# FEDERAL PUBLIC ROAD MILEAGE Federal Lands Coordination 

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Why Collect Certified Public Road Mileage (what is 23 CFR 460 ?)

- Prescribes the Policies and Procedures to identify and report Public Road Mileage.
- Public Road Mileage is a key component of a statutory formula for apportionment of highway safety funds.


## 23 CFR 460 Requirements

Highway Safety Programs require safety funds apportionment based on formula using Population and Public Road Mileage of each state.

- Mileage must be certified by the state Governor or his designee and subject to the approval of the Federal Highway Administrator.
- Public Road Mileage must be determined as of the end of each calendar year preceding the year funds are apportioned.


## 23 CFR 460 Requirements (continued)

Each State must annually submit a Public Road Mileage Certification of Public Road Miles within the state to the state FHWA Division Administrator.

- Due June 1 of each year.
- Indian Reservation Public Road Mileage within state must be identified and included in state mileage.


## 23 CFR 460 Definitions (continued)

a) Public road
means any road under the jurisdiction of and maintained by a public authority and open to public travel.

## 23 CFR 460 Definitions (continued)

(b) Public authority
means a Federal, State, county, town, or township, Indian tribe, municipal or other local government or instrumentality thereof, with authority to finance, build, operate or maintain toll or toll-free highway facilities.

## 23 CFR 460 Definitions (continued)

(c) Open to public travel means that the road section is available, except during scheduled periods, extreme weather or emergency conditions, passable by four-wheel standard passenger cars, and open to the general public for use without restrictive gates, prohibitive signs, or regulation other than restrictions based on size, weight, or class of registration. Toll plazas of public toll roads are not considered restrictive gates.

## 23 CFR 460 Definitions (continued)

(d) Maintenance
means the preservation of the entire highway, including surfaces, shoulders, roadsides, structures, and such traffic control devices as are necessary for its safe and efficient utilization.

## REPORTING PUBLIC ROAD MILEAGE Collecting Federal Lands Mileage.

- Traditional Process
- Establish Official Agency Headquarters/Central Office POC to Provide Annual Mileage Updates.
- Solicit Mileage updates from Agencies On an Annual Basis with mileage attributes by state.
- Distribute Summary Table by Agency Within State (FEDMILE and Fedupda20xx), and package with supporting Agency Data files.

| STATE | BIA | Indian | BLM | FS | NPS | CORPS | ARMY | Naw |  | ARS | BOR |  |  |  | FWS |  |  |  | TVA | TOTAL** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 | Nation* | 2014 | 2014 | 2015 | 2014 | 2014 | 2010 | 2010 | 2010 | 2013 | 2002 | 2014 | 2004 | 2009 | 1998 | 2004 | sonian | 2002 | All |
|  | Fed* | 2015 | $\mathrm{Fed}^{\star}$ | $\mathrm{Fed}^{*}$ | Fed* | $\mathrm{Fed}^{*}$ | $\mathrm{Fed}^{\text {k }}$ | $\mathrm{Fed}^{*}$ | Fed | Fed | $\mathrm{Fed}^{*}$ | Fed | Fed | Fed | $\mathrm{Fed}^{*}$ | Fed | Fed | Fed | $\mathrm{Fed}^{*}$ | Fed |
| ALABAMA | 11 | 3 |  | 525 | 96 | 139 | 597 | 6 |  |  |  |  |  |  | 80 |  |  |  | 26 | 1,480 |
| ALASKA | 603 | 3,084 | 24 | 661 | 172 | 9 | 98 | 169 |  |  |  | 2 |  |  | 90 |  |  |  |  | 1,828 |
| ARIZONA | 8,669 | 3,756 | 218 | 2,634 | 999 | 0 | 574 | 92 |  |  | 445 |  |  |  | 414 |  |  | 8 |  | 14,053 |
| ARKANSAS |  |  |  | 1,271 | 163 | 429 | 133 | 0 |  |  |  |  | 1 |  | 285 |  |  |  |  | 2,282 |
| CALIFORNIA | 800 | 346 | 601 | 8,300 | 2,060 | 161 | 647 | 8,164 |  |  | 28 |  | 0 |  | 169 |  | 1 |  |  | 20,931 |
| COLORADO | 471 | 2 | 137 | 4,153 | 343 | 3 | 176 |  |  |  | 428 |  | 2 |  | 69 |  |  |  |  | 5,781 |
| CONNECTICUT | 4 | 28 |  |  | 0 | 33 | 3 | 47 |  |  | - |  |  |  | 0 |  |  |  |  | 87 |
| DELAWARE |  |  |  |  |  | 0 | 3 | 0 |  |  |  |  |  |  | 11 |  |  |  |  | 14 |
| DISTRICT OF COL |  |  |  |  | 57 | 0 | 5 | 24 | 7 |  |  |  |  |  |  |  |  |  |  | 93 |
| FLORIDA | 183 | 26 |  | 1,245 | 188 | 10 | 6 | 415 |  |  |  |  |  |  | 126 |  | 60 |  |  | 2,235 |
| GEORGIA |  |  |  | 594 | 107 | 215 | 1,268 | 240 |  | 3 |  |  |  |  | 66 |  |  |  | 4 | 2,497 |
| HAWAII |  |  |  |  | 108 |  | 101 | 428 |  |  | - |  |  |  | 5 |  |  |  |  | 642 |
| IDAHO | 669 | 19 | 1,030 | 6,355 | 30 | 15 | 2 | 1 |  | 3 | 4 |  | 16 |  | 31 |  |  |  |  | 8,156 |
| ILLINOIS | - | 0 |  | 115 | - | 125 | 67 | 719 |  |  | - |  | 2 |  | 79 |  |  |  |  | 1,106 |
| Indiana | 5 | - |  | 46 | 9 | 15 | 30 | 414 |  |  |  |  |  |  | 25 |  |  |  |  | 544 |
| IOWA | 10 | 15 |  |  | 2 | 118 | 60 | 0 |  |  | - |  |  |  | 37 |  |  |  |  | 227 |
| KANSAS | 231 | 57 |  | 60 | 2 | 231 | 280 | 0 |  |  | 190 |  |  |  | 64 |  |  |  |  | 1,058 |
| KENTUCKY |  |  |  | 667 | 97 | 106 | 361 | 5 |  |  |  |  | 17 |  | 0 |  |  |  | 15 | 1,268 |
| Louisiana | 29 | 6 |  | 679 | 2 | 114 | 714 | 30 |  |  |  |  |  |  | 137 |  |  |  |  | 1,706 |
| MAINE | 491 | 1 |  | 21 | 120 |  | 2 | 76 |  |  | - |  |  |  | 22 |  |  |  |  | 731 |
| MARYLAND |  |  |  |  | 156 | 2 | 425 | 235 |  | 16 | - |  |  |  | 27 |  | 1 | 5 |  | 867 |
| MASSACHUSETTS | 5 | 1 |  |  | 19 | 43 | 52 | 14 |  |  | - |  |  |  | 12 |  |  |  |  | 144 |
| MICHIGAN | 73 | 77 |  | 1,540 | 28 |  | 47 | 0 |  |  |  |  |  |  | 24 |  |  |  |  | 1,713 |
| MINNESOTA | 939 | 48 |  | 1,027 | 28 | 17 | 27 | 3 |  |  | - |  |  |  | 115 |  |  |  |  | 2,156 |
| MISSISSIPPI | 120 | - |  | 795 | 364 | 194 | 5 | 85 |  |  |  |  |  |  | 125 |  |  |  |  | 1,688 |
| MISSOURI |  |  |  | 391 | 78 | 231 | 199 | 3 |  |  |  |  | 1 |  | 70 |  |  |  |  | 973 |
| MONTANA | 2,454 | 2,016 | 247 | 8,291 | 239 | 57 | 9 | - |  |  | 55 |  |  |  | 770 |  |  |  |  | 12,122 |
| NEBRASKA | 108 | 29 |  | 81 | 7 | 14 | 13 | - |  |  | 182 |  |  |  | 62 |  |  |  |  | 467 |
| NEVADA | 704 | 101 | 625 | 637 | 572 | 3 | 453 | 123 |  |  | 4 |  |  |  | 427 |  |  |  |  | 3,549 |
| NEW HAMPSHIRE |  |  |  | 136 | 1 | 42 | 2 | 2 |  |  |  |  |  |  | 9 |  |  |  |  | 193 |
| NEW JERSEY |  |  |  |  | 85 |  | 62 | 149 |  |  |  |  | 0 |  | 12 |  |  |  |  | 308 |
| NEW MEXICO | 6,102 | 1,732 | 683 | 1,776 | 101 | 36 | 1,857 |  |  |  | 181 |  | 35 |  | 42 |  |  |  |  | 0,812 |
| NEW YORK | 58 | 138 |  | 1 | 54 | 2 | 410 | 20 |  |  |  |  | 35 |  | 6 |  |  |  |  | 586 |
| NORTH CAROLINA | 173 | 220 |  | 930 | 447 | 32 | 257 | 966 |  |  |  |  |  |  | 194 |  |  |  | 8 | 3,007 |
| NORTH DAKOTA | 588 | 51 |  | 622 | 51 | 36 | 7 | - |  | 2 | 50 |  |  |  | 144 |  |  |  |  | 1,500 |
| OHIO |  |  |  | 60 | 7 | 66 | 83 | 1 |  |  | - |  | 40 |  | 6 |  | 1 |  |  | 264 |
| OKLAHOMA | 7 | 69 |  | 117 | 26 | 300 | 542 | 1 |  |  | 128 |  |  |  | 90 |  |  |  |  | 1,211 |
| OREGON | 885 | 838 | 13,510 | 5,542 | 79 | 36 | 2 | 24 |  |  | 18 |  |  |  | 197 |  |  |  |  | 20,293 |
| PENNSYLVANIA |  |  |  | 507 | 118 | 124 | 234 | 52 |  |  |  |  |  |  | 1 |  |  |  |  | 1,036 |
| RHODE ISLAND | 25 | 1 |  |  |  |  | 3 | 87 |  |  |  |  |  |  | 2 |  |  |  |  | 117 |
| SOUTH CAROLINA | 13 | 1 |  | 885 | 12 | 50 | 295 | 427 |  |  |  |  | 8 |  | 158 |  |  |  |  | 1,847 |
| SOUTH DAKOTA | 1,321 | 1,383 |  | 615 | 113 | 27 | 1 |  |  |  | 83 |  |  |  | 71 |  |  |  |  | 2,231 |
| TENNESSEE |  |  |  | 542 | 394 | 98 | 211 | 52 |  |  |  |  | 28 |  | 93 |  |  |  | 131 | 1,550 |
| TEXAS | 40 | 147 |  | 765 | 517 | 414 | 885 | 167 |  |  | 38 |  |  |  | 125 | 4 |  |  |  | 2,955 |
| UTAH | 747 | 362 | 247 | 2,210 | 765 |  | 259 | 8 |  |  | 70 |  | 3 |  | 80 |  |  |  |  | 4,390 |
| VERMONT |  |  |  | 78 |  | 24 | 12 | 0 |  |  |  |  |  |  | 41 |  |  |  |  | 156 |
| VIRGINIA |  |  |  | 803 | 577 | 61 | 655 | 570 |  |  | - |  |  | 27 | 30 |  |  |  |  | 2,724 |
| WASHINGTON | 1,468 | 160 |  | 3,946 | 337 | 105 | 454 | 473 |  |  | 6 |  | 55 |  | 181 |  |  |  |  | 7,025 |
| WEST VIRGINIA |  |  |  | 669 | 31 | 87 | 8 | 24 |  |  | - |  |  |  | 8 |  |  |  |  | 827 |
| WISCONSIN | 580 | 177 |  | 2,112 | 3 | 18 | 165 | 38 |  |  |  |  |  |  | 23 |  |  |  |  | 2,939 |
| WYOMING | 402 | 1,024 | 537 | 2,196 | 658 |  |  | - |  |  | 108 |  | 167 |  | 72 |  |  |  |  | 4,141 |
| AMERICAN SAMOA |  |  |  |  | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GUAM NORTHERN MARIANA ISLANDS |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 2 |  |  |  |  | 2 3 |
| NORTHERNMA PUERTO RICO |  |  |  | 0 | 1 |  | 51 | 55 |  |  |  |  |  |  | 17 |  |  |  |  | $\begin{array}{r}3 \\ 124 \\ \hline\end{array}$ |
| VIRGIN ISLANDS |  |  |  |  | 28 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  | 30 |
| GRAND TOTAL | 28,988 | 15,918 | 17,859 | 64,600 | 10,453 | 3,842 | 12,812 | 14,410 | 7 | 24 | 2,015 | 2 | 409 | 27 | 4,955 | 4 | 63 | 13 | 184 | 160,668 |

## Federal Agency Public Road Mileage Issues

- Discrepancies reported to exist in Federal Agency Mileage as determined by State DOTs or local Federal Agency Offices vs. Federal Agency Headquarters/Central Offices.
- Integrity of the Authoritative Source for Agency Mileage is questioned.
- Traditional Federal Public Road Mileage Reporting has lacked QA or Validation Capability.
- Untimely, Inconsistent and often Incomplete Reporting of Agency Public Road Mileage from year to year.


## Federal Agency Public Road Mileage Questions?

- Does Office of Highway Policy Information Have Shape Files/Geospatial data Representing Federal Agencies Public Road Mileage to share?
- Do Federal Agencies have shape files/Geospatial data and are they willing to share it?


## Federal Lands Coordination Progress

- Coordinate collection of Geospatial Data from Federal Agency Partners
- Promote an authoritative and accurate reporting of Federal Public Road Mileage.
- Establish a QA Methodology.
- Facilitate the ability of users to locate new and existing Federal Public Road mileage.


## If you have questions, contact...

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Public Roads - Federal Land Management Agencies data submittal


## Federal Lands Transportation Program (FLTP)

## Federal Lands Planning Program (FLPP)

Established to improved the transportation infrastructure owned and maintained by:



Mission: The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations

- 10,453.22 Public Miles (5600 paved)
- 52 states
- 5,438 Public Miles
- 53 states

Mission:
Work with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.


The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

- 2,621 Public Miles
- 17 states


The U.S. Army Corps of Engineers is one of the nation's leading federal providers of outdoor recreation

- 5,372 Public Miles
- 43 states


## US Army Corps of Engineers*

The Bureau of Land Management's mission is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

- 45,829 Public Miles
- 12 states


The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations.

- 63,867 Public Miles
- 43 states


## Challenges

- Roads not part of their "mission"
- Don't think in terms of state boundaries
- Consistency


## 2014 / 2015

- Minimum Route ID Table
- $1^{\text {st }}$ Request for partner road data (Route ID data and GIS)


## $\underline{2018}$

- Minimum Route ID Table updated
- Official Request for public road data
- Link to Certified Public Road Miles
- High Level QA of data


# 2018 QA REPORT 

Submittal of all public road data owned by Federal Land Management Agencies (FLMAs)<br>within the Federal estate

Minimum Route Identification Information, Route GIS Data, Public Miles by State

| Field Name | Requirement Description | BLM | USBR | FWS | USFS | USACE | NPS | PRESIDIO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OWNERSHIP | Minimum Requirement | 100\% | 100\% | 100\% | 100\% | 0\% | 0\% | 100\% |
| MAINTENANCE_OPERATIONS | NEW Minimum Requirement | 100\% | 78\% | 100\% | 99\% | 0\% | 0\% | 100\% |
| FLMA_ROUTE_IDENT | Minimum Requirement | 0\% | 0\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| FLMA_REGION | Minimum Requirement | 100\% | 100\% | 100\% | 100\% | 0\% | 0\% | 100\% |
| FLMA_UNIT_ID | Minimum Requirement | 100\% | 100\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| RTE_NAME | Minimum Requirement | 100\% | 86\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| ASSET_TYPE | Minimum Requirement | 100\% | 100\% | 100\% | 0\% | 0\% | 100\% | 100\% |
| FROM_DESC | Minimum Requirement | 93\% | 67\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| TO_DESC | Minimum Requirement | 93\% | 67\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| VER_DATE | Minimum Requirement | 100\% | 0\% | 100\% | 0\% | 0\% | 100\% | 100\% |
| FLTP | Minimum Requirement | 100\% | 100\% | 100\% | 20\% | 0\% | 0\% | 100\% |
| RTE_LENGTH | Minimum Requirement | 100\% | 100\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| STATE | Minimum Requirement | 100\% | 100\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| SURF_TYPE | Minimum Requirement | 100\% | 100\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| FACILITY_TYPE | NEW Minimum Requirement | 100\% | 100\% | 100\% | 0\% | 0\% | 0\% | 100\% |


| Field Name | Requirement Description | BLM | USBR | FWS | USFS | USACE | NPS | PRESIDIO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PAVED_MI | Recommended | 0\% | 100\% | 0\% | 0\% | 0\% | 100\% | 100\% |
| UNPAVED_MI | Recommended | 0\% | 100\% | 0\% | 0\% | 0\% | 100\% | 0\% |
| RTE_NO | Recommended | 0\% | 100\% | 100\% | 100\% | 0\% | 100\% | 0\% |
| FUNCT__CLASS | Recommended | 99\% | 100\% | 100\% | 100\% | 0\% | 100\% | 100\% |
| USER_ACCESS | Recommended | 0\% | 100\% | 100\% | 0\% | 0\% | 100\% | 100\% |
| SQ_FEET | Recommended | 0\% | 0\% | 100\% | 0\% | 0\% | 100\% | 100\% |
| RTE_WIDTH | Recommended | 0\% | 100\% | 100\% | 0\% | 0\% | 100\% | 100\% |
| NO_LANES | Recommended | 100\% | 100\% | 100\% | 99\% | 0\% | 100\% | 100\% |

<= 50\%
$>50 \%$ AND < $=75 \%$

## Compared 2 sets of Tabular data

| STATE | Certified Public Road Miles 04/2018 | Route ID Calculated Miles | Certified vs Route ID \% |
| :---: | :---: | :---: | :---: |
| AK | 91.97 | 91.96 | 100.01\% |
| AL | 84.03 | 85.05 | 98.80\% |
| AR | 321.04 | 319.16 | 100.59\% |
| AZ | 558.87 | 559.46 | 99.89\% |
| CA | 177.51 | 165.88 | 107.01\% |
| co | 73.11 | 73.66 | 99.65\% |
| CT | 0.13 | 0.13 | 100.00\% |
| DE | 10.74 | 10.74 | 99.99\% |
| FL | 124.48 | 124.49 | 100.00\% |
| GA | 79.84 | 80.47 | 99.21\% |
| GU | 1.90 | - | 0.00\% |
| HI | 5.91 | 5.91 | 100.00\% |
| IA | 25.37 | 27.18 | 93.32\% |
| ID | 51.34 | 51.17 | 100.34\% |
| IL | 55.52 | 75.32 | 73.71\% |
| IN | 26.29 | 26.28 | 100.03\% |
| KS | 64.30 | 57.13 | 112.54\% |

Compared Tabular Data (certified miles)
To GIS Data

| State | Certified Public Road Miles from 09/2017 Confirmed 03/2018 | GIS Calculated Miles | Certified vs GIS \% |
| :---: | :---: | :---: | :---: |
| NV | 5,942.00 | 5,535.55 | 107.34\% |
| OR | 19,122.00 | 18,735.89 | 102.06\% |
| SD |  | 9.50 | 0.00\% |
| TX |  | 0.08 | 0.00\% |
| UT | 2,861.00 | 2,797.07 | 102.29\% |
| WA | 62.00 | 64.21 | 96.56\% |
| WY | 2,726.00 | 2,137.87 | 127.51\% |

<= 75\% OR => $125 \%$

## Compared Tabular Data (Route ID) To GIS Data

| State | Route ID Calculated Miles | GIS Calculated Miles | Route ID vs GIS \% |
| :---: | :---: | :---: | :---: |
| AZ | 245.55 | 266.61 | 92.10\% |
| CA | 418.18 | 375.84 | 111.27\% |
| CO | 158.97 | 158.88 | 100.06\% |
| ID | 234.81 | 199.81 | 117.52\% |
| KS | 209.92 | 211.97 | 99.03\% |
| MT | 304.45 | 304.45 | 100.00\% |
| ND | 88.71 | 102.71 | 86.37\% |
| NE | 137.05 | 136.76 | 100.21\% |
| NM | 271.74 | 271.98 | 99.91\% |
| NV | 17.20 | 35.98 | 47.82\% |
| OK | 71.58 | 69.13 | 103.54\% |
| OR | 86.25 | 85.99 | 100.30\% |
| SD | 41.81 | 41.79 | 100.04\% |
| TX | 21.33 | 21.33 | 99.99\% |
| UT | 74.17 | 73.78 | 100.54\% |
| WA | 44.79 | 44.77 | 100.03\% |
| WY | 170.66 | 215.20 | 79.31\% |
| TOTAL | 2,597.17 | 2,616.98 | 99.24\% |

## Positive

- Almost all partners wanted to update their data and provide better data


## Challenges

- Multiple submittals = more work
- FLH had to manually crosswalk field names


## Sharing partner data

- Increased willingness to share
- Increased confidence in their data
- Some require formal Agreements to share
- Continued emphasis on sharing data

Next Submittal from FLMAs Jan 2019

## NHS Routes Discrepancies

- NPS owned NHS routes reported in HPMS
- NPS GIS overlaid on NHS GIS
- Example - TN
- HPMS shows 0 NPS owned NHS routes
- GIS analysis found 19.5 miles


## QUESTIONS?



## Thank You

