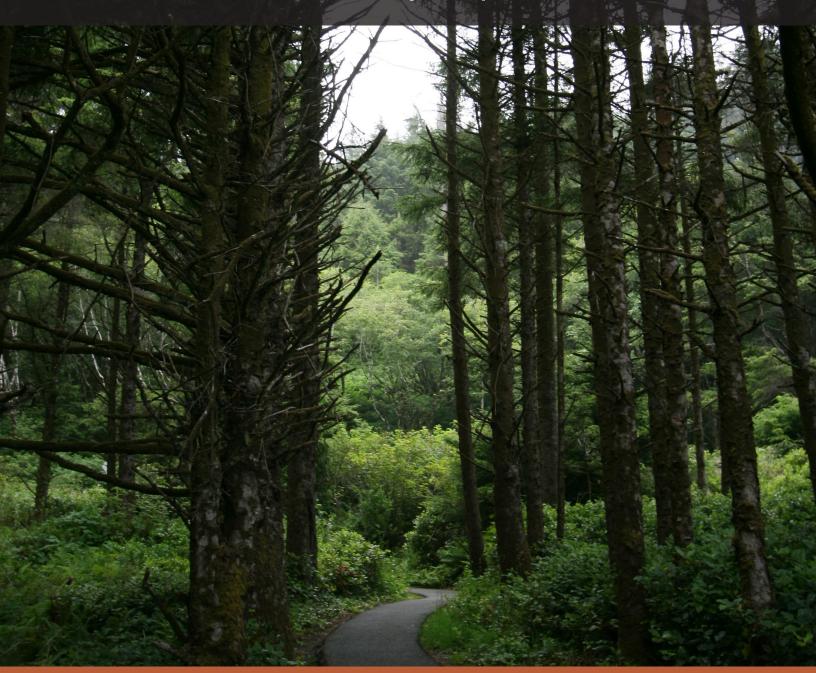
FOREST PRODUCTS MODERNIZATION

Partner Feedback Sessions

Summary Report





ACRONYMS

ACES Agriculture Conservation Experienced Services

CCF Hundred (centum) Cubic Feet

CO Contracting Officer

COR Contracting Officer Representative

DXP Designation by Prescription

EADM Environmental Analysis and Decision Making

EIS Environmental Impact Statement

FPM Forest Products Modernization

FSC Forest Stewardship Council

GNA Good Neighbor Authority

IRSC Integrated Resource Service Contract

IRTC Integrated Resource Timber Contract

LiDAR Light Detection and Ranging

MBF Million Board Feet

NEPA National Environmental Policy Act

NFMA National Forest Management Act

SFI Sustainable Forestry Initiate

S&PF Forest Service-State and Private Forestry

TEA Transaction Evidence Appraisal

TIM Timber Information Management

WO Forest Service-Washington Office

Contents

B	ACKGROUND	1
1.	RECRUIT, TRAIN, AND RETAIN EMPLOYEES	2
	Partner Feedback	2
	Current agency culture discourages innovation	2
	Train staff in evaluating local markets	2
	Cross-pollinate across disciplines in the agency	2
	Address hiring constraints and mitigate staff turnover	2
	Forest Service Response and Recommendations	3
2.	EXAMINE AND REFORM POLICY	4
	Partner Feedback	4
	Certify the people doing the work, not the product.	4
	Streamline the NEPA process	4
	Increase the scale of environmental analysis.	5
	Restructure interdisciplinary teams to include forest products markets and economics	5
	Stop painting trees and use Design by Prescription.	5
	Mark your sale to meet interdisciplinary/stand conditions	5
	Align with local scaling procedures.	6
	Forest Service Response and Recommendations	6
3.	IMPROVE EFFICIENCY THROUGH TECHNOLOGY	7
	Partner Feedback	7
	Bring Forest Service technology into the 21st century	7
	Go digital on sale maps	7
	Use LiDar for resource characterization to save time and money	8
	Move toward virtual boundaries.	8
	Forest Service Response and Recommendations	8
4.	CHANGE PROCESSES AND SYSTEMS	9
	Partner Feedback	9
	Forest Service contracts are too long and complex.	9
	Forest Service contracts impede work on the ground.	9
	(Flexible) Stewardship contracts and GNA agreements are effective tools	10

CORs need training/updates to acquisition management policy	10
Poor condition of Forest Service road network needs to be addressed	10
Silviculture	10
Forest Service Response and Recommendations	11
5. CHANGE THE WAY WE DO BUSINESS	11
Partner Feedback	11
Markets need to be a primary focus of the FPM effort.	11
Ensure sale viability through an appropriate product mix	12
FPM should seek to promote local markets.	12
No bids are the real problem, not bid premiums	12
Modernize pricing; let markets and competition determine the value	13
Adapt appraisals to low-value material and restoration sales	13
Consider haul costs and roads packages, especially for small business	13
Program and Project Management	13
Streamline decision making and authority on the ground	13
External communication is important to success of the FPM program	14
Treat purchasers as partners	14
Forest Service Response and Recommendations	14
CONCLUSIONS AND NEXT STEPS	16

BACKGROUND



National Partner Feedback Session, Washington, DC. Photo by Ashley Warriner, USDA Forest Service

In the fall of 2018, the Forest Products Modernization (FPM) team held a series of partner feedback sessions to update private industry, stewardship contractors, and other partners on the progress of the modernization effort and to solicit their feedback on the director's top 10 recommended actions. The sessions were designed and executed by the FPM Core Team, a Steering Committee comprised of natural resources and forest management staff from each region and the National Forest Foundation. A national session was held in Washington, DC, on September 11, followed by three regional sessions from October 10–12. Details of each session, including presentations, handouts, recordings, and transcripts are on the National Forest Foundation website and the U.S. Department of Agriculture (USDA), Forest Service Forest Products Modernization Share Point site.

The objectives of these sessions were to:

- 1. Create awareness of the Forest Products Modernization effort.
- 2. Collect partner feedback on preliminary solutions that are planned or underway. Their feedback will inform FPM-related efforts on local, regional, and national scales related to contracting and permitting, appraisals, sale layout, and timber sale accounting, scaling, and accountability, among others.
- 3. Help the Forest Service streamline business practices for delivering forest products.
- 4. Strengthen existing and develop new relationships between the agency and partners, including those in industry, other government agencies, environmental groups, Tribes, and scientists.

The first half of each session was a virtual presentation from the FPM team on the background, goals, director's recommendations, and recent progress of the FPM effort, followed by a feedback portion for participants to ask questions and offer input. The second half offered an opportunity for face-to-face dialogue between partners and present Forest Service staff. These in-person discussions were unmoderated and unstructured by design, allowing partners to raise any questions, concerns, or ideas in a candid environment.

More than 160 partners registered for the sessions, and the following report summarizes the questions, comments, and feedback from those participants. Many comments touch on more than one facet of the Forest Service timber sale program, but for the purposes of this report, they are organized within the five broad FPM change categories:

- 1. Recruit, Train, and Retain Employees
- 2. Examine and Reform Policy
- 3. Improve Efficiency Through Technology
- 4. Change Processes and Systems
- 5. Change the Way We Do Business

1. RECRUIT, TRAIN, AND RETAIN EMPLOYEES

The FPM effort recognizes the need to improve recruitment and retention in mission-critical forester and forest tech positions, and to provide better training opportunities on new authorities and technologies. Below are the main takeaways from partners regarding current staffing challenges faced by the agency.

Partner Feedback

Acknowledge current agency culture discourages innovation.

Within a context of high turnover, acting positions, and details within the agency, many partners at the sessions wondered whether employees would feel empowered to take risks and leadership on new ideas. Several partners spoke of interactions with staff on the ground who are frustrated because they want to help their communities in innovative ways but believe the Washington Office (WO) is more concerned with avoiding lawsuits and would not support them if they do.

Partners stressed that for employees to feel empowered, there must be better communication from the WO down to the ranger district on the use of new authorities and technologies. The WO also must be willing to tolerate occasional failures for the sake of learning and innovation and communicate that to employees.

Another recommendation regarding agency culture was for the WO to shift from a top-down model where it sets targets that units must meet, to a bottom-up model in which the WO provides tools to the local field. They worried about conflicts between the targets that politicians and the WO are pushing versus what would be realistically accomplished in the field (and should be accomplished to steward the resource). The legal barriers constraining local decision making hurt the local accomplishment of work while also stirring concerns about the reason certain actions are taken.

Train staff in evaluating local markets.

Regarding specific training needs, partners felt strongly that training in local economics and markets for forest products should be standard for Forest Service timber sale preparation and administrative staff, so they can quickly recognize whether a project is viable. The partners offered to help with this training by taking new sale administrators and timber shop staff on tours to mills and harvest operations.

Cross-pollinate across disciplines in the agency.

Both partners and staff said employees are too specialized and not familiar enough with the work of other people on interdisciplinary (ID) teams, resulting in prescriptions that do not make sense on the ground. They believe the agency needs to invest significant time in training across disciplines, mentoring, and hands-on experience. Employees suggested ID training or cross-pollination to address some of the challenges listed by industry partners. In the context of FPM, they said other disciplines (silviculturists and "-ologists") must understand how the timber shop functions as well as the duties of purchasers and loggers. Partners likewise said sale preparation and appraisal staff should work more closely with sale administrators and talk with contractors to gain practical knowledge and consider costs, wages and other factors in their work. In-house trainings, brown-bag lunches, and other methods were also suggested.

Address hiring constraints and mitigate staff turnover.

During more than one session, partners asked about the status of the 2,000 newly approved positions. Forest Service presenters responded that most of those allotments were internal merit-based positions, which does

not help staffing limitations agency-wide. Staffing constraints have also led to high turnover and positions filled by a revolving door of short-term detailers, which partners blamed for the lack of continuity, never knowing who will be attending a sale or if a Contracting Officer (CO) will even show up. Ever-changing Contracting Officer Representatives (COR) means ever-changing ideas on how things should be done, which can raise costs and lower efficiency.

One suggestion to remedy the lack of COs was to advertise those positions in both the 462 and the 460¹ series, which would likely lead to a broader and better pool of applicants. Employees and partners said a significant disadvantage of advertising CO positions in the 460 professional series as opposed to the 462 technician series is that professionals tend to move on to other positions, but technicians tend to stay longer in one place. Technician jobs could attract a larger pool of local applicants who, if hired and trained, would be more likely to remain in their position.

As an interim solution, some industry partners offered to take on more work (e.g., National Environmental Policy Act (NEPA) and sale layout) for the agency. Master stewardship agreements, such as the Colville A to Z project, were also cited as a means to speed up the hiring process for sale marking, contract preparation, sale administration, etc.

Forest Service Response and Recommendations

- Forest Service presenters felt hands-on exchanges with industry (mill tours, ride-a-longs) for sale prep technicians, harvest inspectors, and resource assistants could be a valuable training component and could help to build trust and strengthen partnerships.
- Forest Service employees present at the sessions noted the diminished number of agency staff with
 expertise in operations (e.g., how to deliver operationally viable logging and transportation systems). The
 Forest Service intends to train employees on current procedures and technologies, which is one reason
 the agency is looking to partner with entities that have this expertise.
- Forest Service managers are recruiting for some forestry positions in venues like the annual Society of
 American Foresters Convention, where they can reach many qualified candidates in one place. Likewise,
 Forest Service retirees are filling gaps in silviculture, sale administration, and other positions through the
 Agriculture Conservation Experienced Services (ACES) program. The Forest Service will likely continue to
 take advantage of ACES authority to support agency needs considering budget and hiring constraints.
- Regarding the 460 professional series versus 462 technician series, the FPM team acknowledged that qualified employees with 2-year degrees are often excluded from positions requiring a 4-year degree, even though the ability to perform the job functions is the same. Where experience counts as much as academic qualifications, as is the case in many timber sale preparation and contract administration jobs, these positions should be open to both technicians and foresters. An alternative job series could include 401, which has a positive education requirement but not a specific degree in forestry. There is also a bias toward filling upper level jobs (GS-12 and above) with professionals (460) instead of technicians. The agency could do a better job of matching skills to positions, and the Forest Service is looking at updating position descriptions and promoting more mentoring on career paths.

3

¹ The 460 and 462 job series correspond to Forester and Forestry Technician positions in the Forest Service. The 460 professional series requires a 4-year degree and has a higher promotion potential than the 462 technician series, which requires a 2-year degree.

• To mitigate hiring constraints and staffing shortages, the FPM team is working with Acquisition Management and Grants & Agreements to explore all prospects in expanding agency capacity with external support via stewardship contracts and other mechanisms.

2. EXAMINE AND REFORM POLICY

Through the FPM effort, the agency is examining which practices and procedures are required by law, which are dictated by agency policy, and where policy can be updated or reformed to better respond to new environmental and market conditions. During the feedback sessions, the FPM team explained efforts to examine Forest Service certification requirements for sale administrators, silviculturists, and timber cruisers and to determine if and where changes are needed. Much of the conversation also centered on another ongoing change effort in the Forest Service, Environmental Analysis and Decision Making (EADM), which seeks to streamline NEPA processes and help restore forests more efficiently and effectively.

Partner Feedback

Certify the people doing the work, not the product.

During two sessions, the group discussed the potential cost versus benefit of the Forest Stewardship Council (FSC) and the Sustainability Forest Initiative (SFI) certification for Forest Service wood products. While some partners were hopeful that these certifications would improve the marketability and value of federally sourced wood for certain products and markets (e.g., paper and pulp), the consensus among partners was it is not practical or feasible for the Forest Service to pursue certification. The Forest Service is unlikely to successfully navigate a forest management certification process, in part because Forest Service management practices are based on legislation, which will not change based on FSC or SFI. Furthermore, in many markets, there may not even be a demand for certified products. Partners felt that the Forest Service is better off ensuring it meets the Controlled Wood Standards of FSC and SFI. Controlled Wood Standards can be met provided there is a clear contract, clear title to the timber, good records of sales, and the agency can certify the people doing the work on the ground.

Streamline the NEPA process.

Several partners lamented the lengthy and burdensome NEPA process; one partner commented that the NEPA process is the single most significant impediment to forest management project implementation. They suggested that the problem does not lie in the law itself, but rather in Forest Service interpretation and overkill— "making mountains out of molehills." Pointing to forests where the NEPA process is streamlined and work is done quickly (the Chequamegon-Nicolet National Forest was cited as a good example), the partners encouraged the agency to look within to identify best practices.

They also pointed to inconsistency in the use of categorical exclusions (CEs) across the agency. Partners felt the reluctance to make more use of CEs represented a barrier to smaller projects, especially salvage material that adds to the market for smaller operators. They wanted to see Forest Service staff become more comfortable using the new authorities in the Farm Bill and expend as much effort finding avenues to make projects work and keep as much area as possible within a project as they do identifying possible barriers.

Several partners mentioned C clauses in timber contracts as a tool for streamlining the NEPA process: "NEPA decisions do not have to include everything under the kitchen sink. Let your contract C clauses address things

that were brought up in the NEPA document." They believe the sale contract is a useful tool. Forest Service management needs to consider the ramifications of NEPA decisions and create realistic mitigation measures that do not jeopardize project implementation. Develop a smooth and seamless transition between NEPA planning, mitigation development, and implementation/contracting.

Increase the scale of environmental analysis.

Some partners asked about the potential for forest-wide or landscape-level environmental assessments (EA) or environmental impact statements (EIS) covering stands only treated every 40-50 years. Forest Service presenters answered that going forest-wide on a programmatic EIS is not likely feasible, but the agency does recognize the value and efficiencies gained with larger, landscape-scale analyses—a component of both FPM and the EADM initiative. An example is the Four Forest Restoration Initiative (4FRI) in Arizona, which included just under 1 million acres in its first EIS. Another partner encouraged the Forest Service to look at expanding pilot efforts (Region 1 was mentioned) to conduct vegetation inventories at a resolution sufficient for both NEPA analysis of a landscape-scale restoration project and timber sale appraisal within that landscape.

Restructure interdisciplinary teams to include forest products markets and economics.

Finally, much of the discussion during the feedback sessions highlighted an imbalance in the necessary expertise represented on interdisciplinary (ID) teams formed to conduct the NEPA analysis for a timber project. Partners suggested timber production and economic considerations were often only a minority voice on these teams. Partners felt that having a forester on an ID team was not sufficient; a sale administrator needs to be represented on ID teams. Their perception was that the lack of representation of timber interests on ID teams and in environmental analysis is due, in part, to a lack of top-down direction from forest supervisors to establish timber as a priority.

Stop painting trees and use Design by Prescription.

Most of the discussion around sale layout focused on the use of Designation by Prescription (DXP) as an alternative to traditional timber cruising and individual tree marking. Many industry partners at the sessions were emphatic that the Forest Service should stop painting trees and trust operators to achieve desired stand conditions, greatly increasing efficiencies both in terms of staff time spent in the field and the cost of paint. Still, some questioned whether DXP was appropriate in all situations, with some describing it as a "double-edged sword." Some felt that DXP passes Forest Service costs onto the contractor; every acre of production delayed to check the basal area or residual stand conditions represents an additional cost in terms of labor. That extra cost gets passed back to the agency through lower stumpage prices. The same was said for using DXP for complex stand prescriptions.

Forest Service presenters pointed to pilot projects that successfully applied DXP for complex prescriptions, using such tools as digital prescription guides that help operators see areas they need to harvest and what they need to leave. To ensure capacity and an even the playing field, industry partners expressed a desire to be included in trainings for using DXP and for digital marking with tablets. Finally, some partners expressed concern that the presence of low-value material may be the trigger for DXP and said stand conditions—not the presence of low-value material—should be the trigger.

Mark your sale to meet NEPA stand conditions.

Partners at the national session stressed the importance of marking timber sales to achieve desired stand conditions. They noted that the private sector doesn't have NEPA, but it is able to reach stand objectives on the entry that it plans. Partners encouraged the Forest Service to stop marking sales below the basal area on the NEPA prescription: "If NEPA says the basal area needs to be 60 board feet, don't leave 100 standing. There

is nothing more expensive than a contractor going back through an entire standard because enough was not taken the first time."

Align with local scaling procedures.

Much of the discussion around timber sale accounting focused on the use of weight scaling or consumer scaling on Forest Service sales. Several partners recommended increasing the use of weight scaling, particularly in the East, where operators are harvesting smaller diameter pulpwood. Partners noted that in private sales, contracts are often based on the end result prescription without volume estimation. The contractor and the seller negotiate the price per species and then pay for what is taken off the land. They suggested this method as an option for Forest Service sales. Forest Service presenters responded that current policy dictates tree measurement sales unless it's a salvage sale or DXP is being used, although Forest Service presenters noted that there are a few ongoing pilots using weight scaling.

Partners from the Eastern session were pleased to hear about weight scaling pilots in their region and encouraged the Forest Service to align with States and counties on weight scaling and consumer scale systems. They noted that States, counties, and industry in the Eastern United States are closely aligned on weight scaling and ticket systems, but the Forest Service has its own unique ticket system and load removal receipts, which do not align with other agencies, adding another layer of bureaucracy for industry to accommodate. Forest Service presenters noted that agency policy does not explicitly allow consumer scaling, but certain service agreements with purchasers can be used to allow weight scaling. Partners responded that the State must certify truck scales before they are permitted to take on a load and questioned why the Forest Service needs another document that certifies the weight.

Finally, partners wanted to see two scale methods allowed on a single sale (e.g., pulpwood by weight and logs or firewood scaled). There may be opportunities to deliver products to locations that do not have scales, but this becomes an issue when an entire sale is sold by the ton. Private industry can manage mixed scaling methods, but partners said this practice has not been allowed by the Forest Service.

Forest Service Response and Recommendations

- The Forest Service presenters noted that the agency has a demonstration pilot underway for certification
 of wood products, but there is concern about adding another layer of oversight and requirements to the
 process and whether the benefits of certification outweigh the associated costs. Regarding the
 certification of people working on the ground, the Forest Service is working on updating its sale
 administrator task book and streamlining the certification process.
- Through the EADM process, the agency is working to streamline environmental analysis and decision-making processes, and one component is considering the addition of new categorical exclusions by reforming 36 Code of Federal Regulations (CFR) 220. The agency is looking at many avenues to be more efficient, whether it is more tools for categorical exclusions or more efforts to increase the landscape scale of environmental analysis.
- Regarding C provisions in timber sale contracts, because the Forest Service has several different contracting and permitting tools—each one with different levels of standard mitigation measures—elimination of standard provisions and mandatory C provisions from all NEPA documents would not be possible. Similarly, project work may be performed through an agreement or a GNA (e.g., a State contract with no standard provisions that match the Forest Service's C provisions), leaving the partner unaware of mitigation measures that may have a large impact on the project. The contract requirements flow from

the NEPA—not the other way around. NEPA decisions should clearly state the objectives of the project and the required outcomes necessary to mitigate effects. The contract language should be able to interpret the required outcomes described in the NEPA into contract requirements that result in desired outcomes.

- Forest Service presenters acknowledged that a DXP prescription is not always the most appropriate tool
 in all cases, but there are tools that can be put in place to make DXP more practical, such as digital
 prescription guides that help operators easily see which areas they need to harvest and which areas
 should be left for habitat conservation.
- Regarding low-value material as the trigger for use of DXP, current direction does not limit the use of DXP to sales, including low-value material. It is available for use in any stand condition approved by the Regional Forester, including non-complex prescription such as in plantations where the individual tree choice is not critical. According to current direction, low-value plays no part in DXP selection, in part because it is difficult to define low-value across regions. In areas where restoration is being prioritized, thinning or small-diameter material is called low-value, but that definition does not apply universally to all forests.
- Region 1 in Montana has been using weight scaling for years, and the recommendation to explore similar
 opportunities was sent to directors in Region 8 and Region 9. There are now pilot projects for weight
 scaling starting in Region 9, but a major challenge has been separating products and species. The FPM
 team continues to work to identify how the agency can make policy more flexible and give regions and
 forests the authority to implement those processes where appropriate.

3. IMPROVE EFFICIENCY THROUGH TECHNOLOGY

The Forest Service lags behind private industry in the adoption of state-of-the-art technologies that could lead to gains in efficiencies and cost savings. The FPM effort is looking to develop business requirements for a modernized Timber Information Management (TIM) system and promote expanded use of digital technologies and the infrastructure improvements needed to support it.

Partner Feedback

Bring Forest Service technology into the 21st century.

Both partners and Forest Service presenters acknowledged that the agency is far behind private industry in adopting new technology that would lead to gains in efficiencies. Again, partners offered to facilitate exchanges for Forest Service employees to see first-hand how private industry is using new technologies in the field. They noted that many of the new technologies are standard. Since manufacturers are building it into their machines, the operator is paying for it, whether they choose to use it or not.

Go digital on sale maps.

One such technology recommended by several partners was smartphone applications, such as the inexpensive Avenza Maps (as low as \$30 per year per device) which allows the user to download maps for offline use on a smartphone or tablet. The device's built-in global positioning system can track location, plot locations and photos, measure distance and area, etc. Partners said that much of private industry already uses this type of application and finds it is saving time and money and improving results. Regardless of the specific software or application, several partners requested that all timber sale prospectuses include geo-referenced maps so

purchasers can map access points and estimate costs. Another partner mentioned that scannable quick-response codes could be included on sale area maps so purchasers can load them directly on smartphones or tablets.

Use LiDar for resource characterization to save time and money.

Partners repeatedly said that increased use of world-class resource characterization methods, such as light detection and ranging (LiDAR) and other high-resolution imagery, should have a higher priority. The base-data provided by LiDAR would give industry a better understanding of the wood offered and the risk associated with a particular sale. One partner is using high pulse rate LiDAR to grade timber along with ground-based reference plots for determining sales and utilization. With a pulse rate of ~420/m, they can designate and grade every tree in an acre. The partner offered to share what they are doing and learning with the agency.

Move toward virtual boundaries.

Many partners encouraged the Forest Service to move toward the use of virtual boundaries for timber sales. They said painted trees and marked boundaries had not been used on private sales for years unless the land was adjacent to other ownership. Most of the time, landscape features serve as boundaries.

Forest Service Response and Recommendations

- Forest Service presenters acknowledged, as an organization of 30,000 people, the agency is slow to adopt new, large-scale systems and has gotten comfortable with the old way of doing business. A focus on avoiding litigation has led the agency to become risk-averse. The Forest Service must also ensure that new technologies comply with regulations and policy established both by USDA and by other relevant agencies, which can be a time-consuming process. For example, Forest Service employees have advocated for the use of technologies like unmanned aircraft systems (drones) to fly over sale units to save time on the ground. But to roll this out on a broad scale, the agency must first put in place compliance measures in coordination with the Federal Aviation Administration and the Forest Service Fire and Aviation to ensure public safety. The FPM team is reaching out to other Deputy Areas to identify solutions that are appropriate and beneficial to the agency as a whole.
- Nevertheless, Forest Service presenters noted new direction from the Chief mandating all forests to go
 digital with timber sale preparation by 2019. This includes using tablets in the field for sale prep and
 cruising, digital prescription guides, etc. For smaller operators for whom these technologies may be costprohibitive, the FPM is discussing the possibility of the agency loaning equipment to operators, who
 would return it at the end of the sale.
- A challenge of the FPM effort is to make it easier for Forest Service employees to easily access technology like Avenza Maps. Currently, employees do not have permission to download it on Forest Service devices and will not be reimbursed if they buy it on their personal devices. However, there are numerous other applications available through the Forest Service's Forest Management Service Center to make digital interactive sale area maps available for the field in a secure environment. There are no policy barriers to using digital sale area maps today to augment the paper contract maps, other than funding and training. These sorts of limitations are all being examined through the FPM effort.
- Forest Service is using LiDAR on individual demonstration projects, including a project with the Northern
 Arizona University aiming to establish volume estimates using LiDAR, making cruising unnecessary. These
 experiences are being shared across the agency, and once rolled out nationally, information produced by
 LiDAR will be shared with industry for bidding and planning.

Pilots using virtual boundaries on agency land are also underway, and based on those experiences, the
agency is developing the contract language for their expanded use, including the type of equipment used,
sampling error, etc. Forest Service presenters noted that virtual boundaries are not appropriate
everywhere—particularly on sales adjacent to wilderness or private land—but areas between sale units
would be acceptable. Further demos using virtual boundaries are planned for 2019.

4. CHANGE PROCESSES AND SYSTEMS

The FPM effort is also reviewing agency policy and procedures for timber sale contracts and non-commercial forest products permits to determine if any can be eliminated, changed, or streamlined when in the best interest of the parties involved. FPM is considering low-value markets, post-contract awards, term adjustments, award timeframes, road package contracts, end-results clauses, stewardship, and Good Neighbor Authority (GNA) contracts.

Partner Feedback

Make Forest Service contracting process less lengthy and complex.

Several partners said that Forest Service is the last choice for timber purchasing largely due to the complexity and length of Forest Service contracts. They stated a preference for private, State, or Bureau of Land Management sales: "With State sales, I'm looking at a 27-page contract. With a Federal timber sale, I'm looking at who-knows-how-many pages. That all takes time and money, and this is a market where profit margins are getting thinner." Especially in Regions 8 and 9, partners said there is not much competition with current Forest Service contracts because it is too easy to go to a private seller or county with simpler ones. Partners also noted that request for proposals are inconsistent among forests, and they would like to see more standardization—at least at the regional level—to streamline the bidding process.

Partners and presenters agreed that at least some of what is included in Forest Service contracts is not required by law, but rather is policy based on precedent from past lawsuits or from the days when timber theft was a larger issue on Forest Service sales. Partners recommended the agency identify which clauses are law and which are policy to determine what can be eliminated or streamlined. A repeated suggestion was to focus less on the timber harvest process and more on the desired stand condition or result. Another was the use of new technologies to streamline the bidding process.

Finally, some partners expressed a desire for in-person meetings to resolve contract concerns up front for operators who may be less technology savvy.

Do not allow Forest Service contracts to impede work on the ground.

Particularly for timber sales with copious low-value material, partners felt that Forest Service contracts were too rigid and should not be treated like a traditional timber sale with large diameter trees: "If you are selling a pure hardwood pulp sale, where a tree is worth 50–80 cents, it is really impossible for a forester to mark every tree and make sure the equivalent utilized can get through that sale. It is okay to have flexibility and be consistent with that flexibility." Partners repeated their recommendation to look at the overall target and then work with COs and timber sale administrators to make prescriptions feasible.

Partners also said the agency's ability to create operating seasons that are flexible enough for operators to implement contracts is a major issue, especially with the unpredictability of seasonal changes and wildfires

pulling timber sale staff off their normal jobs. They recommended contract term adjustments for market-related events and regional or sub-regional indices, expanding the operating season into winter, and including infrastructure considerations (roads) to keep people working throughout the year.

Similarly, one partner noted that operations are shut down quickly in bad weather and, in other cases, because of waiting for the appropriate paperwork from the Forest Service, representing a significant cost to the operator. Partners want to build better partnerships so they can be more adaptable to inclement weather or other unforeseen factors and process paperwork more efficiently to minimize adverse impact on operators.

Use (flexible) stewardship contracts and GNA agreements.

In every session, partners were happy to hear that the agency is looking into how to make more and better use of master stewardship agreements and GNA, especially in the context of meeting restoration goals. One partner urged the FPM team to look at where and why GNA agreements are working, pointing to examples in the Upper Midwest. Since GNA was first initiated in Wisconsin, the Chequamegon-Nicolet National Forest has made great progress toward achieving American Society for Quality certification. Partners noted that for GNA to be successful, both sides need to be flexible (for example, a willingness to use scaled sales on county and State-administered sales).

While many partners were encouraged to hear that the Forest Service is looking into increasing the use of stewardship contracts, they expressed frustration with a complicated procurement process for this type of mechanism. The sentiment among many partners and some Forest Service employees was that the process for a restoration contract versus a timber sale should be different and more streamlined to encourage more bids and minimize cost and risk to the partner. They specified integrated resource timber contracts (IRTC) and integrated resource service contracts (IRSC) as needing extra attention during the FPM process. They believed these mechanisms to be prohibitively complex and place too much legal responsibility for subcontractor performance on the principal operator. As a result, few operators are willing to bid on them.

Update acquisition management policy and CO training.

Several partners recommended that beyond simplifying contracts, the FPM team needs to look at training COs to understand sale feasibility, diameter issues, and local markets.

Another partner suggested COs receive more training in applicable labor laws and compliance with worker safety measures, and that labor law be an element in all timber sale contracts and inspections. They also stressed that CORs should be trained to evaluate a bid to ensure that timber and service contracts don't go below cost, which potentially leads to wage theft and cutting corners on safety standards. They also noted a disconnect among acquisition COs and timber sale COs and the need for better communication and coordination regarding contracts and administration.

Address the poor condition of Forest Service roads.

Many partners cited deteriorating Forest Service roads as a major issue that should be addressed by the FPM effort. Transportation is approaching 50 percent of total timber harvest costs. Purchasers are transporting on a Forest Service road network initially designed for timber production, but now used at a high level by recreationists. A deteriorated road network has led to delays and increased costs for operators.

Pay attention to silviculture.

Some partners felt that not enough attention is paid to the impact silvicultural prescriptions have on a timber program: "Silviculture cannot be an afterthought...it has a huge impact on the end product, and we see a huge difference between districts and regions and how they treat the forest." Some expressed a concern with the

level of silviculture training and instruction and that more attention should be paid to take a holistic approach to a sale and ensuring its viability.

Others suggested a need for type-specific sales or sales for a silvicultural application (i.e., heavy percentage hardwood, softwood, or aspen, single tree selection, shelterwood, or even-age). This gives opportunities for loggers or mills to concentrate on their specialty, which would be reflected in the bid prices.

Forest Service Response and Recommendations

- In general, the FPM team acknowledged that Forest Service contracts are much longer than many State and county contracts and asked for suggestions on how the Forest Service could simplify theirs within the bounds of Federal law. Among the solutions under consideration, presenters listed georeferenced maps, simpler prospectuses sent via email, combining contracts, numbering provisions, and digital maps to simplify the process.
- Presenters noted that Region 5 recently implemented new contract provisions that offer more flexibility
 in their operating seasons, although it is not possible in every case because of site-specific wildlife
 considerations or other potential resource impacts.
- An example given of success with GNA was the agreement between the Forest Service and Colorado.
 Contracts have quadrupled since the initiation of GNA in 1998, largely because the State can use its own shorter, more streamlined contract format.
- Forest Service presenters acknowledged the agency has a large backlog of road maintenance. Certain
 Forest Service grants or agreements could be used to work with States to manage roads, especially if
 agency roads are within a State road network. The presenters also noted that the agency has extended
 the FPM team to include transportation engineers to address transportation management concerns
 during sale layout and has in mind developing short courses for interdisciplinary team members.

5. CHANGE THE WAY WE DO BUSINESS

Through the FPM effort, the Forest Service is looking to create a new system for how we determine forest product value and create flexibility for how we deal with biomass or low-value products. The FPM team aims to establish agency direction for disposal of minimal amounts of sawtimber and set definitions for low-value forest products and how those are managed within the contracts system. Changing the way we do business also means adapting to new market conditions and changing the way we approach our relationships with timber purchasers to achieve more restoration and deliver forest products efficiently.

Partner Feedback

Make market needs a primary focus of the FPM effort.

In every session, industry partners insisted that more emphasis is needed on existing and future markets for forest products. Said one partner, "If you don't have markets and the ability to utilize that material, the other priorities are irrelevant. Accurately appraising low-value material will not help if there are no buyers." Partners said the market includes more than just the logger and the mill; haul distance, fuel cost, logging systems, etc., all impact the viability of a sale and should be front and center as the Forest Service thinks about how to streamline its business practices.

Both partners and presenters agreed there is a need to help local timber sale managers put up sales that match the current local inventory and demand. Partners recommended the Forest Service evaluate local and regional manufacturing capacity to determine to what degree more predictable small log supplies should be absorbed around national forests.

Ensure sale viability through an appropriate product mix.

While partners recognized the priority for restoring forest landscapes and reducing risk, many partners were emphatic that low-value material alone is not an option from a business standpoint. Purchasers need valuable material to offset costs. In some cases, the costs incurred to get low-value material off the forest makes it a negative value product. If there is not an adequate mix that includes enough larger material (one partner stated that mills need an average of about 15- to 16-inch diameter-at-breast-height trees), a subsidy is required to make the sale viable. Another said at least 30 percent saw timber is needed on a sale to market the pulpwood in the sale. Timber sale administrators should tailor a timber sale to respond to relative access to different industries (small diameter logs for pellets, etc., and large logs for mills).

Promote local markets.

Partners also wanted to know if the FPM effort was considering how the agency can promote increased investments in wood products manufacturing beyond timber sales. One partner in Region 3 asked about the possibility of a special-use permit to build a sawmill on Forest Service land in Coconino County, where there is no other suitable location. In Region 8, one partner suggested if the Forest Service were able to sign an agreement committing to provide the current or an increased amount of pine saw logs over the next decade, it could encourage an improvement and upgrading of the mill to increase output production of smaller diameter product. Likewise, partners in Region 9 said the Great Lakes region has a viable existing pulp industry, and all solutions should focus on assuring that access to products remains steady.

Partners also stressed that the FPM effort should consider offering smaller (<3,000 acres) sales that represent less of a payment burden and use sales authority related to small businesses to help smaller operators.

Realize that no bids are the real problem, not bid premiums.

Regarding timber sale appraisals, many partners said that from their perspective, bid premium is not the primary issue with the current process. The lack of bids on sales is the bigger issue. Even as the Forest Service moves toward a simplified appraisal process, no-bid sales continue at the forest level. Partners affirmed the reason is that many Forest Service contracts are impossible for a contractor to achieve at the price the Forest Service is willing to pay. They felt the Forest Service Handbook assumption that 15 percent of offerings should be anticipated to go no-bid was counter-productive, and the Forest Service should evaluate appraisal performance based on acres treated.

When asked what the deciding factor is in evaluating whether to bid on a sale, industry representatives said they look at the minimum required bid and that advertised rates for bid prices was less of a concern. The industry will bid what they know the timber is worth.

There were varying messages about measuring timber by volume in hundred cubic feet or million board feet (MBF), cords, or tons for payment. One partner felt that changing how the wood is sold made little difference. Purchasers know what the wood is worth and will bid accordingly. This partner suggested that the Forest Service try a pay-as-you-cut sale. Another said that overbids on sales could be avoided if there were more options for dealing with pulp or firewood. They suggested using multiple units of measure for selling different products, such as selling sawtimber by MBF and pulp sold by the ton.

Modernize pricing; let markets and competition determine the value.

Some partners were critical of the current Forest Service method for calculating base period prices using the Transaction Evidence Appraisal (TEA) system and random lengths market adjustments, saying that TEA is backward-looking rather than predicting future changes in the market. They expressed a need for a modernized, forward-looking appraisal calculation that can accommodate swings in local market price and demand. They suggested using weekly/monthly data being produced by the International Wood Fiber Report.

Other partners felt the Forest Service should move away from rigid formulas to appraise timber and allow local market conditions to determine the price of a sale. This would get more volume off the forest and reduce the number of no-bid sales. They said the time employees spend on appraisals in the current system is inefficient; rather than calculating a value of the end product while having access to live market data, their time could be better spent making sure the next sale is viable and can attract more bidders to the table.

Adapt appraisals to low-value material and restoration sales.

Several partners noted that the current appraisal system excludes potential low-value timber purchasers (producers of pellets, bedding, etc.). They cannot afford to bid on Forest Service contracts. One suggestion was to balance the value of the timber with the value of removing fuels in restoration sales. This may require overhauling contracting mechanisms and allowing sales by the acre. They wanted to know how the FPM effort would impact appraisals on non-commercial contracts or on IRTCs, where the product is improved forest conditions and watersheds that are not quantifiable by tree volume and the time, equipment, and material. Another partner suggested also including potential lives in the equation using data from the insurance industry on the risk of death or catastrophic injury to firefighters.

Consider haul costs and roads packages, especially for small business.

Partners also emphasized that transportation costs and distance to mills can have a significant impact on the feasibility of a sale and should be considered in the appraisal process. They also noted that many fixed-cost items in road packages (asphalt, culverts, logging, and hauling) have been largely inaccurate.

During an onsite session, one Forest Service employee said that on his forest, no-bid sales often occur not because of dead wood or lack of operators, but due to expensive road packages on sales with low-value material. A pellet manufacturer was unable to bid on the last several sales in the area because of competition with lumber companies, noting that escalating timber sales and road packages are unaffordable for small businesses.

Improve program and project management.

Partners noted an overall lack of project management and planning skills in the timber program and suggested seeking out experts from private industry. One participant said the agency should be upfront about not only what they want to do, but what can be done reasonably under NEPA. These type of planning skills will prevent sales from getting to gate six (sale award) before the forest realizes it is not a viable project. Educated, experienced foresters need to be involved in project planning to ensure salable outcomes.

Streamline decision making and authority on the ground.

Partners wanted a simplified approval process for timber sale adjustments. They said in the past, COs and sale administrators had the authority to make decisions on the ground; now it seems that more people need to be involved in every decision and adjustment. They wanted sale administrators to be able to make some decisions without having to check in with fire and engineering, for example. They encouraged the agency to examine who needs to be involved in decisions by law and where things can be streamlined.

Continue external communication; it is important to success of the FPM program.

Partners at all sessions expressed appreciation for the opportunity to have face-to-face dialogue with the agency, and more of this type of engagement could go a long way in building trust and improving project outcomes. Partners specifically wanted a greater presence of line officers and local leadership at partner meetings and more exchange in the field. One partner suggested holding focused sessions on specific topics of local importance, such as training for industry and partners on new authorities and initiatives (e.g., DXP).

Similarly, partners in more than one session noted a need for better communication with local communities and environmental groups: "External stakeholders need to know that some projects don't pay their way out of the woods." There should be better communication with the public on the costs and benefits of restoration sales and those that include large-diameter trees. When communication is poor, projects can get tied up in litigation for years. In turn, this creates an aversion to taking risks, which then leads to the agency not removing enough wood from the forest to reduce catastrophic fire risk. Partners said the agency has an excessive list of restrictions but fails to articulate the costs those restrictions incur from both an economic and ecological standpoint.

Treat purchasers as partners.

Partners repeatedly pointed to a larger need for a cultural shift in the agency. The general sentiment expressed was Forest Service employees needed to change how they approach interactions and relationships with timber purchasers. From partners: "Treat purchasers as partners and not enemies," and "Don't make law enforcement issues out of contract administration issues. I hear too much about law enforcement getting involved in something that could be worked out between the sale administrator and a purchaser."

Partners said the Forest Service should move away from its traditional focus on individual trees and move toward inspections focusing on the end result or stand condition, especially with DXP sales. They felt that many sale administrators still have a mindset of mistrust and trying to prevent timber theft, even on low-value material, and that staff on the ground should have a higher tolerance for minor errors. They also noted that with performance bonds in place, there should be no need for sale administrators to require such copious field notes and/or signatures. The sale is either being harvested within the contractual requirements or is not, and if administrators are trained well and have earned the role, they should be trusted.

Forest Service Response and Recommendations

- The FPM team agreed there is a need in the agency for better information and more training in analyzing local markets. The agency hopes to address this through its cross-deputy teams by working with Research and State and Private Forestry (S&PF) deputy areas to characterize markets agency wide.
- Regarding flexibility in adjusting low-value strategies region to region, the FPM team is actively trying to
 minimize how prescriptive the comprehensive strategy is at the national level, leaving more decisions up
 to the Regional Offices.
- Regarding existing opportunities for investment recruitment, Forest Service presenters encouraged
 partners to look into Forest Service S&PF innovation grants. S&PF administers many \$250,000 grants for
 which industry can apply. In one example, a grant recipient used the funds to produce cross-laminated
 timbers to replace concrete and steel in construction.
- The National Forest Management Act (NFMA) mandates that the agency must get fair market value for timber and must determine the appraised value for anything over \$10,000, but it does not dictate how

this is done. The "how" is policy, not law. Revisions to the handbook would lay out how appraisals are to be done, with the Forest Service having the flexibility to change the appraisal system without Congressional approval.

- The FPM solutions teams discussed possibilities for appraising watershed improvement or fire resiliency, which could arguably have a much higher economic return in the long run than a wood product. Legally, the Forest Service must look at the wood product when appraising sales, but the agency is exploring some form of an end-value approach, such as in Colorado where timber is sold by the acre versus the amount of wood.
- The Forest Service is looking at the various materials involved in timber sales and their valuations, breaking them out separately and not treating everything as logs. The agency is also looking at opportunities under NFMA for small businesses to use an option to deduct the cost of building a road from the stumpage. Small businesses can also allow the Forest Service to perform the road construction required under the contract.
- Agency culture was a theme that emerged at several feedback sessions. Forest Service presenters agreed
 that we need to shift away from an agency culture that evolved in an era of theft of high-value timber.
 Modern forest conditions and restoration needs demand that the Forest Service shift toward a culture
 and attitude in which accountability and enforcement measures are aligned with the type of sale and
 value, while ensuring that the public's interests and resources are fully protected, and land management
 objectives are achieved.

CONCLUSIONS AND NEXT STEPS

In all the feedback sessions, participants demonstrated sophisticated knowledge of the Forest Service forest products program and a commitment to partnering with the agency to steward National Forest lands and resources. Both Forest Service presenters and participants at the partner feedback sessions were appreciative of the opportunity to have an open dialogue about the challenges facing the agency and to freely exchange ideas on how to strengthen forest restoration efforts and improve delivery of forest products.

The FPM team held two employee feedback sessions in late 2018. As of December 2018, partners and employees have provided over 1,200 comments and suggestions. The FPM team is working to process and analyze each one of these comments and incorporate them into the draft comprehensive strategy for forest products modernization.

The comprehensive strategy will be complete (tentatively) in May of this year and will include accomplishments to date with a focus on our highest priority actions for implementation over the next several years. The strategy will also include recommendations for how modernization and innovation can become part of our culture and standard operating procedures over the long term. We will use the great ideas and feedback received to date from our employees and partners to create a framework for continuing to gather, evaluate, and implement innovative solutions.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720–2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877–8339. Additionally, program information may be made available in languages other than English. To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD–3027, found online at https://www.ascr.usda.gov/ad-3027-usda-program-discrimination-complaint-form and at any USDA office or write a letter addressed to USDA and provide in the letter all the information requested in the form.

To request a copy of the complaint form, call (866) 632–9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250–9410; (2) fax: (202) 690–7442; or (3) email: program.intake@usda.gov

USDA is an equal opportunity provider, employer, and lender.