watershed protection.

The Tongass National Forest budget allocation data do not show all the Forest Service expenditures on the Tongass National Forest. The budget allocation tables in this report include many, but not all, of the mandatory spending accounts. The largest timber-related accounts—the K-V Fund, the Salvage Sale Fund, and the Reforestation Trust Fund—are shown, but other timber-related accounts—Cooperative Deposits, from purchasers for post-sale road restoration; and Brush Disposal, from timber purchasers to dispose of slash (tree tops and limbs, and unusable trees) from the sale—are not presented in the budget allocations. It is possible that the brush disposal account is not used on the Tongass National Forest, since its use is not required, but the Forest Service has always treated brush disposal funds differently from other accounts, even though the authorizing language is quite similar. On the other hand, cooperative road (and other cooperative) deposits of \$264,711 are shown under receipts in the “Tongass Financials” table on page 11 of the *State of the Tongass National Forest FY2013* (USFS Report R10-MB-786), but they are not shown in the budget allocation tables. (The *State of the Tongass* report is not used for this budget analysis because it shows deposits to mandatory spending accounts as revenues, but does not show expenditures from any of these accounts as expenses.) Thus, it seems likely that the Tongass National Forest budget presented in this report understates timber expenditures.

In addition, three recreation mandatory spending accounts were not included in the budget allocation tables received from the Forest Service. The Federal Land Recreation Enhancement Act (FLREA) authorizes the Forest Service (and other federal agencies) to collect and retain certain recreation fees, and spend them on certain types of projects. (See CRS Report RL33730) Because of their significance—more than \$3 million collected annually since FY2010—some estimate of the relevant expenditures was warranted. For this report, recreation receipts shown in the annual Tongass National Forest *Recreation Program Fee Accomplishment Reports* were included to estimate the expenditures from these mandatory spending accounts.

### Fiscal Year

The federal government fiscal year is the accounting period that begins on October 1 and ends on September 30. The fiscal year is designated by the calendar year in which it ends; for example, FY2013 begins on October 1, 2012 and ends on September 30, 2013.

### Regional Definition

In this report “southeast Alaska” refers to the following Boroughs and Census Areas: Haines Borough AK, Hoonah-Angoon Census Area AK, Juneau City and Borough AK, Ketchikan Gateway Borough AK, Petersburg Census Area AK, Prince of Wales-Hyder Census Area AK, Prince of Wales-Outer Ketchikan Census Area AK, Sitka City and Borough AK, Skagway Municipality AK, Skagway-Hoonah-Angoon Census Area AK, Wrangell City and Borough AK, Wrangell-Petersburg Census Area AK, and Yakutat City and Borough AK.

## The Evolution of the Tongass National Forest “Transition Framework”

On May 26, 2010 Agriculture Secretary Tom Vilsack proposed to “chart a new path forward in the region that enhances economic opportunities to communities while conserving the Tongass National Forest.” The Secretary announced a “Transition Framework” designed to create jobs and community stability through a new emphasis on “forest restoration, renewable energy, tourism and recreation, subsistence, fisheries, and mariculture.” He also proposed “a new approach to forest management ... [that] will move timber harvesting into roaded, young growth areas and away from old-growth timber in roadless areas.” (USDA 2010)

Regional Forester Beth Pendleton added that the Transition Framework would be designed to diversify the economy of southeast Alaska and above all to “develop a region-wide job creation platform.” She went on to identify additional goals: “promote small business creation, expansion, and retention; improve access to capital; create quality jobs and sustainable economic growth; promote job training and educational opportunities; and maximize a forest restoration economy and by-product use.”

Later in 2010 the Juneau Economic Development Corporation (JEDC), a partner in the evolving Transition Framework and under contract with the Forest Service, launched the Southeast Alaska Cluster Initiative to engage key interests and outline a business cluster approach to regional economic development. JEDC completed an asset map for the region and identified cluster action initiatives that the Forest Service and others could support in the region. (JEDC)

In 2011, after an extensive consultation process in the region, the Forest Service released a report refining the direction of Transition Framework efforts. An interagency team recommended initiatives that cross agency boundaries, support agency priorities, and are realistically achievable. These initiatives were organized around the concept of industry clusters and were focused on ocean products, with an emphasis on watershed restoration and mariculture; visitor services supporting independent traveler opportunities, new land and water trails, and guided access for forest resources; forest products with an emphasis on second-growth harvests and more efficient use of wood waste; and renewable energy, including the development of a renewable energy plan and projects focused on woody biomass. (USDA 2011)

In 2013 the Forest Service released a “Leader’s Intent” document on young growth management to clarify how the Tongass National Forest would transition its timber program to a “young-growth forest products industry” and integrate this with “restoration, collaboration, and forest stewardship to support ecological, community and economic health.” The document, signed by Region 10 and Tongass National Forest leadership, recognized constraints in making a timber transition and offered no firm deadlines. Under the heading “Actions,” it proposed to “Offer increasing annual volumes of young growth timber and gradually reduce old growth harvests...” (USDA 2013)

In 2013 the Forest Service also released an update on Tongass National Forest economic diversification strategies in southeast Alaska. The report cited new cluster initiatives around mining, and research and development; and also proposed an innovation summit; a biomass initiative; and a “multi-year integrated plan for active forest management activities, including old and young growth timber sales, ecological restoration and enhancement, and road work.” (USDA 2013)

In 2014 the Forest Service released a “Leader’s Intent” document on recreation, wilderness, and heritage programs that acknowledged that outdoor recreation continues to grow in the region but indicated that the Forest Service would be cutting back on its investments in recreation and trail infrastructure due to budget constraints starting in FY2015. (USDA 2014)

## Budget and Staffing Analysis

This section reviews findings from the analysis of the Tongass National Forest's budget and staffing during the Transition Framework period and evaluates whether discernable changes were made in either budgets or staffing.

### Budget Analysis

The table and figure below summarize findings from the budget analysis.

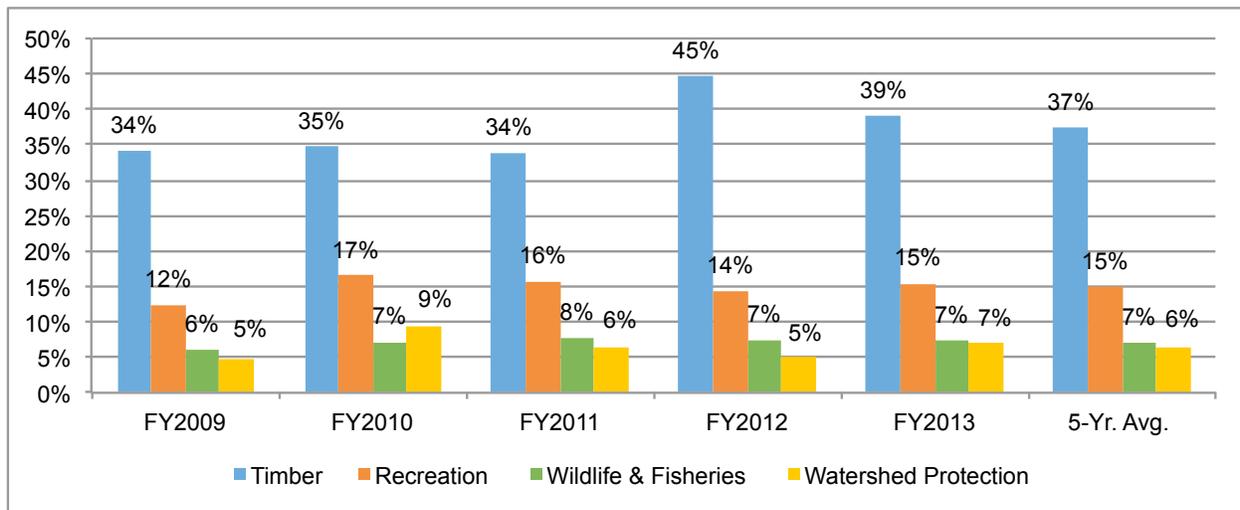
#### Tongass National Forest Budget by Program, FY2009 to FY2013 and 5-Yr. Avg.

Fiscal Year	FY2009	FY2010	FY2011	FY2012	FY2013	5-Yr. Avg.
<b>Total Budget</b>	<b>\$ 74,773,208</b>	<b>\$ 55,826,372</b>	<b>\$ 56,841,568</b>	<b>\$ 56,850,896</b>	<b>\$ 55,302,207</b>	<b>\$ 59,918,850</b>
<i>Timber Accounts</i>						
NF Forest Products [NFTM]	\$ 14,179,865	\$ 11,307,823	\$ 11,609,957	\$ 10,858,311	\$ 10,621,183	\$ 11,715,428
K-V projects [CWKV + CWK2]	\$ 95,000	\$ 98,000	\$ 207,050	\$ 164,730	\$ 442,000	\$ 201,356
Reforestation Trust Fund [RTRT]	\$ 1,382,107	\$ 1,434,000	\$ 1,420,172	\$ 1,421,253	\$ 1,567,942	\$ 1,445,095
Salvage Sales [SSSS]	\$ 200,000	\$ 200,000	\$ 500,000	\$ 800,000	\$ 789,000	\$ 497,800
<b>Subtotal</b>	<b>\$ 15,856,972</b>	<b>\$ 13,039,823</b>	<b>\$ 13,737,179</b>	<b>\$ 13,244,294</b>	<b>\$ 13,420,125</b>	<b>\$ 13,859,679</b>
<i>Timber-related programs</i>						
Roads [CMRD]	\$ 9,732,200	\$ 6,363,750	\$ 5,549,666	\$ 12,214,050	\$ 8,208,324	\$ 8,413,598
<b>Subtotal</b>	<b>\$ 9,732,200</b>	<b>\$ 6,363,750</b>	<b>\$ 5,549,666</b>	<b>\$ 12,214,050</b>	<b>\$ 8,208,324</b>	<b>\$ 8,413,598</b>
<b>Timber Total</b>	<b>\$ 25,589,172</b>	<b>\$ 19,403,573</b>	<b>\$ 19,286,845</b>	<b>\$ 25,458,344</b>	<b>\$ 21,628,449</b>	<b>\$ 22,273,277</b>
<b>Timber Share</b>	<b>34%</b>	<b>35%</b>	<b>34%</b>	<b>45%</b>	<b>39%</b>	<b>37%</b>
<i>Recreation Accounts</i>						
Recreation & Wilderness [NFRW]	\$ 5,015,500	\$ 4,249,015	\$ 4,086,561	\$ 3,875,730	\$ 3,775,277	\$ 4,200,417
Deferred Maint. Recreation [FDRF]		\$ 731,201				\$ 146,240
Trails [CMTL]	\$ 1,987,785	\$ 1,251,374	\$ 1,650,300	\$ 1,284,095	\$ 1,271,005	\$ 1,488,912
Recreation Receipts	\$ 2,312,532	\$ 3,005,430	\$ 3,245,632	\$ 3,036,745	\$ 3,516,487	\$ 3,023,365
<b>Recreation Total</b>	<b>\$ 9,315,817</b>	<b>\$ 9,237,020</b>	<b>\$ 8,982,493</b>	<b>\$ 8,196,570</b>	<b>\$ 8,562,769</b>	<b>\$ 8,858,934</b>
<b>Recreation Share</b>	<b>12%</b>	<b>17%</b>	<b>16%</b>	<b>14%</b>	<b>15%</b>	<b>15%</b>
<i>Wildlife and Fish Accounts</i>						
<b>W &amp; F [NFWF &amp; NFWF Subsistence] Total</b>	<b>\$ 4,550,435</b>	<b>\$ 4,012,222</b>	<b>\$ 4,405,136</b>	<b>\$ 4,247,316</b>	<b>\$ 4,088,231</b>	<b>\$ 4,260,668</b>
<b>Wildlife &amp; Fisheries Share</b>	<b>6%</b>	<b>7%</b>	<b>8%</b>	<b>7%</b>	<b>7%</b>	<b>7%</b>
<i>Watershed Protection Accounts</i>						
Vegetation & Watershed [NFWW]	\$ 2,701,736	\$ 2,706,380	\$ 2,963,618	\$ 2,660,900	\$ 2,931,650	\$ 2,792,857
Legacy roads & trails [CMLG]	\$ 896,000	\$ 2,503,870	\$ 683,773	\$ 146,230	\$ 926,180	\$ 1,031,211
<b>Watershed Protection Total</b>	<b>\$ 3,597,736</b>	<b>\$ 5,210,250</b>	<b>\$ 3,647,391</b>	<b>\$ 2,807,130</b>	<b>\$ 3,857,830</b>	<b>\$ 3,824,067</b>
<b>Watershed Protection Share</b>	<b>5%</b>	<b>9%</b>	<b>6%</b>	<b>5%</b>	<b>7%</b>	<b>6%</b>

Source: U.S. Forest Service

Note: This table does not display Regional Office budget allocations that support timber, even though the Tongass National Forest has accounted for 90 percent or more of the timber harvested in Region 10, which includes only the Tongass and Chugach national forests.

### Tongass National Forest Budget by Program, Share of Total, FY2009 to FY2013 and 5-Yr. Avg.



Source: U.S. Forest Service

The results show that timber expenditures account for the largest share of the Tongass National Forest budget in all years. The total budget was \$75 million in FY2009 and \$55 million to \$57 million annually for FY2010 through FY2013. The total budget five-year average was \$60 million. Timber expenditures ranged from \$19 million to \$26 million during the five years, accounting for 34 percent (FY2009 and FY2011) to 45 percent (FY2012) of the total budget. Timber expenditures accounted for 37 percent of total on average during the five-year study period.

Recreation, wildlife and fish, and watershed protection combined accounted for less of the total budget than timber for the entire period FY2009 to FY2013. Recreation expenditures ranged from \$8 million to \$9 million, 12 percent to 17 percent of the total. Wildlife and fish expenditures averaged about \$4 million annually, 6 percent to 8 percent of the total. Watershed protection expenditures ranged from \$3 million to \$5 million, 5 percent to 9 percent of the total.

These three non-timber categories aggregated to \$15 million to \$18 million annually. At their peak in FY2010, they accounted for 33 percent of the Tongass National Forest budget, only a little less than the 35 percent of the Tongass National Forest budget in that year's relatively low timber expenditures; the difference was less than \$1 million. In FY2012, however, the difference was much greater, with the three non-timber categories accounting for only 27 percent of the Tongass National Forest budget compared to 45 percent for timber expenditures; the difference was more than \$10 million in FY2012.

FY2009 may be an outlier as the total Tongass National Forest budget in that year, \$75 million, was \$18 million to \$20 million (about 25%) higher than the subsequent years. It is unknown whether this was because of additional American Recovery and Reinvestment Act funding in FY2009 (see CRS Report 40537), or if this is part of a longer-term trend; additional data and further analysis would be needed to make such an assessment.

Looking at the five-year period does not show a significant change for most categories of expenditures. For timber expenditures, the two highest years were FY2009 and FY2012, with the lowest timber expenditures in FY2010 and FY2011; this shows no particular trend. Similarly, wildlife and fish, and watershed protection expenditures show no clearly identifiable rising or falling trend.

For recreation expenditures, it is worth distinguishing between changes in budget allocations and recreation receipts. Recreation budget expenditures fell by \$2 million from FY2009 to FY2013. This downward trend was partially offset by increases in recreation receipts paid by forest users. The budget cutbacks are consistent with language from the agency's 2014 leader's intent document that indicates the Tongass National Forest will be cutting the recreation budget, despite increasing demand for Tongass National Forest recreation resources.

These budget findings show no evidence of a transition in Tongass National Forest priorities. The timber program remains the largest program, larger than the other program areas combined for all years. Recreation cutbacks in the budget have been partially offset by increases in retained receipts from users. As we will see below, these budget commitments are out of step with the economy of southeast Alaska and opportunities for the Tongass National Forest to contribute to expanded economic opportunities in the region.

## Staffing Analysis

The table and figure below summarize findings from the staffing analysis.

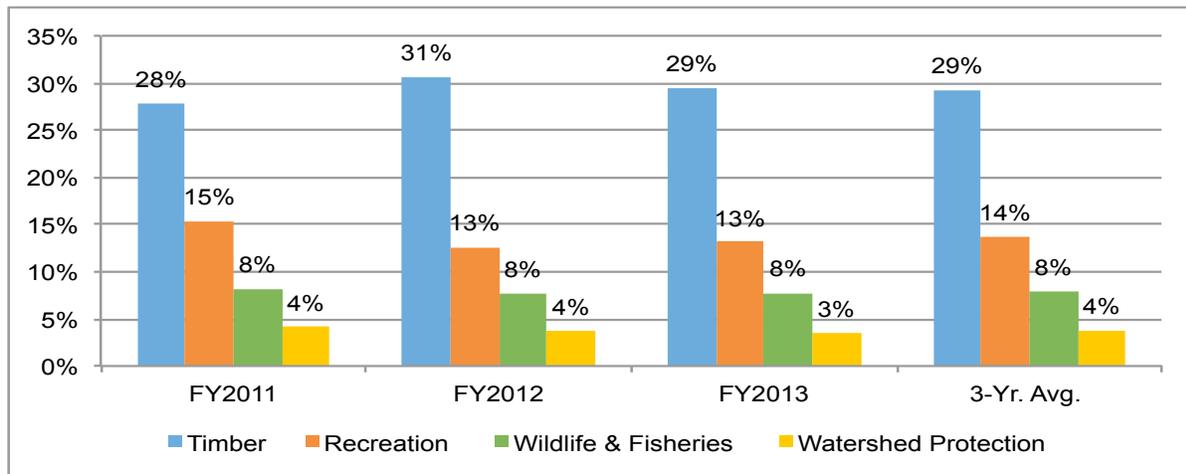
### Tongass National Forest Staffing (FTEs) by Program, FY2011 to FY2013 and 3-Yr. Avg.

Fiscal Year	FY2011	FY2012	FY2013	3-Yr. Avg.
<b>FTE Total</b>	<b>392</b>	<b>368</b>	<b>356</b>	<b>372</b>
<i>Timber Accounts</i>				
NF Forest Products [NFTM]	85.6	82.4	78.3	82.1
K-V projects [CWKV]	0.5	0.8	0.8	0.7
Reforestation Trust Fund [RTRT]		2.7	2.6	1.8
Salvage Sales [SSSS]	2.5	6.3	5.4	4.8
<i>Timber-related programs</i>				
Roads [CMRD]	20.5	20.4	17.8	19.6
<b>Timber Total</b>	<b>109.1</b>	<b>112.6</b>	<b>104.9</b>	<b>108.9</b>
<b>Timber Share</b>	<b>28%</b>	<b>31%</b>	<b>29%</b>	<b>29%</b>
<i>Recreation Accounts</i>				
Recreation & Wilderness [NFRW]	44.1	34.8	34.8	37.9
Deferred Maint. Recreation [FDRF]	1.2	0.0	0.0	0.4
Trails [CMTL]	14.8	11.5	11.9	12.8
<b>Recreation Total</b>	<b>60.2</b>	<b>46.3</b>	<b>46.7</b>	<b>51.1</b>
<b>Recreation Share</b>	<b>15%</b>	<b>13%</b>	<b>13%</b>	<b>14%</b>
<i>Wildlife and Fish Accounts</i>				
<b>W &amp; F [NFWF] Total</b>	<b>32.0</b>	<b>28.4</b>	<b>27.6</b>	<b>29.3</b>
<b>Wildlife &amp; Fisheries Share</b>	<b>8%</b>	<b>8%</b>	<b>8%</b>	<b>8%</b>
<i>Watershed Protection Accounts</i>				
Vegetation & Watershed [NFVW]	15.7	13.1	12.0	13.6
Legacy roads & trails [CMLG]	0.5	0.4	0.4	0.4
<b>Watershed Protection Total</b>	<b>16.2</b>	<b>13.5</b>	<b>12.4</b>	<b>14.0</b>
<b>Watershed Protection Share</b>	<b>4%</b>	<b>4%</b>	<b>3%</b>	<b>4%</b>

Source: U.S. Forest Service

Note: This table does not display Regional Office staffing allocations that support timber, even though the Tongass National Forest has accounted for 90 percent or more of the timber harvested in Region 10, which includes only the Tongass and Chugach national forests.

### Tongass National Forest Staffing by Program, Share of Total, FY2011 to FY2013 and 3-Yr. Avg.



Source: U.S. Forest Service

The results of the staff analysis are similar to those of the budget analysis. Timber is the most significant Tongass National Forest workforce commitment for all years, accounting for 105 to 113 FTEs annually for the three fiscal years—ranging from 28 percent to 31 percent of the total. This is a smaller share of the total Tongass National Forest staffing than is timber’s share of the Tongass National Forest budget. The factors causing this difference probably include contracting for timber sale support (*e.g.*, some road work and some required environmental analyses) and that most of the mandatory spending accounts excluded from the budget allocation tables are not timber-related accounts. Timber accounted for 29 percent of all FTEs on average during the three-year study period.

Recreation staffing was smaller, at 60 FTEs in FY2011, 46 FTEs in FY2012, and 47 FTEs in FY2013. This ranges from 13 percent to 15 percent of the total Tongass National Forest staffing, roughly the same proportion as recreation’s share of the Tongass National Forest budget when the recreation receipts are included. While the recreation staffing share of total remains consistent, the absolute decline in FTEs, from 60 in FY2011 to 47 in FY2013, shows that as the overall workforce on the Tongass National Forest shrank the recreation programs absorbed the largest losses.

Wildlife and fish staffing, at 28 to 32 FTEs, accounted for about 8 percent of the total Tongass National Forest staffing, also comparable to the wildlife and fish share of the total Tongass National Forest budget. Watershed protection staffing was much smaller, at 12 to 16 FTEs. This is only about 4 percent of the total Tongass National Forest staffing, smaller than the watershed protection share of the Tongass National Forest budget. Contracting for watershed protection work could explain the relatively smaller staff share.

These staff findings show no evidence of a transition in Tongass National Forest commitments. With only three fiscal years of FTE data, it is difficult to assess staff trends by workforce category. However, it does not appear there was a significant shift in FTE allocations across programs from FY2011 to FY 2013. The exception is the recreation program, which saw the largest declines. Timber remained the largest staff commitment, larger than all other programs combined during the three years.

## Economic and Fiscal Analysis

This section reviews key southeast Alaska economic sectors for comparison with Tongass National Forest budget and staffing priorities, and assesses whether the Tongass National Forest has moved beyond an emphasis on old growth timber and below-cost timber sales.

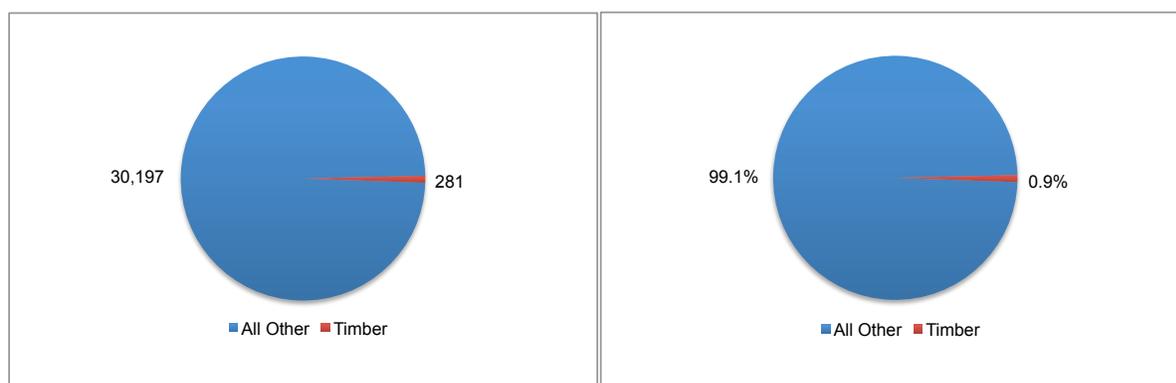
### Economic Analysis

Evaluation of the Tongass National Forest budget and staffing shows that timber production is the largest resource management account, and is larger than the Tongass National Forest budget and staffing dedicated to recreation, wildlife and fish, and watershed protection combined. This allocation of funding and effort is at odds with the regional economy of southeast Alaska, where the timber industry is a small source of employment, and two of the largest sectors of the economy are the tourism and fishing industries.

The few studies of the economic impacts of Tongass National Forest management and activities are outdated and focus on timber production. For example, *Economic Growth and Change in Southeast Alaska* (USFS Report PNW-GTR-611) was published a decade ago in 2004. Many Forest Service studies and projections of the timber supply and timber industry in southeast Alaska appear to be based on sawmill capacity in 2003 and 2004. (See draft U.S. Forest Service studies, <http://www.fs.fed.us/pnw/pubs/brackley/index.shtml>.) These studies are thus based on the historic timber industry, not on current timber utilization by the existing industry.

However, the timber industry in southeast Alaska has clearly declined substantially in the past two decades. One industry source (Resource Development Council) stated that there were 457 people employed in forestry and sawmill jobs in all of Alaska in 2011, down 90 percent from the 4,600 jobs in 1990. A Forest Service source (*Economic Analysis of Southeast Alaska*) reported 265 timber-related jobs in Southeast Alaska in 2008. The Southeast Conference's most recent assessment (*Southeast Alaska by the Numbers 2014*) estimates the timber industry lost 3,500 jobs in the 1990s, and reports that the industry supported 270 jobs and 55 self-employed individuals in 2013, a two percent decline from the previous year and less than one percent of total regional employment in 2013. (Southeast Conference)

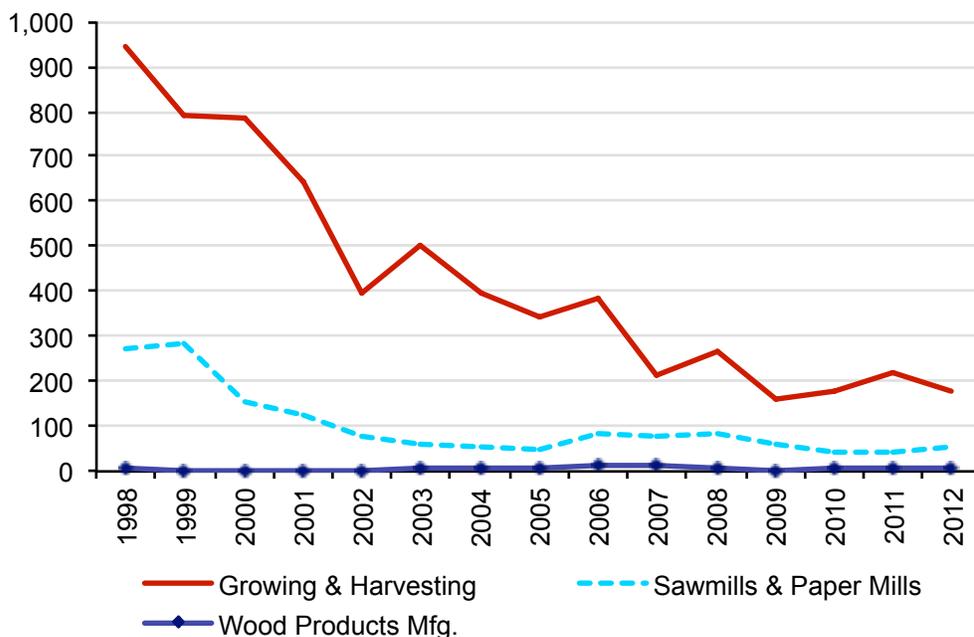
### **Private Sector Timber Jobs & Self-Employed vs. All Other Private Sector Jobs & Self-Employed, Southeast Alaska, 2012**



Source: County Business Patterns, Nonemployer Statistics

Data from the U.S. Department of Commerce show similar trends and values. According to this source, southeast Alaska timber industry employment—in growing and harvesting, sawmills, and wood products manufacturing from timber cut on state, private, and federal lands combined—declined from 1,222 jobs in 1998 to 240 jobs in 2012, or 1.1 percent of total private employment that year. The largest declines were sustained in growing and harvesting jobs. Regional self-employed trends in timber-related activities are difficult to determine because of data limitations, but there were 41 self-employed individuals in the timber sector in 2012, or 0.5 percent of total self-employed people in the region that year. Private sector timber jobs and self-employed individuals together accounted for 0.9 percent of private jobs and self-employed in southeast Alaska in 2012. (County Business Patterns, Nonemployer Statistics)

**Private Sector Employment Trends in Timber by Major Category, Southeast Alaska, 1998-2012**



Source: County Business Patterns

These figures exaggerate the size of the timber sector that relies specifically on Tongass National Forest resources. A portion of the timber jobs in the region are not related to the Tongass National Forest, since the Tongass National Forest is not the only timber producer in southeast Alaska. In the Big Thorne Project Final Environmental Impact Statement, the Forest Service estimated that Tongass National Forest-related private employment was 109 in 2011. (Big Thorne Project Final EIS, 3-19) This is less than half of the total size of the timber industry in southeast Alaska as reported from other sources.

The cause of the decline in timber industry employment in southeast Alaska is disputed. Industry and federal and state government sources assert that declining timber sales from the Tongass National Forest are the cause. (See, e.g., Alaska Timber Jobs Task Force, *Report to Governor Sean Parnell*.) Others (Colt, *et al.*) have noted that the decline was largely due to the closure of the two large pulp mills in southeast Alaska, both of which relied exclusively on Tongass National Forest timber, but whose closures was the result of declining Japanese pulp markets, not

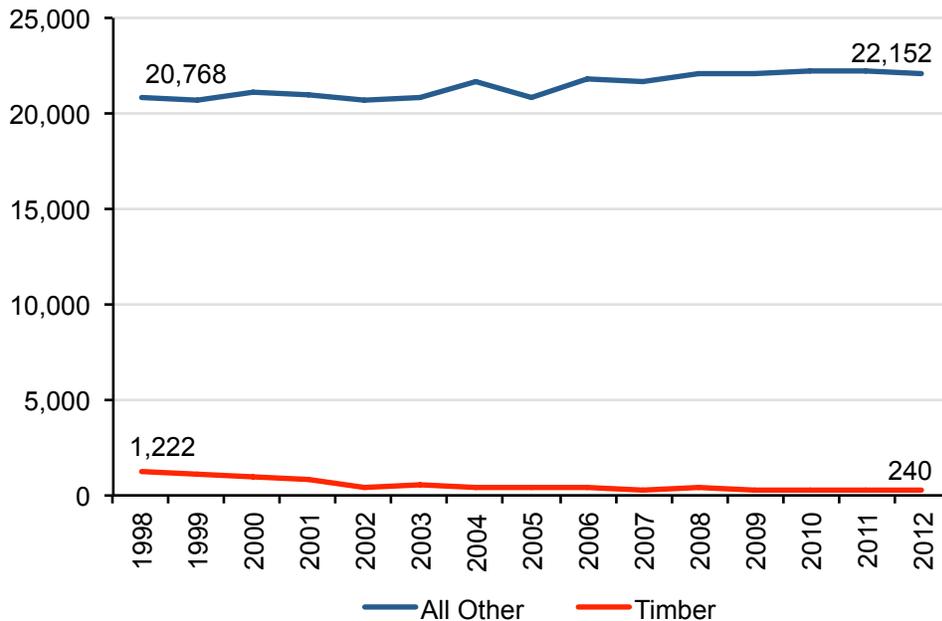
declining Tongass National Forest timber supplies. Environmental sources charge that estimated timber demand from the Tongass National Forest has been persistently overestimated, and that restrictions on log exports (to promote local wood processing jobs) have been eased to find markets for Tongass National Forest timber. (See, *e.g.*, *Tongass Timber Economics 101*.) Others (Colt, *et al.*) have noted that Alaska is a high-cost production area and is far from markets, making recovery and/or growth of the timber industry difficult.

The relative importance of the Tongass National Forest for timber supply is also unclear. One industry source (Resource Development Council) noted that the federal government administers about half of Alaska's forests, with the state government and Native corporations each administering about a quarter of the forests. A state source (AK Dept. of Commerce) stated that the federal government administers 65 percent of Alaska's forests, with 25 percent owned by the state and only 10 percent owned by Native corporations. Another industry source (Alaska Forestry Association) stated that the Tongass National Forest contains 93 percent of the timberland in southeast Alaska. In contrast, Sealaska, a Native corporation, maintains that it is the dominant timber producer in southeast Alaska, although Native corporations are not bound by the log export restrictions imposed on most logs from federal lands, and thus may provide little timber for domestic processing.

The conclusion from these data is that the timber industry in southeast Alaska has experienced a decades-long decline and today is a small part of the regional economy, accounting for no more than one percent of southeast Alaska employment while receiving the lion's share of Tongass National Forest budget and staffing resources.

The decline of the timber industry has been difficult for the region, but it has not kept the overall southeast Alaska economy from growing. According to the U.S. Department of Commerce, from 1998 to 2012 regional timber jobs declined by more than 80 percent (-982 jobs), while all other private sector jobs grew by nearly seven percent (+1,384 jobs). (County Business Patterns)

### Private Sector Employment Trends, Timber vs. All Other, Southeast Alaska, 1998 to 2012



Source: County Business Patterns

In considering how the Tongass National Forest might contribute to the economic vitality of southeast Alaska communities, it is useful to examine two major regional industries—tourism and fishing—that are affected by Tongass National Forest management decisions and investments.

Tourism is a notoriously difficult sector to measure because it spans a number of industries and the U.S. Department of Commerce does not have a single industry code for tracking the travel and tourism economy. Despite this challenge, there are credible efforts to measure the visitor industry. Southeast Conference reports that in 2013 the southeast Alaska visitor industry employed 6,707 people, is growing (+332 jobs, 5.2% change from 2012 to 2013), and accounted for 15 percent of total regional employment. (Southeast Conference) Using data from the U.S. Department of Commerce, Headwaters Economics estimates that in 2012 travel and tourism-related industries combined—accommodation and food services; arts, entertainment, and recreation; passenger transportation; and retail trade—accounted for 4,711 jobs, or 21 percent of total private employment. (County Business Patterns)

The fishing, or seafood, industry also can be measured in a number of ways and has tracking challenges related to data nondisclosures and the large number of self-employed individuals. Despite these hurdles, Southeast Conference reports that in 2013 the southeast Alaska seafood industry employed 4,252 people, is growing (+148 jobs, 3.6% change from 2012 to 2013), and accounted for nine percent of total regional employment. (Southeast Conference) Using data from the U.S. Department of Commerce, Headwaters Economics estimates that in 2012 fishing-related sectors employed 1,780 people, along with another 2,408 self-employed individuals. This represents eight percent of total private employment and 31 percent of all self-employed people in the region. (County Business Patterns, Nonemployer Statistics)

There are also methods of calculating the broader regional economic significance (*i.e.*, including the multiplier effect of direct spending and employment) of the tourism and fishing industries in southeast Alaska. Several recent efforts, which confirm the economic importance of the tourism and fishing industries, are summarized below.

A 2014 McDowell Group study for the state of Alaska's Department of Commerce, Community, and Economic Development found that the visitor industry as a whole in southeast Alaska, including multiplier effects, totaled \$1.1 billion in spending and resulted in 10,900 jobs and \$407 million in labor income during the 12-month period from October 2012 to September 2013. The employment total represents 20 percent of total southeast Alaska employment in 2012. (Bureau of Economic Analysis) This report shows that the visitor industry is growing in the region. Since the 2011-2012 season, visitor spending increased by 10 percent, employment by 7 percent, and labor income by 10 percent. (McDowell Group 2014)

The McDowell Group also analyzed specific southeast Alaska visitor activities in an earlier 2012 study and found that top tourism activities were: "wildlife viewing (42 percent of visitors participated), hiking/nature walk (28 percent), day cruises (26 percent), flightseeing (15 percent), fishing (11 percent), bird watching (9 percent), zipline (7 percent), dogsledding (7 percent), kayaking/canoeing (7 percent), biking (4 percent), rafting (3 percent), ATV/4-wheeling (2 percent), camping (2 percent), Northern Lights viewing (1 percent), and hunting (<1 percent)." (McDowell 2012) Many of these visitor activities rely heavily on natural resources managed by the Tongass National Forest and the ability to access and enjoy the landscape in its natural state.

A 2010 TCW Economics report for Trout Unlimited found that southeast Alaska salmon fisheries and hatchery operations, including multiplier effects from commercial, recreational, and personal use/subsistence and the processing of commercially harvested salmon, accounted for \$986 million in total economic output, 7,282 jobs, and \$189 million in personal income in 2007. (TCW Economics) The employment total represents 14 percent of total regional employment in 2007. (Bureau of Economic Analysis)

A more recent 2013 McDowell Group study for the Alaska Seafood Marketing Institute, which was not limited to salmon and used different classifications than the TCW Economics report, found that the seafood industry produced \$641 million worth of seafood (in wholesale terms) and, including multiplier effects, supported 9,650 average monthly jobs along with \$468 million in labor income in 2011. (McDowell 2013) The average monthly job total represents 18 percent of total southeast Alaska employment in 2011. (Bureau of Economic Analysis) The salmon fishery, which relies on the Tongass National Forest for cold water and healthy spawning grounds, accounted for three quarters of the region's total commercial wholesale fishing value and drives the majority of the industry's economic impacts in southeast Alaska.

The conclusion from these data is that the tourism and fishing industries are two of the major economic sectors in southeast Alaska today, and are growing in scale and importance. Despite demonstrated growth in tourism and fishing markets, these industries are not benefiting from increases, or even increases in share, of Tongass National Forest budget and staffing resources.

## Fiscal Analysis

Tongass National Forest timber sales have consistently cost more to prepare, access, and administer than the federal government receives for the timber. The proposed transition from old growth to young growth timber, which in general has lower value, has brought renewed attention to losses on timber sales and the return these sales provide U.S. taxpayers. The argument that old growth must be harvested because it has higher value has not changed the fact that predominantly old growth timber sales on the Tongass National Forest continue to cost significantly more than they generate in revenue.

National concerns about Forest Service timber sales in which the sale costs exceeded the revenues (known as below-cost timber sales; see CRS Report 94-698 ENR) were first raised in 1980. That year, the Natural Resources Defense Council (NRDC) issued a lengthy report showing timber costs and revenues for each national forest in the country, and showing federal fiscal losses on timber sales from many national forests, including the Tongass National Forest. Several reports, mostly from various congressional agencies, were published in 1984, also showing fiscal losses on timber sales in many national forests, including the Tongass National Forest. (See CRS Report 84-799 ENR) The Forest Service and the timber industry have defended such practices, arguing that the agency was not required to make a profit for the U.S. Treasury and that timber sales were needed to stabilize communities. (See, *e.g.*, Beuter) Despite the concerns and counter-arguments, no action to reduce timber sale losses has been made by Congress or the several Administrations, but the concerns persist. (See CRS Report RL32485)

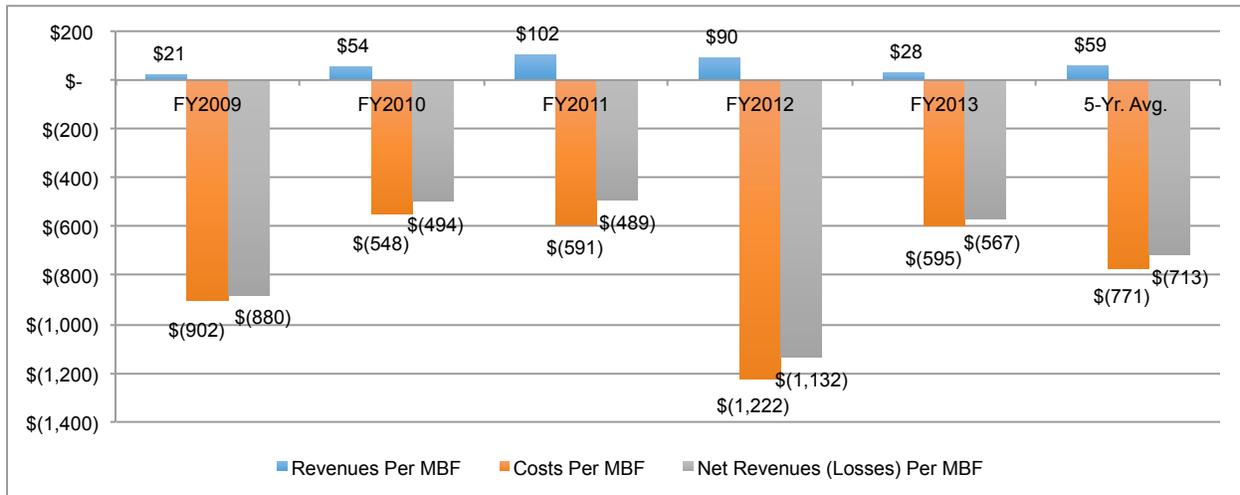
The Tongass National Forest clearly has lost money on recent timber sales, as the table below shows. (See also Mehrkens) Harvest revenues ranged from \$600,000 to more than \$3.3 million between FY2009 and FY2013—from \$20 per thousand board feet (MBF) harvested to more than \$100 per MBF. As noted above, timber-related costs have been significantly higher, ranging from \$19 million to \$26 million during the same period—from more than \$500 per MBF harvested to more than \$1,200 per MBF. This means that the Tongass National Forest lost nearly \$25 million—\$880 per MBF—in FY2009; more than \$17 million—\$494 per MBF—in FY2010; nearly \$16 million—\$489 per MBF—in FY2011; nearly \$24 million—\$1,132 per MBF—in FY2012; and nearly \$21 million—\$567 per MBF—in FY2013. The total net cost to the U.S. Treasury from Tongass National Forest timber sales during these five years was more than \$100 million.

### **Tongass National Forest Timber Sale Revenues and Costs, FY2009 to FY2013 and 5-Yr. Avg.**

Fiscal Year	FY2009	FY2010	FY2011	FY2012	FY2013	5-Yr. Avg.
Total Revenues	\$ 605,166	\$ 1,897,909	\$ 3,330,495	\$ 1,873,382	\$ 1,015,373	\$ 1,744,465
Total Costs	\$ 25,589,172	\$ 19,403,573	\$ 19,286,845	\$ 25,458,344	\$ 21,628,449	\$ 22,273,277
<b>Net Revenues (Losses)</b>	<b>\$(24,984,006)</b>	<b>\$(17,505,664)</b>	<b>\$(15,956,350)</b>	<b>\$(23,584,962)</b>	<b>\$(20,613,076)</b>	<b>\$(20,528,811)</b>
Volume Harvested (in MBF)	28,385	35,410	32,638	20,828	36,366	30,725
Revenues Per MBF	\$ 21	\$ 54	\$ 102	\$ 90	\$ 28	\$ 59
Costs Per MBF	\$ 902	\$ 548	\$ 591	\$ 1,222	\$ 595	\$ 771
<b>Net Revenues (Losses) Per MBF</b>	<b>\$ (880)</b>	<b>\$ (494)</b>	<b>\$ (489)</b>	<b>\$ (1,132)</b>	<b>\$ (567)</b>	<b>\$ (713)</b>

Source: Costs are from the budget table in this report; revenues and cut volume are from U.S. Forest Service Cut and Sold reports available online: <http://headwaterseconomics.org/interactive/national-forests-timber-cut-sold>.

## Tongass National Forest Timber Sale Revenues and Costs, FY2009 to FY2013 and 5-Yr. Avg.



Source: Costs are from the budget table in this report; revenues and cut volume are from U.S. Forest Service Cut and Sold reports available online: <http://headwaterseconomics.org/interactive/national-forests-timber-cut-sold>.

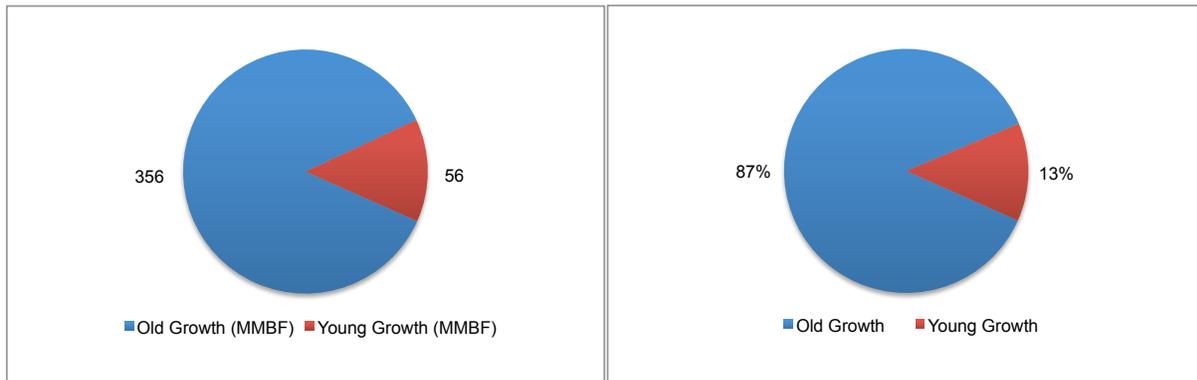
The Transition Framework outlines a transition from old growth to young growth harvests, but such a shift has yet to be shown in Tongass National Forest timber sales and is unlikely to improve the fiscal results of timber sales. A review of timber sales proposed (or in various planning stages) by the Tongass National Forest since the Transition Framework announcement shows an overwhelming bias toward old growth volume—approximately 87 percent of total proposed volume.

## Recent Tongass National Forest Proposed Timber Sales, Old Growth vs. Young Growth

Project Name	District	Final Decision	Status	Date	Old Growth Volume (MMBF)	Young Growth Volume (MMBF)
Navy	Wrangell	N	FEIS	3/1/09	11.6	0
Central Kupreanof	Petersburg	Y	ROD/FEIS	2/4/11	26.3	0
Wrangell Roadside	Wrangell	Y	DN/EA	3/10/11	5	0
Tonka	Petersburg	Y	ROD/FEIS	3/28/12	38.5	0
Dargon Point	Thorne Bay	Y	DN/EA	2/19/13	0	2.5
Wrangell Island	Wrangell	N	Scoped	7/31/13	65	0
Kosciusko	Thorne Bay	N	Scoped	8/1/14	5	38
Mitkof	Petersburg	N	Draft Decision, EA, FONSI	8/7/14	28.5	0
Big Thorne	Thorne Bay	Y	FEIS/ROD/SIR	8/21/14	116.3	15
Saddle Lakes	Ketchikan	N	DEIS	8/29/14	60	0
<b>Total Volume (MMBF)</b>					<b>356</b>	<b>56</b>
<b>Share of Total Volume</b>					<b>87%</b>	<b>13%</b>

Source: Tongass National Forest planning documents; Tongass National Forest 5-Year Timber Sale Schedule (no longer publically available on the Tongass National Forest website); and Trajectory to Young Growth report.

## Recent Tongass National Forest Proposed Timber Sales, Old Growth vs. Young Growth



Source: Tongass National Forest planning documents; Tongass National Forest 5-Year Timber Sale Schedule (no longer publically available on the Tongass National Forest website); and Trajectory to Young Growth report.

An instructive illustration of the continued money-losing reality is the Big Thorne Project, which has been approved by the Tongass National Forest but is being litigated by various environmental groups. This sale is the largest proposed timber sale in decades on the Tongass National Forest. It is predominantly an old growth timber sale and is rationalized in large part by the Forest Service's assertion that young growth trees on Prince of Wales Island are not commercially viable at present—that without a substantial old growth component the various proposed alternatives would incur significant financial losses, or find no bidders.

However, even with the dominant old growth component—which takes the Tongass National Forest in a direction counter to the Transition Framework and stated young growth leader's intent goal—the Tongass National Forest will likely find itself losing money for federal taxpayers. The recently awarded 97-million board foot sale contract was reportedly worth more than \$6 million, but at the FY2013 average Tongass National Forest cost of \$595 per MBF, the preparation and administration costs of the sale would be more than \$57 million, with a net cost to the U.S. Treasury of \$50 million—a nearly 10:1 expense-revenue loss ratio. (E&E News)

There may be legitimate questions about the readiness of second growth supply on the Tongass National Forest and the viability of young growth timber economics, but as these figures show the old growth program itself is not a self-supporting endeavor. The allocation of scarce Tongass National Forest budget and staff resources to a minor economic sector represents a large opportunity cost for the regional economy—these resources could be repurposed, using the logic of the Transition Framework, to larger and more vibrant industries that support more jobs and communities in southeast Alaska.

## Conclusion

The Tongass National Forest Transition Framework, announced in 2010, came at an opportune time, promising a “new path forward in the region that enhances economic opportunities to communities while conserving the Tongass National Forest.”

Southeast Alaska was poised to emerge from the Great Recession, and timber conflicts had seemingly given way to a discussion about how to shift to young growth harvesting and restoration that would in turn support other forest values and activities, and ultimately allow the Forest Service to better meet the needs southeast Alaskans.

Over time, the region’s timber industry has shrunk to a fraction of its former size and continues to decline; while the large and growing tourism and fishing industries could benefit from new Tongass National Forest investments in infrastructure and supporting services. The goal of managing the Tongass National Forest in a way that contributes to the revitalization of the southeast Alaska economy seemed within grasp.

A close analysis, however, shows a path taken that is much different than the promises made. Today, four years after the start of the Transition Framework, the Forest Service continues to allocate the largest share of its budget and manpower to timber production, while simultaneously flat-lining or even reducing support for recreation, wildlife, fish, and watershed protection. At best, the agency’s actions are inconsistent with the assurances made by the Transition Framework.

Given the economic context of southeastern Alaska, the Forest Service’s actions are difficult to understand. While there may be legitimate questions about the readiness of second growth supply on the Tongass National Forest and the viability of young growth timber economics, the analysis in this paper clearly demonstrates that the old growth program itself is not a self-supporting endeavor. It is possible that, with the right support, some timber industry could be a vital part of the region’s economic geography, but this should not come at the cost of more strategic and promising investments in southeast Alaska’s overall economic health.

The allocation of scarce Tongass National Forest budget and staff resources to a minor economic sector represents a large opportunity cost for the regional economy—these resources could be repurposed, using the logic of the Transition Framework itself, to larger and more vibrant industries that support more jobs and communities in southeast Alaska.

In short, the Tongass National Forest has not lived up to the expected “transition,” and the casualties of this failure to seize a more promising economic trajectory are the region’s businesses and communities, as well as the U.S. taxpayer.

## Appendix: U.S. Forest Service Budget Acronyms

<b>National Forest Systems - NFNF</b>	
Inventory & Monitoring	NFIM
Landowner Management	NFLM
Minerals & Geology Management	NFMG
Forest Planning	NFPN
Grazing Management	NFRG
Recreation, Heritage, & Wilderness	NFRW
Timber Sale Management	NFTM
Vegetation & Watershed Management	NFVW
Wildlife & Fisheries Habitat Mgt	NFWF
<b>Capital Improvements &amp; Maintenance - CMCM</b>	
Facilities Capital Improvements & Maint	CMFC
Infra Improvements - Deferred Maint	CMII
Legacy Roads & Trails	CMLG
Roads Capital Improvements & Maint	CMRD
Trails Capital Improvements & Maint	CMTL
Deferred Maint Projects for Recreation Facilities	FDRF
<b>Perms &amp; Trust Funds (Not All-Inclusive)</b>	
Cooperative Work - NONAGT Based	CWF2
Cooperative Work - Other	CWFS
K-V Sale Area Projects	CWKV
Regional K-V Sale Area Projects	CWK2
Reforestation Trust Funds	RTRT
Conveyance of Admin Sites	EXSC
Regional Recreation Enhancement	FDAS
Unit Recreation Enhancement	FDDS
Gifts & Bequests	GBGB
Maps - (MRMS, MVIS & MSEQ)	MAPS
Quarters Maintenance	QMQM
Secure Rural Schools (Title II)	SRS2
Stewardship Contracting	SSCC
Salvage Sale	SSSS
Timber Pipeline - Botanical Products	TPBP
Timber Pipeline - Recreation Backlog	TPCD
Timber Pipeline - Sale Prep	TPPS
Cost Recovery - Major Projects	URMJ
Cost Recovery - Minor Projects	URMN

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