Comments from Outdoor Recreation Roundtable: EXPLORE Act Section 133 Pilot Projects

Part I — ORR Proposed Comments:

ORR strongly supports the implementation of Section 133 of the EXPLORE Act and the utilization of pilot projects to develop more accurate, consistent, and timely methods for understanding recreation use across federal lands and waters. **These pilots should be designed not only to improve visitation estimates, but also to create a scalable foundation for better infrastructure investment, visitor services, access, resource management, business decisions, public-private collaboration, and support and insights for surrounding gateway communities.** ORR and its members stand ready to support the agencies in developing practical protocols that reflect the full range of recreation activities and the realities of modern recreation data collection and visitation.

Comments:

1. Engage outdoor recreation industry, states, Tribes, researchers, and technology partners

The agencies should create opportunities for external partners to help shape the protocols, identify available data sources, test assumptions, and evaluate results. Partnerships should be designed so agencies can benefit from outside expertise without compromising privacy, intellectual property, or public accountability. Outdoor Recreation Roundtable members have significant regional and activity-specific expertise to provide on the implementation of pilot projects and should be consulted as applicable.

2. Use common definitions and interoperable data standards

The agencies should establish shared definitions of outdoor recreation activity categories and reporting formats across the pilots. The protocols should align with the agencies' broader work under Section 132 of the EXPLORE Act to establish a unified federal recreation data system.

3. Measure activities and use patterns, not only total visitors

While helpful, a count of total visitation from a single site does not provide enough information for infrastructure, access, staffing, or resource-management decisions. Where appropriate and possible, the pilot projects should also capture:

- Types of outdoor recreation activities
- Frequency and duration of visits
- Seasonal and time-of-day patterns
- Visitor movement across jurisdictions
- Changes in use over time
- User demographics

4. Include less-trafficked, dispersed, and emerging outdoor recreation

Pilot sites should specifically test methods for measuring activities that traditional traffic counters and visitor surveys may miss, including dispersed camping (RV, tent, and other overnight categories), backcountry use, paddling, climbing, mountaineering, skiing (resort and backcountry), mountain biking, OHV use, snow sports, horseback riding, recreational shooting, and other activities currently grouped into broad "other recreation" categories.

ORR also suggests breaking down biking by further segmentation into road biking, mountain biking, cyclocross, touring, gravel biking, fat biking, bikepacking, e-biking, etc.

5. Test multiple technologies and data sources

The pilots should be used to determine which methods of counting/documenting visitation work best in different landscapes and recreation settings.

The pilots should compare combinations of:

- Traditional counters and surveys
- Reservation and permit data
- Mobile-location data
- Trail and road sensors
- Remote sensing
- Voluntary app and platform data
- Private partner and concessionaire data
- Predictive modeling

Automated/on-site counting methods being tested should be evaluated specifically for their ability to distinguish overnight stay types, not just total counts.

The protocols should distinguish between generic mobile-location data, which may help estimate how many people or devices are present, and voluntarily logged GPS activity data, which can provide information about the activity performed, route traveled, distance, duration, and changes in use over time. These data sources answer different questions and should not be treated as interchangeable.

Agencies should disclose the limitations and representativeness of each data source. For example, activity-platform data may provide strong information about runners, hikers, and cyclists while underrepresenting hunters, anglers, OHV users, casual visitors, and people who do not digitally record their activities.

6. Establish clear privacy and data-use guardrails

The agencies should avoid collecting personally identifiable information unless it is necessary and adequately protected. In creating these guardrails for data collection, the agencies should develop protocols that address:

- Aggregation and de-identification
- Data retention
- Permitted uses
- Limits on redistribution
- Protection of proprietary information
- Public transparency
- Contractor and third-party access
- Appropriate use of artificial intelligence
- Data gaps (e.g., underrepresented activity types, geographic blind spots)

7. Connect data collection to management decisions

The pilots should be evaluated on whether they improve actual decisions, not simply whether they generate more data. For this reason we recommend the protocols identify how the data will inform:

- Infrastructure investment
- Maintenance priorities
- Staffing and emergency response
- Visitor dispersion
- Transportation and parking
- Permit and reservation systems

- Accessibility improvements
- Gateway-community planning
- Resource protection

The agencies should publish comparative findings across pilots, including which data collection methods (mobility data, comment cards, game cameras, crowd sources/SMS reporting, etc.) proved most accurate or cost effective for which recreation settings, and share early lessons learned before scaling to additional units.

Part II — Project-by-Project Feedback

State	Agency	Study locations/ focus	Data used	Description	ORR Comment
NC, VA	DOI/NPS	Blue Ridge Parkway Visitor Use Counting Study	Mobile device location; Automated on-site counters	Blue Ridge Parkway (BLRI) is a 469-mile roadway that connects Great Smoky Mountains National Park with Shenandoah National Park. Estimating visitor use across this NPS unit is extremely challenging due to its length and numerous access points via public and private roads and communities. This study used commercially available mobility data (from cell phone applications) to review and update the park's counting methodology and provide estimates of recreation use. This BLRI Visitor Counting Study was completed in 2023 and is the basis for the park's current counting procedures.	First-ever robust visitation baseline for a 469-mile corridor with significant gateway business density (breweries, inns, outfitters). ORR would appreciate access to the underlying data available to support state/local economic development asks and suggests collaboration with local

					businesses that collect survey information for further data validation. In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
VA	DOI/NPS	Richmond NBP and Maggie L. Walker NHS Visitor Movement Study	Mobile device location; Automated on-site counters	The Richmond National Battlefield (RICH) and Maggie L. Walker National Historic Site (MAWA) are located in central Virginia approximately 100 miles south of Washington, D.C. The two National Park Service units are managed jointly and encompass a large non-contiguous area including sites in the City of Richmond, as well as Henrico, Hanover, and Chesterfield Counties. In the last ten years, the park has experienced significant changes including the shift to a smaller visitor contact footprint at Tredegar Iron Works, the closing of the Fort Harrison Visitor Center, and reductions in staff that have necessitated seasonal closures of other park sites. In response to these changes, this study provides empirical data to inform decisions related to Visitor Use Management and Visitor Services at Maggie L. Walker National Historic Site and Richmond National Battlefield Park. Commercially available mobility data (from cell phone applications) was analyzed to provide park managers with information to develop 1) operational plans, 2) make decisions about visitor center projects and management, and 3) an understanding of current and potential visitor use in the form of both recreational and informational uses. The RICH and MAWA Visitor Movement Study was completed in 2023.	As described in the project description, the park has experienced staff reductions that have led to seasonal closures at other sites. It will be important to identify via data how new recreation investments can increase access.

					In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
CT, GA, MA, MD, ME, NC, NH, NJ, NY, PA, TN, VA, VT, WV	DOI/NPS	Appalachian NST Visitor Use Estimation Study	Mobile device location; Automated on-site counters	The 2024 Appalachian National Scenic Trail (ANST) Visitor Estimation Study is one of three pilot projects being conducted by the National Park Service under its National Rivers and Trails Program. The goal of these pilot projects is to evaluate the feasibility of using modern technologies, alongside traditional counting methods, to estimate total visitation on long-distance rivers and trails. Spanning over 2,100 miles from Georgia to Maine, the ANST attracts visitors who attempt a "thru-hike" journey from start to finish as well as visitors who come for shorter hikes and exercise. Unlike many national park sites, the ANST has not estimated overall visitor use statistics due to the complexity of maintaining and updating counts along the entire trail. After a thorough literature review of potential data sources, commercially available mobility data (from cell phone applications) was selected for this project to identify and understand individual trip patterns. This ANST Visitor Use Estimation Study was completed in 2024 and estimates of use across the length of the ANST were compiled from these data and a framework to estimate use across the ANST based on on-the-ground counts. Further refinement and testing of methods are needed, both in the field and post-implementation, but this study demonstrated that a viable path forward is possible. Striking a balance between the operational feasibility of capturing visitation estimates and the scientific accuracy of those estimates will be critical as the initiative progresses.	Pilots should include a focus on capturing day-use and short-term use on the trail. Consult with nearby trail towns that have had limited data in the past to understand the most valuable data to support economic development efforts. Investigate whether mobile device location is triggered by a geofence and a single data point or if location data

					is being collected repeatedly over some time once a device crosses a geofence. In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
NE	DOI/NPS	Niobrara NSR Visitor Use Estimation Study	Mobile device location; Automated on-site counters	The Niobrara National Scenic River (NIOB) Visitor Estimation Pilot is one of three pilot projects being conducted by the National Park Service under its National Rivers and Trails Program. The goal of these pilot projects is to evaluate the feasibility of using new technologies, alongside traditional counting methods, to estimate total visitation on long-distance rivers and trails. NIOB stretches through Nebraska's scenic sandhills and is a popular destination for visitors seeking to experience its unique landscapes, wildlife, and recreational opportunities. NIOB reports visitor use numbers, but the park's counting procedures need updating. In general, rivers are challenging to measure visitor use and rivers like the Niobrara National Scenic River face unique challenges with traditional counting methods (such as vehicle counters, manual counts, and trail counters), which are often impractical for dynamic river environments. Following a thorough literature review of potential data sources, commercially available mobility data (from cell phone applications) was selected for this project to identify and understand individual trip patterns. This NIOB Visitor Use Estimation Study was completed in 2024 and a model to estimate visitor use for NIOB was created from these analyses. The study identified significant limitations of on-the-ground and highlighted the need for data validation	In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.

UT	DOI/NPS	Estimate Visitor Use Movements in Bryce Canyon NP	Mobile device location; Automated on-site counters; Manual counting	Bryce Canyon National Park (BRCA) protects the largest concentration of Hoodoos (irregular columns of rock) on earth. Over 2 million visitors come to Bryce Canyon NP each year to view and experience this landscape. Visitor use is very dense in the park due to its limited size of 36,000 acres. BRCA managers need to know how visitors disperse across the park throughout a day in order to inform visitor use management strategies such as infrastructural improvement, field staffing, or potential managed access. In this Estimation of Visitor Use Movements in BRCA project, researchers from Pennsylvania State University will use commercially available mobile data technologies to characterize and estimate visitor travel patterns across BRCA. Mobility data will be calibrated to field-collected data (e.g., automated vehicle counters, staff observations) to estimate error and ensure accuracy of the mobility data. Results for visitation metrics (e.g., entry and exit rates, attraction site and parking area utilization, and length of stay) will be summarized. Statistical relationships between park entrance counts and use at attractions will be explored to determine variables that can explain park use levels.	Description is explicitly framed around informing "potential managed access" (i.e., reservation/timed-entry systems). Gateway businesses in Bryce Canyon City/Tropic could see real revenue impacts from capacity caps. We ask that any managed-access decision stemming from this data include infrastructure-investment suggestions (parking, shuttles, trail crews) rather than caps alone. In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection,

					including QR codes that launch a survey app. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated "camping" figure.
WV	DOI/NPS	New River Gorge NP Visitor Use Estimation Study	Mobile device location; Automated on-site counters	New River Gorge National Park and Preserve (NERI) encompasses over 70,000 acres along the New River in West Virginia and is popular for a wide variety of recreation uses including hiking, rafting, and biking. In 2020, New River Gorge National River was redesignated as New River Gorge National Park and Preserve. Visitation at NERI increased from 1 million in 2020 to 1.5 million in 2023. However, the park's size, complexity, and porous boundaries make it particularly challenging to estimate visitation. The NERI Visitor Use Estimation study analyzed commercially available mobility data to 1) better understand the users that visit New River Gorge National Park and Preserve across a full year, and 2) to develop an improved model for estimating total visitation. An updated model to estimate visitor use at NERI was developed along with trip characterizations for climbing and hunting areas.	The agency should ensure that use is classified by activity and access point. Use commercial trip/permit records and booking data to validate rafting and climbing use; distinguish day users, multi-day guests, repeat visits, and pass-through traffic. In addition to automated onsite counters, the agency should engage gateway

					communities in survey and data collection, including QR codes that launch a survey app.
WI	DOI/NPS	Apostle Islands Visitor Count Study	Mobile device location; Automated on-site counters	Apostle Islands National Lakeshore in Wisconsin covers approximately 69,372 acres. This includes about 35,000 acres of land spread across 21 islands and a 12-mile stretch of mainland shoreline along Lake Superior. The remaining acreage accounts for the surrounding water area of Lake Superior. The park is renowned for its sea caves, lighthouses, historic sites, and natural beauty, offering opportunities for kayaking, sailing, hiking, and camping. This project will include a visitor count study to update count protocols at APIS using mobility data acquired from cell phone applications. These spatial and temporal data will be analyzed to characterize visitor use throughout the park. On-the-ground counts (e.g., vehicle counters) will be used to calibrate and correct the mobility data. This research will provide empirical data to inform decisions related to Visitor Use Management and Visitor Services at APIS, specifically in the Meyers Beach and Little Sand Bay areas of the park to determine how visitors move at/through these locations and along the trail that runs north of Meyers Beach.	In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
DC	DOI/NPS	National Mall and Memorial Parks	Mobile device location; Automated on-site counters; Manual counting	The National Mall and Memorial Parks (NAMA) encompass more than 1,000 acres of parkland containing many of the United States' more significant natural and cultural resources. Counting visitors is challenging given the area's many access points and urban location. This project will evaluate NAMA's counting procedures using commercially available mobility (i.e., cellphone) data, review current counting equipment, recommend new counters where necessary, and create an online dashboard for staff to view use levels across the park. This study will provide further confidence in the use of mobility data as a method to evaluate and optimize park counting systems and the online dashboard will further increase the utility of these data. NAMA and its friends group are submitting a National Park Foundation (NPF) Innovation Grant Proposal to fund this project.	In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
(Multiple)	DOI/USFWS	Leveraging Digital Mobility	Mobile device location;	Accurately, efficiently, and consistently estimating the total number of visitors to National Wildlife Refuges is challenging for Fish and Wildlife Service managers due	In addition to automated onsite

		Data to Estimate Visitation in National Wildlife Refuges	Social media; Automated on-site counters	to the remote and porous nature of many refuges, staffing levels for visitor services, and the variety of visitor activities. This study tested the use of multiple forms of emerging data to estimate recreation use at 13 refuges with on-the-ground counts of visitation. Data from mobile device location providers, social media platforms, and a community science platform were incorporated. Statistical models that used emerging data sources, on-site counts, and information about refuges showed that emerging data were useful in models to estimate recreation use at refuges but not without limitations. For instance, the mobile device location data products were inconsistent with each other and were potentially not reliable from year to year. The study highlighted the importance of using on-site data with emerging data and the benefit of using more than one type of emerging data. This Leveraging Digital Mobility Data to Estimate Visitation in National Wildlife Refuges study was published in 2025.	counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
(Nationwide)	DOI/BLM	Leveraging Digital Mobility Data to Estimate Visitation at Bureau of Land Management Sites	Social media; Mobile device location; Automated on-site counters; Visitor-provided information	On-site methods for collecting visitation data can be expensive and time-consuming, particularly in remote places like many of the areas managed by the Bureau of Land Management (BLM). BLM, together with the U.S. Geological Survey (USGS) and the University of Washington, evaluated the use and accuracy of digital mobility data (including mobile device data) to help estimate visitation at 70 BLM sites, some of which are remote and have dispersed use, across 10 states. The study highlighted that mobile device data on its own was not an accurate representation of visitation to these sites, but that it could be useful in a larger statistical model to help estimate visitation at sites with no data. This study, Leveraging Digital Mobility Data to Estimate Visitation at Bureau of Land Management Sites, will be published in 2026. BLM continues to partner with USGS and the University of Washington to improve methods for using mobile device data to estimate visitation at remote sites with dispersed use.	The agency should organize the data by activity and site type. Pair mobile data with road/trail counters, permits, OHV registration or route information, voluntary app data, outfitter records, and targeted surveys. In addition to automated onsite counters, the agency should engage gateway communities in

					survey and data collection, including QR codes that launch a survey app.
MD	NOAA	Mallows Bay NMS	Mobile device location	Utilize human mobility data to estimate recreational use. This study will rely on secondary data to collect a count of visitors to the sanctuary.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
MI	NOAA	Harrisville State Park Access Point to Thunder Bay NMS	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Thunder Bay NMS. There is also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and

					parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
MI	NOAA	Thompson Harbor State Park access point to Thunder Bay NMS	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Thunder Bay NMS. There is also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets. This is believed to be a lower use site.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
MI	NOAA	40 Mile Point access point to	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Thunder Bay NMS. There is	Capture boating, paddling, diving, fishing, beach

		Thunder Bay NMS		also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets.	access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
WI	NOAA	Amsterdam Dunes access to Wisconsin Shipwreck Coast NMS	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Wisconsin Shipwreck Coast NMS. There is also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets. This is believed to be a lower use site.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors

					from paddlers and other boaters.
WI	NOAA	Kohler Andrae State Park access to Wisconsin Shipwreck Coast NMS	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Wisconsin Shipwreck Coast NMS. There is also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
NY	NOAA	Sterling Nature Center access to Lake Ontario NMS	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Lake Ontario NMS. There is also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental

					bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
NY	NOAA	Sodus Point Lighthouse - Lake Ontario NMS	On-site data; Mobile device location	Estimate recreational use on and near the sanctuary. This study will utilize partner efforts to collect visitation and use data in and around Lake Ontario NMS. There is also an opportunity to utilize human mobility data to estimate total counts of recreation to understand the accuracy of secondary data sets.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
CA	NOAA	Manchester Beach - Greater Farallones NMS	Mobile device location	Utilize human mobility data to estimate recreational use. This study will rely on secondary data to collect a count of visitors to Greater Farallones NMS. This is believed to be a low use site.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on

					types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.
CA	NOAA	Salmon Creek Beach - Greater Farallones NMS	Mobile device location	Utilize human mobility data to estimate recreational use. This study will rely on secondary data to collect a count of visitors to Greater Farallones NMS. This is believed to be a low use site.	Capture boating, paddling, diving, fishing, beach access, coastal tourism, and information on types of marine vessel recreation. Add launch and parking counts, guided tour/rental bookings, group registrations, and manual observations. Distinguish shoreline visitors from paddlers and other boaters.

GA	USACE	Hartwell Lake	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	In 2023, ORR provided Hartwell, GA a grant to help stimulate their efforts to grow an outdoor recreation economy. They are a previous participant in the Recreation Economy for Rural Communities program, and improvements in data collection at Lake Hartwell will be vital to supporting their efforts. Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment

					results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than as an aggregated “camping” figure. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
MA	USACE	Cape Cod Canal	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground

					reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
TN	USACE	J. Percy Priest Lake	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access

					point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated "camping" figure. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
PA	USACE	Raystown Lake	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	The pilot could inform campground, marina, trail, and staffing investments and show how boating, RV travel, lodging, and trail use

					combine to support a rural destination economy. Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated “camping” figure. ORR members could support survey tools with QR code

					posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
WA	USACE	Washington Ship Canal	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey

					information and can likely pull data from Rec.gov.
CA	USACE	Bay Model	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated "camping" figure. ORR members could support survey tools with QR code posters/stickers

					posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
MT	USACE	Libby Dam	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated “camping” figure.

					ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
FL	USACE	Lake Okeechobee	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately

					rather than an aggregated "camping" figure. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.
ND	USACE	Garrison Dam and Lake Sakakawea	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Results could support marina and campground capacity, access-road and ramp maintenance, seasonal staffing, and a clearer picture of visitor spending in rural communities around the reservoir. Pair comment cards with ramp and parking counts, marina and guide

					bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated "camping" figure. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey information and can likely pull data from Rec.gov.

AR, OK	USACE	McClellan–Kerr Arkansas River Navigation System (MKARNS)/Grainer	Comment cards	Ongoing, voluntary customer comment surveys that take place annually during the lake's recreation season	Pair comment cards with ramp and parking counts, marina and guide bookings, tournament/permit data, campground reservations, mobile data, and targeted activity surveys. Segment results by access point, activity, visitor origin, and season. This pilot could capture RV, tent, and other overnight stay types separately rather than an aggregated "camping" figure. ORR members could support survey tools with QR code posters/stickers posted throughout the lake to gather survey

					information and can likely pull data from Rec.gov.
AK	FS	Tongass National Forest, boat and plane dispersed area visitors	Visitor questionnaires	This study gathers information about recreation use patterns by southeast Alaska residents who use boats or planes to recreate in the dispersed areas of the Tongass National Forest. These visitors are not always intercepted in the standard Forest Service recreation monitoring activities.	The pilot could improve docks, cabins, access, safety, and visitor services while documenting the economic role of guided trips, marine transport, lodging, and seasonal employment in remote communities.
CO	FS	Arapaho and Roosevelt National Forests Transportation and Visitor Use Study - Brainard Lake, Guanella Pass, and Mount Blue Sky	Handheld GPS units; Automated on-site counters; Visitor questionnaires	The collection and evaluation of baseline transportation and visitor use data provided a foundation for defining transportation and visitor use management needs, opportunities, and management constraints. A variety of data types were collected from each study site to understand current conditions and desired future conditions. Data types collected include visitor surveys, global positioning system (GPS) tracks of hiking patterns, trail use counts, traffic counts, parking lot counts, and recreation--related resource impact assessment used to characterize transportation, recreation and resource-related conditions at each site. https://highways.dot.gov/sites/fhwa.dot.gov/files/docs/federallands/flpp/transportation-studies/28486/arapaho-and-roosevelt-national-forests-transportation-systems-alternatives-study-final-report.pdf	Data could improve reservation, shuttle, parking, and visitor-dispersion decisions while showing how congestion and access policies shift spending among gateway communities and recreation businesses. In addition to

					automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
CA, NH, NY, PA, VT, WA	FS	Okanogan-Wenatchee NF, White Mountain, Green Mountain/Finger Lakes NF, Allegheny NF, Region 5 (Tahoe, Lake Tahoe Basin, and Plumas NFs)	Game cameras; Crowd-sourced data	These studies improve our knowledge about how to use images and crowd-sourced contributions to better measure motorized and non-motorized recreation use in remote, dispersed, recreation settings. This study is also an opportunity for visitors to dispersed recreation trailheads and low-use recreation sites to participate in a community-science effort to better measure recreation visitation. To participate, recreationists send an SMS text message with the count of traffic they observed at a study recreation site.	The agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
(Nationwide)	FS	Multiple national forests across the U.S.	Mobile device location; Automated on-site counters; Community-science data	This study will yield statistical models that use multiple types of data, including on-site counts and emerging data sources, to estimate the number of visits. Recreation use estimates will be constructed for recreation settings attracting dispersed activities and other hard-to-measure recreation use. This project will build from recent models developed from these types of data for national forests: https://research.fs.usda.gov/treesearch/69988	In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.

AZ, CA, CO, ID, MT, NM, OR, WA	FS	High wildfire risk national forests located in the western U.S.	Social media	This study developed estimates of recreation visits and the associated economic benefits to recreationists for firesheds within national forests identified as initial investment landscapes in the Wildfire Crisis Strategy. These firesheds represent large landscapes of dispersed recreation. https://doi.org/10.2737/RDS-2024-0080	Results could inform closure communications, recovery funding, staffing, and visitor redistribution while measuring lost or shifted demand for lodging, camping, guides, retail, food, and transportation. Bolstering recreation resilience to natural disasters is a major priority at ORR, and better data will help recreation infrastructure build back sooner. Activity-platform data could also help measure changes in hiking, running, and cycling use before, during, and after wildfire closures, including

					displaced recreation demand and patterns of recovery following reopening.
(Nationwide)	FS	Multiple national forests across the U.S.	Visitor questionnaires	This proposed project would use previously collected on-site visitor survey data to understand the extent and characteristics of visitation to engage in recreation activities not currently reported or difficult to capture in the Forest Service recreation monitoring program standard set of activities. For example, potential activities that could be examined include rock climbing, snowmobiling, rafting, and backcountry skiing. The goal of this project would be to identify opportunities to expand the Forest Service recreation visitor questionnaire or the sample site selection to better account for visitors engaged in activities not currently reported.	
ID	FS	Salmon, Idaho, Salmon-Challis NF - Salmon River Wild and Scenic River	Game cameras; Automated on-site counters	This study focused on river recreation use that is hard to measure and describe through visitor intercept sampling. The information collected in this study was intended to improve understanding of current recreation use patterns in the context of efforts to maintain National Wild and Scenic River values. https://www.fs.usda.gov/rds/archive/catalog/RDS-2025-0043	The pilot could improve launch and campsite capacity, permit allocation, safety, and maintenance while documenting demand for outfitting, lodging, shuttles, food, and transportation. In addition to automated onsite counters, the agency should engage gateway

					communities in survey and data collection, including QR codes that launch a survey app.
MT	FS	Missoula, MT, Lolo NF, Rattlesnake National Recreation Area	Visitor questionnaires; Handheld GPS units	This study focused on a dispersed recreation area popular with local residents engaging in a wide range of recreation activities. This study provided information useful for understanding recreation congestion, safety, and access. https://www.fs.usda.gov/rds/archive/catalog/RDS-2024-0005	A successful protocol could improve trail and river maintenance, shuttles, permits, and access.
(to be determined)	FS	To be determined	Mobile device location; Automated on-site counters	This proposed project would develop pilot protocols for measuring recreation use at linear recreation features such as trails or rivers using mobility data and automatic counters. Recreation use patterns at these sites are hard to fully measure because linear features frequently have many entry and exit points and, in some cases, visitors travel only one way, which limits the opportunity to include them in recreation monitoring.	The agency should select at least one trail and one river, including one high-use and one dispersed/low-use site, with multiple entry/exit points and willing industry partners. Publish selection criteria and combine counters, mobile data, permits, shuttles, and partner data. In addition to

					automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.
CA	FS	Cleveland NF (Cha'chaany Hamuk Trailhead and San Diego River Gorge Trailhead)	Visitor questionnaires; Automated on-site counters; Mobile device location	This study used information from a visitor survey, trail counter data, and cell phone data to complete a capacity use determination and rationing strategy for 2 trails on the forest, given current use levels. https://research.fs.usda.gov/download/treesearch/80206.pdf	The agency should push for infrastructure investment as the first response to capacity findings, not just access rationing. In addition to automated onsite counters, the agency should engage gateway communities in survey and data collection, including QR codes that launch a survey app.