

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
High-Cost Universal Service Support)	WC Docket No. 05-337
)	

**ERRATUM TO
APPLICATION FOR REVIEW**

On June 10, 2013, Silver Star Telephone Company, Inc. (Silver Star), filed an Application for Review (Application) via the Commission’s electronic filing system and by hand, asking the Commission to review a decision of the Wireline Competition Bureau (WCB) to deny, in part, expedited waiver requests filed by Silver Star to correct erroneous data used in the quantile regression analysis model. This erratum seeks to correct a few non-substantive errors in the Application for Review concerning the exhibits as follows:

1. At page 9 of the Application, the exhibit number for the HCLS Geospatial Workflow 2012, has been changed from Exhibit 6 to Exhibit 6-A. This change also has been made to the cover page for the exhibit.
2. At page 10, line 1 of the Application, the reference to Exhibit 3 has been changed to Exhibit 1.
3. An electronic version of Exhibit 4 is provided with this erratum. The exhibit was filed manually on June 10, 2013, but it was not accepted by the Commission’s electronic filing system due to size constraints. Commission staff has explained how the file can be submitted electronically and we are doing so for the Commission’s convenience.
4. Exhibit 7 is corrected to include the heading information in the email from the WCB to Silver Star.

A complete copy of the Application that includes the corrections shown above is being filed with this Erratum (except for the shapefiles that were submitted on a CD-ROM with the hand-filed Application only).

Respectfully submitted,

SILVER STAR TELEPHONE
COMPANY, INC.

By: /s/ Mary J. Sisak

Blooston, Mordkofsky, Dickens, Duffy &
Prendergast, LLP
2120 L Street, NW, Suite 300
Washington, DC 20037
202-659-0830

Dated: June 11, 2013

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
High-Cost Universal Service Support)	WC Docket No. 05-337

**SILVER STAR TELEPHONE COMPANY
APPLICATION FOR REVIEW**

Mary J. Sisak
Blooston, Mordkofsky, Dickens,
Duffy, & Prendergast, LLP
2120 L Street NW, Suite 300
Washington, DC 20037
Tel: 202-659-0830
Fax: 202-828-5568

Filed June 10, 2013

Table of Contents

Executive Summary iii

I. Background1

II. The WCB Erred in its Conclusion that Silver Star did not Demonstrate the Superiority of Tier Line Data.....4

A. Silver Star Demonstrated that the ESRI Data is Grossly Inaccurate4

B. The Use of ESRI Version 9.3 Instead of 10.0 is an Insignificant Error that Does Not Change the Result5

C. Tiger Line Includes Local Roads that are Not Included in ESRI5

III. The WCB has Granted a Similar Waiver Based on a Similar Showing8

IV. The WCB Erred in its Conclusions Concerning the Inclusion or Exclusion of Certain Road Types.....9

V. The WCB Did Not Address Silver Star’s Request to Correct Density Data10

VI. Conclusion11

Summary

The WCB claimed that it would correct errors in the data used in the regression model. However, in denying Silver Star's request to correct grossly inaccurate data concerning road miles and road crossings, the WCB failed to give serious consideration to the showing made by Silver Star of the significant errors in the ESRI Street Map road and road crossing data for its study areas. Rather, the WCB focused on an error made by Silver Star, which has no appreciable impact on the issues raised in the waivers, and an alleged error in Tiger Line data, which appears not to be an error at all.

In addition, although the WCB acknowledges that Silver Star asked that the density data be corrected, the WCB's Order does not discuss or address this issue. Because the WCB granted Silver Star's waiver to change the Idaho study area boundary, the density for Idaho must be recalculated under the WCB's own procedures. For the Wyoming study area, density calculated by WCB does not appear to be correct based on the square mileage and housing units in the regression model. In any event, the WCB is required to at least address this issue.

Therefore, Silver Star asks the Commission to reverse the WCB's findings as to the ESRI and Tiger Line data and to order the WCB to correct the density, road miles and road crossing data, as shown in the waiver petitions. Silver Star requests that these corrections be applied to the benchmark methodology effective July 1, 2012.

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
High-Cost Universal Service Support)	WC Docket No. 05-337

APPLICATION FOR REVIEW

Silver Star Telephone Company, Inc. (Silver Star), by its attorney, requests that the Commission review and reverse the Wireline Competition Bureau's (WCB's) May 9, 2013, *Order*¹ in which the WCB refused to correct the erroneous data used in the quantile regression analysis model concerning density, road miles and road crossings for Silver Star's Idaho and Wyoming study areas. As shown herein, review is merited because the WCB failed to address Silver Star's requests and arguments and the WCB made erroneous findings as to important and material questions of fact. Silver Star requests that the Commission correct the erroneous data and apply the corrections to the benchmark methodology effective July 1, 2012.

I. Background

On September 27, 2012, Silver Star filed Expedited Waiver Requests² pursuant to the procedure established by the WCB in the *HCLS Benchmarks Implementation Order*³ to correct

¹ *Connect America Fund; High-Cost Universal Service Support*, Order, WC Docket Nos. 10-90, 05-337 (May 9, 2013) (*Order*).

² In the Matter of the Connect America Fund and High Cost Universal Service Support, WC Docket Nos. 10-90 and 05-337, Expedited Waiver Request of Silver Star Telephone Company, Inc., Idaho Study Area, 472295, filed Sept. 27, 2012; In the Matter of the Connect America Fund and High Cost Universal Service Support, WC Docket Nos. 10-90 and 05-337, Expedited Waiver Request of Silver Star Telephone Company, Inc., Wyoming Study Area 512295 (sic), filed Sept. 27, 2012.

erroneous data concerning density, road miles and road crossings for both its Idaho and Wyoming study areas and to correct erroneous study area boundary data for its Idaho study area. At that time, Silver Star believed that the number of road miles and road crossings used in the benchmark methodology did not match the data shown in the ESRI Street Map for each study area. Thereafter, Silver Star and the WCB staff engaged in discussions and communications to review the WCB's use of the ESRI Street Map data and Silver Star's analysis.

After this further review, Silver Star concluded that the number of road miles and road crossings used in the regression model did match the data shown in the ESRI 2010 Street Map for each study area but that this data is grossly inaccurate for Silver Star. Accordingly, Silver Star amended its Expedited Waiver Requests on January 2, 2013,⁴ asking the WCB to correct the erroneous data on road miles and road crossings. Instead of the ESRI Street Map data, Silver Star asked the WCB to use the Tiger Line 2010 Census data to calculate road miles and road crossings for its Idaho and Wyoming study areas. Silver Star demonstrated that this data more accurately reflects the actual number of road miles and road crossings for Silver Star's Idaho and Wyoming study areas, as confirmed by Silver Star's own records and Idaho and Wyoming county maps.⁵

In its *Order*, the WCB granted Silver Star's request to correct the study area boundary for its Idaho study area. However, the WCB denied Silver Star's request to correct the data

³ *Connect America Fund; High-Cost Universal Service Support*, WC Docket Nos. 10-90, 05-337, Order, 27 Rcd 4235 (Wireline Comp. Bur. 2012) (*HCLS Benchmarks Implementation Order*).

⁴ In the Matter of the Connect America Fund and High Cost Universal Service Support, WC Docket Nos. 10-90 and 05-337, Amendment to Expedited Waiver Request of Silver Star Telephone Company, Inc., Idaho Study Area, 472295, filed Jan. 2, 2013; In the Matter of the Connect America Fund and High Cost Universal Service Support, WC Docket Nos. 10-90 and 05-337, Amendment to Expedited Waiver Request of Silver Star Telephone Company, Inc., Wyoming Study Area 512295 (sic), filed Jan. 2, 2013.

⁵ Silver Star is providing shapefiles of the county maps to allow for comparison to the ESRI and Tiger Line data. The shapefiles are being filed by hand on a CD-Rom.

concerning road miles and road crossings. The WCB did not address Silver Star's request to correct the erroneous density data for the Idaho and Wyoming study areas.

The WCB states that it declined to change the basis for the road information used in calculating Silver Star's caps for 2012 and 2013 because "Silver Star has not demonstrated that the Tiger Line 2010 data are superior to the ESRI data adopted by the Bureau in the *HCLS Benchmarks Implementation Order*."⁶ In support of this conclusion, the WCB states that Silver Star's comparisons were based on ESRI 2010 Street Map version 9.3 "whereas the Bureau used the more recent version 10.0."⁷ The WCB also states that although the example provided by Silver Star "shows that in some cases the ESRI data missed some roads, the Tiger data appear to be overly inclusive, in some cases including driveways and intra-property access routes."⁸ In support of this statement, the WCB states the Tiger Line data for an area in the vicinity of Victor, Idaho, "appear to include a driveway and an intra-property access route that, according to maps, do not constitute actual roads or road crossings, whereas the ESRI data do not include these..."⁹

As shown herein, the WCB's *Order* contains errors of fact; the WCB failed to examine all relevant data; and the WCB failed to articulate a satisfactory explanation for its denial of Silver Star's waiver. Therefore, Silver Star asks the Commission to reverse the WCB's findings as to the ESRI and Tiger Line data and to order the WCB to correct the density, road miles and road crossing data, as shown in the waiver petitions.

⁶ *Order* at ¶7.

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* at n.26.

II. The WCB Erred in its Conclusion that Silver Star Did not Demonstrate the Superiority of Tiger Line Data

The WCB contends that Silver Star failed to demonstrate that the Tiger Line 2010 data are superior to the ESRI data adopted by the Bureau in the *HCLS Benchmarks Implementation Order*. To reach this conclusion, the WCB ignores glaring errors in the ESRI data and focuses on insignificant errors in the waiver filings and Tiger Line data.

A. Silver Star Demonstrated that the ESRI Data is Grossly Inaccurate

In the amendments to the expedited waivers, Silver Star showed that the ESRI Street Map data undercounts road miles and road crossings by approximately one-third for these study areas. To support its position, Silver Star provided a shapefile showing the Tiger Line base map, roads and road crossings for each study area. Silver Star confirmed the Tiger Line data by comparing it to its own internal information on road miles and road crossings and publicly available road maps maintained by the county governments in Idaho and Wyoming that intersect with Silver Star's study areas. Based on its internal records and the county maps, Silver Star was able to determine that the Tiger Line data counts most of the road miles and road crossings in its study areas and that it includes far more road miles and road crossings than the ESRI data.

As an example of its findings, Silver Star provided an aerial photo of a portion of each study area and it overlaid the ESRI road data and the Tiger Line road data for the area, as a visual confirmation of the process it used to determine the discrepancy in road miles and to conclude that the Tiger Line data is far more accurate than the ESRI Street Map data. Silver Star provided a certification from an officer of the company, under penalty of perjury, as to the accuracy of the statements made and information presented in the waiver request.

B. The Use of ESRI Version 9.3 Instead of 10.0 is An Insignificant Error that Does Not Change the Result

There can be no reasonable argument that, as a matter of fact, the ESRI data is accurate for Silver Star or that the Tiger Line data is not superior to the ESRI data. As an initial matter, the WCB challenges Silver Star's findings because Silver Star based its analysis on ESRI version 9.3 and the WCB used version 10.0.¹⁰ However, Silver Star has compared these two versions of ESRI Street Map and, as shown in Exhibit 1, there is almost no difference in the road mileage data for the Silver Star study areas. Thus, even version 10.0 shows that the ESRI Street Map data significantly undercounts road mileage and road crossings for Silver Star's study areas. Accordingly, this does not explain the gross inaccuracy of the data as found by Silver Star or justify the WCB's refusal to correct the inaccurate data.

C. Tiger Line Includes Local Roads That Are not Included in ESRI

A comparison of road miles from ESRI Street Map and Tiger Line, attached hereto as Exhibit 2,¹¹ clearly shows far more road miles in the Tiger Line data. One of the largest discrepancies in road miles is for roads identified as local roads, which are reflected in code S1400 for Tiger Line and codes A40 and A41 for ESRI.¹²

¹⁰ Based on the road miles and road crossings used in the regression model, Silver Star believed that ESRI version 9.3, which Silver Star had, and version 10.0 were substantially the same. After spending over \$12,000 to obtain version 10.0, Silver Star has confirmed that the difference is insignificant.

¹¹ The ESRI Street Map data is from version 10.0. In addition, the road miles reflect the Idaho study area boundary change approved in the Order. For Wyoming, the road miles reflect the study area boundary recently filed with the Commission, which is slightly smaller than the boundary originally used by the WCB in the regression model.

¹² ESRI identifies code A40 as "Local, neighborhood, and rural road, city street, major category" and code A41 as "Local, neighborhood, and rural road, city street, unseparated." Tiger Line identifies code S1400 as "Local Neighborhood Road, Rural Road, City Street." The coding for roads for each database is attached as Exhibit 3.

The superiority of the Tiger Line data is supported by the shapefiles provided by Silver Star in the January 2, 2013, amended waiver requests, showing all the roads identified by Tiger Line on a map of the entire study areas and the aerial photos also provided by Silver Star, which show an overlay of the roads that are included in Tiger Line and ESRI on a map of a portion of the study areas.¹³ The shapefiles and the photos clearly show that ESRI does not include clusters of roads, many of which are some of or all of the local roads for housing subdivisions. Silver Star is attaching as Exhibit 5 two versions of the aerial photos previously provided in the January 2, 2013, amended waivers. The first version shows the original photo, except that the ESRI data reflects version 10.0. The second version shows the original photo, except that the ESRI data reflects version 10.0 and Silver Star has highlighted the many local roads associated with housing subdivisions that appear in Tiger Line and do not appear in ESRI. As stated in the waiver petitions, this is an example of how Silver Star determined that Tiger Line is superior to ESRI.

The photo for the Idaho study area shows 79 subdivisions and the associated local roads, missing in whole or in part from the ESRI data and included in the Tiger Line data. The photo for the Wyoming study area shows 34 subdivisions and the associated local roads, missing in whole or in part from the ESRI data and included in the Tiger Line data. Exhibit 6 identifies these subdivisions and the additional subdivisions and associated local roads missing from the ESRI data for the entire study area. Exhibit 6 identifies 298 subdivisions built before the year

¹³ As Exhibit 4, Silver Star also is providing an overlay comparison of the roads and road crossings for the entire Idaho and Wyoming study area. The Commission should not consider this as new information, because the Tiger Line shapefiles showing the roads and road crossings were provided in the January 2, 2013 amendment to the waivers. The files provided herewith simply show that information and the ESRI information in the WCB's possession in a new format.

2010, with in excess of 6000 lots, containing numerous local roads that are missing in whole or in part from ESRI.

The WCB ignores this evidence and instead focuses on a driveway shown in the aerial photo in the vicinity of Victor, Idaho, to support its conclusion that while "in some cases the ESRI data missed some roads, the Tiger data appear to be overly inclusive, in some cases including driveways and intra-property access routes."¹⁴ The conclusion that ESRI missed "some roads in some cases" ignores the extent of the errors in the ESRI data and is clearly incorrect... The Tiger Line shapefiles, the aerial photos, and the comparison of ESRI data to Tiger Line data, clearly show far more roads are missed by ESRI. Against this, the example of one road allegedly incorrectly included by Tiger Line cannot lead to a reasonable conclusion that the data errors in the two data sources are similar in scope or that Tiger Line is not superior..

This is not an insignificant error. Silver Star has constructed facilities and currently provides services to customers in every one of the identified subdivisions not counted in ESRI and the error in the ESRI data represents a significant percentage of Silver Star's capital and operational expense. Silver Star estimates that the error translates into an estimated loss of \$1.8 million per year for Silver Star.

Further, it appears that the root cause of the error in the ESRI data is that the data does not represent results for Silver Star as of the year 2010. In the waivers, Silver Star contended that the ESRI Street Map data is grossly inaccurate, at least in part, because it appears that this data was not updated for Silver Star's study area in 2010. In other words, although the WCB's regression model purports to be based on 2010 data for all carriers, Silver Star contends that the ESRI Street Map data used for Silver Star is not 2010 data. The fact that the ESRI Street Map

¹⁴ *Order* at ¶7.

data does not capture a significant portion of local roads in Silver Star's study areas associated with new housing subdivisions supports this contention. The WCB did not address this or examine the data as to the roads excluded in the ESRI data.

In the *HCLS Benchmarks Implementation Order*, the WCB states that “when considering whether there are special circumstances and the public interest is served by granting a waiver of the benchmark methodology, we will be focusing on ensuring that accurate data is used to perform the necessary computations, regardless of the extent of support reduction.”¹⁵ However, as shown, the WCB has failed to give serious consideration to Silver Star’s showing that ESRI is not accurate for its study areas, including Silver Star’s contention that ESRI data was not updated to the year 2010. The minor errors associated with Silver Star using ESRI version 9.3 instead of 10.0 and the alleged error in Tiger Line concerning driveways and intra-property roads does not change the fact that the ESRI data is grossly inaccurate. In sum, the WCB's *Order* reaches a conclusion that is contradicted by evidence and the WCB failed to examine the data as to the roads excluded in the ESRI data. Therefore, its action is arbitrary and capricious and should be reversed.¹⁶

III. The WCB has Granted a Similar Waiver Based on a Similar Showing

The WCB also has acted in an arbitrary and capricious manner by applying a different standard than the one applied in the *Arctic Slope Order* in a discriminatory manner.¹⁷ In the *Arctic Slope Order*, the WCB granted a waiver to Arctic Slope Telephone Association Cooperative, Inc. (Arctic Slope) to correct road miles and road crossings. In granting the waiver, the WCB found that Arctic Slope “provided the Bureau detailed road information ... including

¹⁵ *HCLS Benchmarks Implementation Order* at ¶ 31.

¹⁶ *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29 (1983)

¹⁷ *Connect America Fund; High-Cost Universal Service Support*, Order, WC Docket Nos. 10-90, 05-337, 27 FCC Rcd 14867 (Wireline Comp. Bur. 2012) (*Arctic Slope Order*).

certifications by an officer of the company under penalty of perjury that the filed information is accurate."¹⁸ The WCB seeks to distinguish its finding in the *Arctic Slope Order*, by stating that "Arctic Slope identified and provided evidence that specific roads should be removed from the road miles calculation because these roads constituted caribou migration, foot, jeep, tractor, and winter trails as well as roads across tundra that are inaccessible by most vehicles."¹⁹

However, as shown herein, Silver Star also identified and provided evidence that specific roads should be included in the road calculation. Simply put, Silver Star claimed and continues to claim, that all of the roads identified in Tiger Line are, in fact, roads in Silver Star's study areas. And, like the process in the *Arctic Slope Order*, Silver Star confirmed that information by comparing it to its company information and county maps and Silver Star submitted an officer's certification under penalty of perjury as to the accuracy of its statements and data. Where, as here, an agency applies a different standard to similarly situated entities and it does not provide a "reasoned explanation and substantial evidence in the record" to support disparate treatment, the agency's action is arbitrary and capricious.²⁰

IV. The WCB Erred In Its Conclusions Concerning the Inclusion or Exclusion of Certain Road Types

The WCB erred in denying Silver Star's waivers, in part, on the basis that "the Tiger data appear to be overly inclusive, in some cases including driveways and intra-property access routes." There is nothing in the WCB's *HCLS Benchmarks Implementation Order* or instructions for the regression model that identify any type of road or any ESRI road code that has been excluded from the calculation of road miles. The HCLS Geospatial Workflow 2012, attached at Exhibit 6-A, states at paragraph 3.6 that "[a]ll road types were included from the

¹⁸ *Id.* at ¶3.

¹⁹ *Id.*

²⁰ *Burlington N. & Santa Fe Ry. Co. v. Surface Transp. Bd.*, 403 F.3d 771, 777 (D.C. Cir. 2005).

following data sets.” In addition, all of the ESRI road categories shown in Exhibit 1, including driveways, were actually included in the WCB's calculation of road miles that was used in the regression model for Silver Star. Since the ESRI data includes driveways, it cannot be said that Tiger Line is less accurate because it may include driveways in its calculation of road miles.

Silver Star asked the WCB to provide information and the data it used to determine road miles and road crossings, in an effort to determine whether the WCB made an adjustment to the ESRI data. However, the WCB would not do so.²¹ Accordingly, to the extent the WCB made such adjustments, it should be precluded from relying on this as a basis to deny Silver Star's waiver request.

In any event, even if the WCB is correct that driveways or any other category of road should not be included, that it not a basis to reject correcting the road miles for Silver Star or to reject the use of the Tiger Line data. As shown in Exhibit 2, because local roads are the biggest driver in the difference between the two data sources, the WCB would have to argue that local roads should be deleted before its contention that Tiger Line is not superior to ESRI would have any basis. Accordingly, there is no support for the WCB's contention and it is nonsensical.

V. The WCB Did Not Address Silver Star's Request To Correct Density Data

In the September 27, 2013, Expedited Waiver Requests, Silver Star showed that the density used in the regression model is incorrect for both the Idaho and Wyoming study areas and asked the WCB to correct this factor. In its Order, although the WCB acknowledges that Silver Star asked that this data be corrected, the WCB's Order does not discuss or address this issue and, therefore, its Order is arbitrary and capricious.

²¹ See, Electronic communications between Kevin Lewis of Silver Star and John Emmett, of the Wireline Competition Bureau, attached hereto as Exhibit 7.

In addition, the density for Idaho must be recalculated under the WCB's own procedures. The *HCLS Benchmarks Implementation Order* states that density is "the natural log of the following quotient: number of housing units in the study area divided by the size of the study area in square miles as reported by the Tele Atlas boundaries."²² Because the WCB granted Silver Star's request to change the study area boundary for Idaho, which increased the square mileage and the number of housing units in the study area, the density factor must be adjusted.

For the Wyoming study area, density calculated by WCB does not appear to be correct based on the square mileage and housing units in the regression model. In any event, the WCB is required to at least address this issue.

VI. Conclusion

The WCB claimed that it would correct errors in the data used in the regression model. However, the WCB failed to give serious consideration to the showing made by Silver Star of the significant errors in the ESRI Street Map road and road crossing data for its study areas. Rather, the WCB focused on an error made by Silver Star, which has no appreciable impact on the issues raised in the waivers, and an alleged error in Tiger Line data, which appears not to be an error at all. Accordingly, Silver Star asks that the Commission reverse the WCB's findings, and direct the WCB to correct the road miles and road crossing data for Silver Star. Silver Star also asks the Commission to direct the WCB to correct the density figures used in the regression model. Silver Star requests that these corrections be applied to the benchmark methodology effective July 1, 2012.

²² *HCLS Benchmarks Implementation Order* at 33 , para. 91.

Respectfully submitted,

SILVER STAR TELEPHONE
COMPANY, INC.

By: /s/ Mary J. Sisak

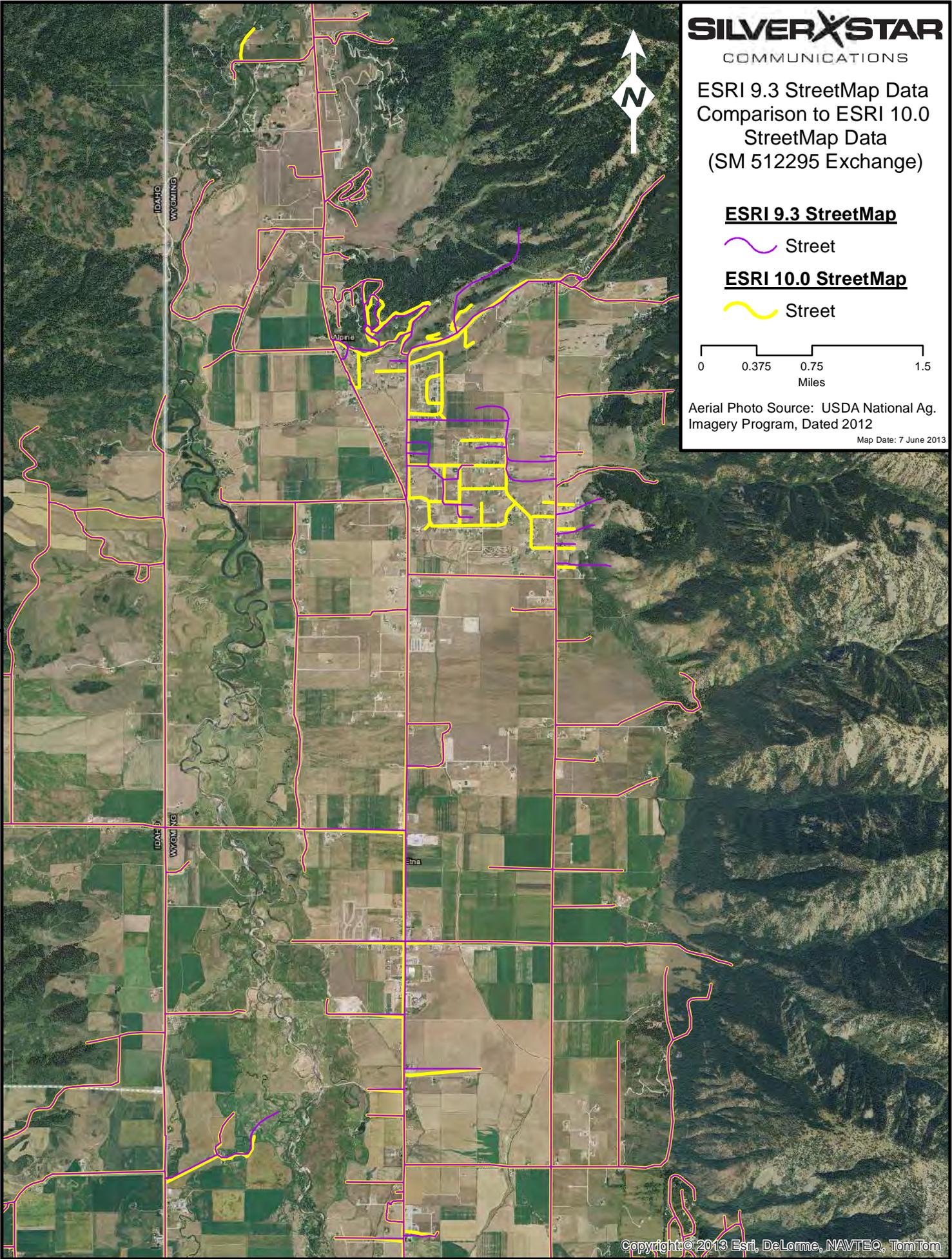
Blooston, Mordkofsky, Dickens, Duffy &
Prendergast, LLP
2120 L Street, NW, Suite 300
Washington, DC 20037
202-659-0830

Dated: June 10, 2013

EXHIBIT 1

Exchange 512295 StreetMAP 10.0 mileage				Exchange 512295 StreetMAP 9.3 mileage			
OBJECTID	FCC	FREQUENCY	SUM_Road_M	FCC	Count	Sum_Miles	
1	A21	154	47.85	A21	7	49.53	
2	A25	50	3.36				
3	A30	24	6.52	A30	4	6.53	
4	A31	3	0.60	A31	1	0.60	
5	A40	803	209.32	A40	316	212.22	
6	A41	1,137	320.08	A41	522	336.01	
7	A50	7	4.55	A50	8	21.73	
8	A51	88	50.28	A51	16	32.25	
9	A60	1	0.11	A60	1	0.11	
10	A70	69	19.91	A70	49	22.48	
11	A71	1	0.56	A71	1	0.56	
12	A74	34	11.52				
		TOTAL	674.67		TOTAL	682.03	
Exchange 472295 StreetMAP 10.0 mileage				Exchange 472295 StreetMAP 9.3 mileage			
OBJECTID	FCC	FREQUENCY	SUM_Road_M	FCC	Count	Sum_Miles	
1	A21	245	33.40	A21	4	34.41	
2	A30	454	138.33	A30	18	138.53	
3	A31	38	11.29	A31	5	11.29	
4	A40	1,132	292.71	A40	635	310.28	
5	A41	4,369	1,331.01	A41	1,735	1,351.39	
6	A50	81	33.94	A50	27	33.60	
7	A51	132	61.56	A51	47	66.48	
8	A60	3	0.31	A60	3	0.31	
9	A61	3	0.04	A61	2	0.13	
10	A70	534	183.86	A70	455	245.56	
11	A74	243	78.40				
		TOTAL	2,164.85		TOTAL	2,191.98	

6/6/2013



SILVER STAR
COMMUNICATIONS

ESRI 9.3 StreetMap Data
Comparison to ESRI 10.0
StreetMap Data
(SM 512295 Exchange)

ESRI 9.3 StreetMap

Street

ESRI 10.0 StreetMap

Street



Aerial Photo Source: USDA National Ag.
Imagery Program, Dated 2012
Map Date: 7 June 2013

ESRI 9.3 StreetMap Data
Comparison to ESRI 10.0
StreetMap Data
(SM 472295 Exchange)

ESRI 9.3 StreetMap

 Street

ESRI 10.0 StreetMap

 Street



Aerial Photo Source: USDA National Ag.
Imagery Program, Dated 2011

Map Date: 7 June 2013

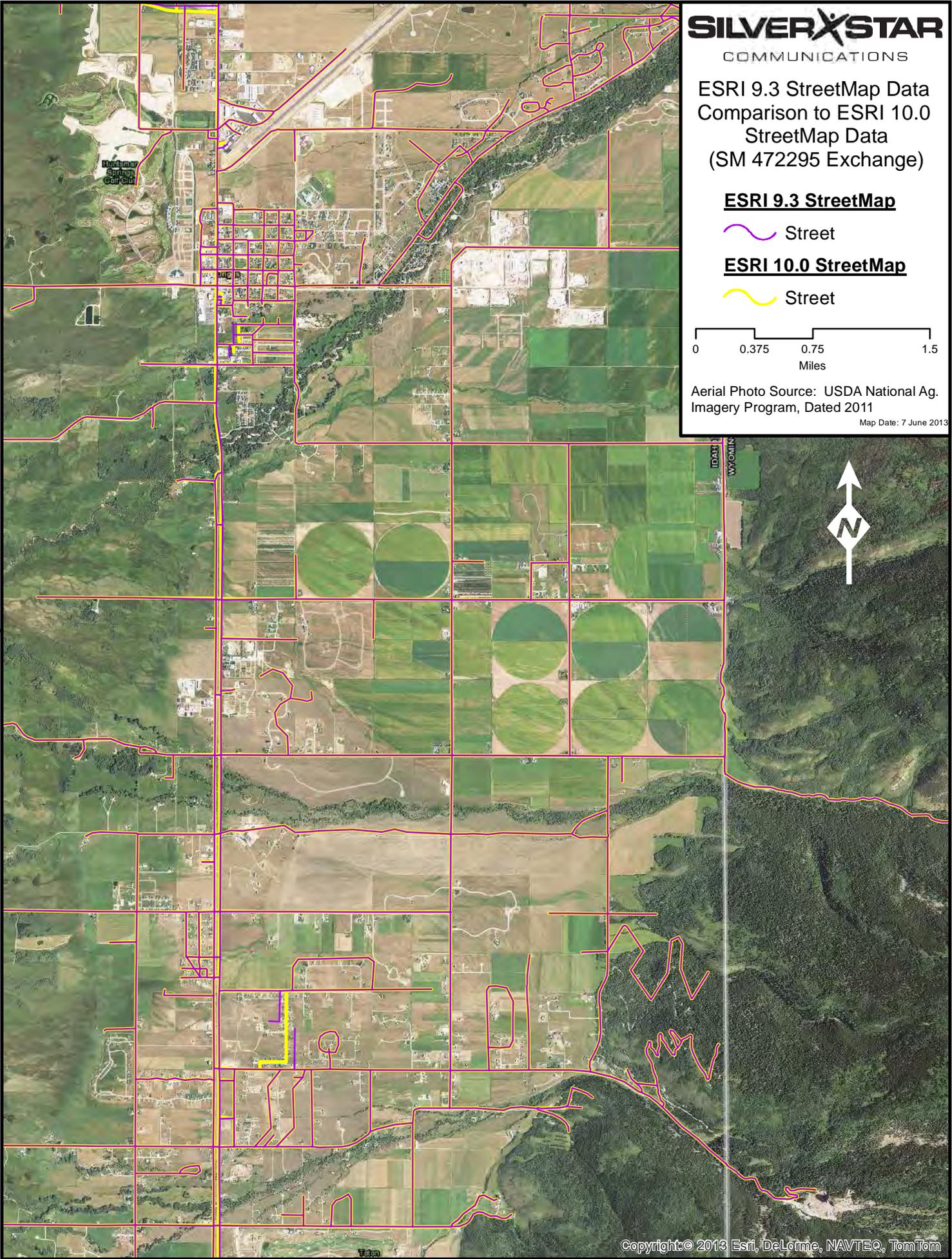


EXHIBIT 2

Study Area 512295 StreetMAP mileage				Study Area 512295 TigerLINE mileage			
OBJECTID	CFCC	FREQUENCY	SUM_Road_M	OBJECTID	MTFCC	FREQUENCY	SUM_Road_M
1	A21	154.00	47.85	1	S1200	1,426	55.69
2	A25	50.00	3.36	2	S1400	33,699	694.43
3	A30	24.00	6.52	3	S1500	2,516	65.30
4	A31	3.00	0.60	4	S1630	8	0.11
5	A40	803.00	209.32	5	S1640	35	0.24
6	A41	1,137.00	320.08	6	S1710	28	0.55
7	A50	7.00	4.55	7	S1740	1,271	20.43
8	A51	88.00	50.28	8	S1750	1,296	11.16
9	A60	1.00	0.11	9	S1780	187	1.91
10	A70	69.00	19.91				
11	A71	1.00	0.56				
12	A74	34.00	11.52				
		TOTAL	674.67			TOTAL	849.82

Study Area 472295 StreetMAP mileage				Study Area 472295 TigerLINE mileage			
OBJECTID	CFCC	FREQUENCY	SUM_Road_M	OBJECTID	MTFCC	FREQUENCY	SUM_Road_M
1	A21	245.00	33.40	1	S1100	52	0.24
2	A30	454.00	138.33	2	S1200	3,273	146.70
3	A31	38.00	11.29	3	S1400	131,406	2,625.73
4	A40	1,132.00	292.71	4	S1500	9,896	197.76
5	A41	4,369.00	1,331.01	5	S1710	318	9.73
6	A50	81.00	33.94	6	S1740	12,528	190.12
7	A51	132.00	61.56	7	S1750	114	0.84
8	A60	3.00	0.31	8	S1780	20	0.08
9	A61	3.00	0.04				
10	A70	534.00	183.86				
11	A74	243.00	78.40				
		TOTAL	2,164.85			Total	3,171.21

EXHIBIT 3

Support

Support

Search Support

Technical Articles > ArcIMS > Data > Other data

Knowledge Base - Technical Articles

[Email this Article](#)[Printable Version](#)[Print PDF](#) **HowTo: CFCC code lookup table**

Article ID:	11966
Software:	ArcInfo Workstation 8.0.1, 8.0.2, 8.1, 8.1.2, 8.2, 8.3, 9.0, 9.1, 9.2, 9.3, 9.3.1, 10 ArcSDE 8.0.1, 8.0.2, 8.1, 8.1.2, 8.2, 8.3, 9.0, 9.1, 9.2, 9.3, 9.3.1, 10, 10.1 ArcGIS Server (10.0 and prior) 9.0, 9.0.1, 9.1, 9.2, 9.3, 9.3.1, 10 ArcGIS - ArcEditor 8.1, 8.1.2, 8.2, 8.3, 9.0, 9.1, 9.2, 9.3, 9.3.1, 10 ArcGIS - ArcInfo 8.0.1, 8.0.2, 8.1, 8.1.2, 8.2, 8.3, 9.0, 9.1, 9.2, 9.3, 9.3.1, 10 ArcIMS 3.0, 3.1, 4.0, 4.0.1 ArcGIS - ArcView 8.1, 8.1.2, 8.2, 8.3, 9.0, 9.1, 9.2, 9.3, 9.3.1, 10 ArcGIS for Desktop Advanced 10.1 ArcGIS for Desktop Standard 10.1 ArcGIS for Server 10.1 ArcGIS for Desktop Basic 10.1
Platforms:	N/A

The U.S. Census Bureau's Census Feature Class Codes (CFCC) provide information on the classification of a feature. The Census Feature Class Codes (also called FCC) are used in many geodatasets. To display Census Feature Class Codes attributes, join the Census Feature Class Codes table to any table with FCC or CFCC as the common field.

 Tele Atlas North America, Inc. provides some codes.

The table is located in ESRI Data & Maps media kits (since 2000) as part of the USA data. It is in dBASE (*.dbf) format prior to 2005 and SDC (*.sdc) format after 2004.

Question: What do the CFCC codes mean?

Answer: The codes are made up of an uppercase letter and a two-digit number followed by their one or two-line definition. The following information can also be found in the Census Feature Class Codes table. This table is located with the USA data sets under the census folder on the ESRI Data & Maps disks.

CFCC Description

- A00 Road, major and minor categories unknown
- A01 Road, unseparated
- A02 Road, unseparated, in tunnel
- A03 Road, unseparated, underpassing
- A04 Road, unseparated, with rail line in center
- A05 Road, separated
- A06 Road, separated, in tunnel
- A07 Road, separated, underpassing
- A08 Road, separated, with rail line in center
- A10 Primary road with limited access or interstate highway, major category
- A11 Primary road with limited access or interstate highway, unseparated
- A12 Primary road with limited access or interstate highway, unseparated, in tunnel
- A13 Primary road with limited access or interstate highway, unseparated, underpassing
- A14 Primary road with limited access or interstate highway, unseparated, with rail line in center
- A15 Primary road with limited access or interstate highway, separated
- A16 Primary road with limited access or interstate highway, separated, in tunnel
- A17 Primary road with limited access or interstate highway, separated, underpassing
- A18 Primary road with limited access or interstate highway, separated, with rail line in center
- A20 Primary road without limited access, U.S. and state highway, major category
- A21 Primary road without limited access, U.S. and state highways, unseparated
- A22 Primary road without limited access, U.S. and state highways, unseparated, in tunnel

A23 Primary road without limited access, U.S. and state highways, unseparated, underpassing

A24 Primary road without limited access, U.S. and state highways, unseparated, with rail line in center

A25 Primary road without limited access, U.S. and state highways, separated

A26 Primary road without limited access, U.S. and state highways, separated, in tunnel

A27 Primary road without limited access, U.S. and state highways, separated, underpassing

A28 Primary road without limited access, U.S. and state highways, separated, with rail line in center

A30 Secondary and connecting road, state and county highways, major category

A31 Secondary and connecting road, state and county highways, unseparated

A32 Secondary and connecting road, state and county highways, unseparated, in tunnel

A33 Secondary and connecting road, state and county highways, unseparated, underpassing

A34 Secondary and connecting road, state and county highways, unseparated, with rail line in center

A35 Secondary and connecting road, state and county highways, separated

A36 Secondary and connecting road, state and county highways, separated, in tunnel

A37 Secondary and connecting road, state and county highways, separated, underpassing

A38 Secondary and connecting road, state and county highway, separated, with rail line in center

A40 Local, neighborhood, and rural road, city street, major category

A41 Local, neighborhood, and rural road, city street, unseparated

A42 Local, neighborhood, and rural road, city street, unseparated, in tunnel

A43 Local, neighborhood, and rural road, city street, unseparated, underpassing

A44 Local, neighborhood, and rural road, city street, unseparated, with rail line in center

A45 Local, neighborhood, and rural road, city street, separated

A46 Local, neighborhood, and rural road, city street, separated, in tunnel

A47 Local, neighborhood, and rural road, city street, separated, underpassing

A48 Local, neighborhood, and rural road, city street, separated, with rail line in center

A50 Vehicular trail, road passable only by four-wheel drive (4WD) vehicle, major category

A51 Vehicular trail, road passable only by 4WD vehicle, unseparated

A52 Vehicular trail, road passable only by 4WD vehicle, unseparated, in tunnel

A53 Vehicular trail, road passable only by 4WD vehicle, unseparated, underpassing

A60 Special road feature, major category used when the minor category could not be determined

A61 Cul-de-sac, the closed end of a road that forms a loop or turn around

A62 Traffic circle, the portion of a road or intersection of roads that form a roundabout

A63 Access ramp, the portion of a road that forms a cloverleaf or limited access interchange

A64 Service drive, road that provides access to businesses, facilities, and rest areas along limited-access highway

A65 Ferry crossing, the representation of a route over water that connects roads on opposite shores

A66 Ferry crossing, Passenger, Year Round

A68 Ferry Crossing, Vehicular, Seasonal

A69 Ferry Crossing, Vehicular, Year-Round

A70 Other thoroughfare, major category used when the minor category could not be determined

A71 Walkway, nearly level road for pedestrians, usually unnamed

A72 Stairway, stepped road for pedestrians, usually unnamed

A73 Alley, road for service vehicles, usually unnamed, located at the rear of buildings and property

A74 Driveway or service road, usually privately owned and unnamed, used as access to residences, etc., or as access to logging areas, etc.

A75 Road, Parking Area

B00 Railroad, major and minor categories unknown

B01 Railroad track, not in tunnel or underpassing

B02 Railroad track, in tunnel

B03 Railroad track, underpassing

B10 Railroad main track, major category

B11 Railroad main track, not in tunnel or underpassing

B12 Railroad main track, in tunnel

B13 Railroad main track, underpassing

B20 Railroad spur track, major category

B21 Railroad spur track, not in tunnel or underpassing

B22 Railroad spur track, in tunnel

B23 Railroad spur track, underpassing

B30 Railroad yard track, major category

B31 Railroad yard track, not in tunnel or underpassing

B32 Railroad yard track, in tunnel

B33 Railroad yard track, underpassing

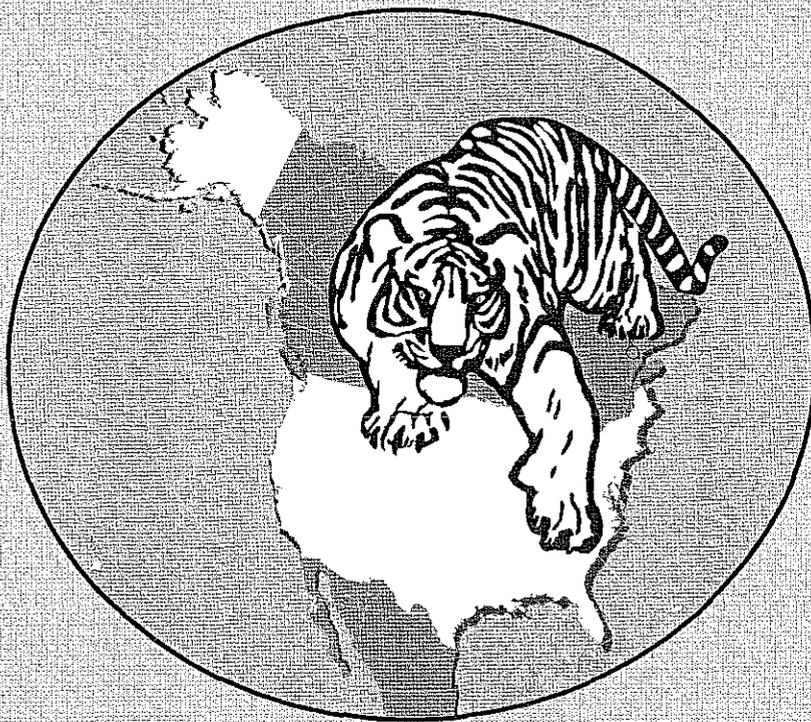
B40 Railroad ferry crossing, route over water used by ships carrying train cars to connecting railroads on opposite shores, major category

B42 Subway or Metroline

TIGER/Line® Shapefiles

2010

Technical Documentation



USCENSUSBUREAU

Helping You Make Informed Decisions

U.S. Department of Commerce
Geography Division
U.S. Census Bureau

MTFCC	FEATURE CLASS	SUPERCLASS	POINT	LINEAR	AREAL	FEATURE CLASS DESCRIPTION
L4125	Cliff/Escarpment	Miscellaneous Linear Features	N	Y	N	A very steep or vertical slope. [including bluff, crag, head, headland, nose, palisades, precipice, promontory, rim and rimrock]
L4130	Point-to-Point Line	Miscellaneous Linear Features	N	Y	N	A line defined as beginning at one location point and ending at another, both of which are in sight.
L4140	Property/Parcel Line (Including PLSS)	Miscellaneous Linear Features	N	Y	N	This feature class may denote a nonvisible boundary of either public or private lands (e.g., a park boundary) or it may denote a Public Land Survey System or equivalent survey line.
L4165	Ferry Crossing	Miscellaneous Linear Features	N	Y	N	The route used to carry or convey people or cargo back and forth over a waterbody in a boat.
R1011	Railroad Feature (Main, Spur, or Yard)	Rail Features	N	Y	N	A line of fixed rails or tracks that carries mainstream railroad traffic. Such a rail line can be a main line or spur line, or part of a rail yard.
R1051	Carline, Streetcar Track, Monorail, Other Mass Transit Rail	Rail Features	N	Y	N	Mass transit rail lines (including lines for rapid transit, monorails, streetcars, light rail, etc.) that are typically inaccessible to mainstream railroad traffic and whose tracks are not part of a road right-of-way.
R1052	Cog Rail Line, Incline Rail Line, Tram	Rail Features	N	Y	N	A special purpose rail line for climbing steep grades that is typically inaccessible to mainstream railroad traffic. Note that aerial tramways and streetcars (which may also be called "trams") are accounted for by other MTFCCs and do not belong in R1052.
<u>S1100</u>	Primary Road	Road/Path Features	N	Y	N	Primary roads are generally divided, limited-access highways within the interstate highway system or under state management, and are distinguished by the presence of interchanges. These highways are accessible by ramps and may include some toll highways.
<u>S1200</u>	Secondary Road	Road/Path Features	N	Y	N	Secondary roads are main arteries, usually in the U.S. Highway, State Highway or County Highway system. These roads have one or more lanes of traffic in each direction, may or may not be divided, and usually have at-grade intersections with many other roads and driveways. They often have both a local name and a route number.

MTFCC	FEATURE CLASS	SUPERCLASS	POINT	LINEAR	AREAL	FEATURE CLASS DESCRIPTION
<u>S1400</u>	Local Neighborhood Road, Rural Road, City Street	Road/Path Features	N	Y	N	Generally a paved non-arterial street, road, or byway that usually has a single lane of traffic in each direction. Roads in this feature class may be privately or publicly maintained. Scenic park roads would be included in this feature class, as would (depending on the region of the country) some unpaved roads.
<u>S1500</u>	Vehicular Trail (4WD)	Road/Path Features	N	Y	N	An unpaved dirt trail where a four-wheel drive vehicle is required. These vehicular trails are found almost exclusively in very rural areas. Minor, unpaved roads usable by ordinary cars and trucks belong in the S1400 category.
S1630	Ramp	Road/Path Features	N	Y	N	A road that allows controlled access from adjacent roads onto a limited access highway, often in the form of a cloverleaf interchange. These roads are unaddressable.
S1640	Service Drive usually along a limited access highway	Road/Path Features	N	Y	N	A road, usually paralleling a limited access highway, that provides access to structures along the highway. These roads can be named and may intersect with other roads.
<u>S1710</u>	Walkway/Pedestrian Trail	Road/Path Features	N	Y	N	A path that is used for walking, being either too narrow for or legally restricted from vehicular traffic.
S1720	Stairway	Road/Path Features	N	Y	N	A pedestrian passageway from one level to another by a series of steps.
S1730	Alley	Road/Path Features	N	Y	N	A service road that does not generally have associated addressed structures and is usually unnamed. It is located at the rear of buildings and properties and is used for deliveries.
<u>S1740</u>	Private Road for service vehicles (logging, oil fields, ranches, etc.)	Road/Path Features	N	Y	N	A road within private property that is privately maintained for service, extractive, or other purposes. These roads are often unnamed.
<u>S1750</u>	Internal U.S. Census Bureau use	Road/Path Features	N	Y	N	Internal U.S. Census Bureau use.
<u>S1780</u>	Parking Lot Road	Road/Path Features	N	Y	N	The main travel route for vehicles through a paved parking area.
S1820	Bike Path or Trail	Road/Path Features	N	Y	N	A path that is used for manual or small, motorized bicycles, being either too narrow for or legally restricted from vehicular traffic.
S1830	Bridle Path	Road/Path Features	N	Y	N	A path that is used for horses, being either too narrow for or legally restricted from vehicular traffic.
S2000	Road Median	Road/Path Features	N	N	Y	The unpaved area or barrier between the-carriageways of a divided road.

MTFCC	FEATURE CLASS	SUPERCLASS	POINT	LINEAR	AREAL	FEATURE CLASS DESCRIPTION
P0001	Nonvisible Linear Legal/Statistical Boundary	Bounding Edges	N	Y	N	A legal/statistical boundary line that does not correspond to a shoreline or other visible feature on the ground.
P0002	Perennial Shoreline	Bounding Edges	N	Y	N	The more-or-less permanent boundary between land and water for a water feature that exists year-round.
P0003	Intermittent Shoreline	Bounding Edges	N	Y	N	The boundary between land and water (when water is present) for a water feature that does not exist year-round.
P0004	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	Bounding Edges	N	Y	N	A bounding Edge that does not represent a legal/statistical boundary, and does not correspond to a shoreline or other visible feature on the ground. Many such Edges bound area landmarks, while many others separate water features from each other (e.g., where a bay meets the ocean).