

From: Rogers, Debra <Debra.Rogers@icf.com>
Sent: Friday, February 14, 2020 2:08 PM
To: Wayland, Joshua
Cc: Moelter, Chris; Wolff, Mikenna
Subject: FW: Grate-Separated Road Crossings/Bridges

Hi Josh,

Brent (ICF) and Travis (HDR) connected. Please see below.

Thanks
Debi



DEBI ROGERS | Principal, Environment & Planning | debra.rogers@icf.com | icf.com
ICF | 2005 Market St, Suite 3110, Philadelphia, PA 19103 USA | +1.202.714.1508 mobile

From: Read, Brent <Brent.Read@icf.com>
Sent: Friday, February 14, 2020 1:44 PM
To: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>
Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>
Subject: RE: Grate-Separated Road Crossings/Bridges

Hey Everyone,

Just an FYI/Update for the team, Travis and I spoke and shared screens, and discussed the available data. This was very helpful to both of us, for me to see what was available, and for him to see what we needed. We reconciled many of the questions on my list, most importantly, the BLM overlap issues.

Based on our call, and seeing the data that Travis has available, here is a list of datasets that I would appreciate having fresh in GIS format. I divided it into 2 lists; Needed and Known is data that I extracted from past KMZ files, so I know it exists, and Wishlist data, which is data I do not have, but would appreciate having if it does exist.

Needed and known data:

- Alignments: Include attributes for Type (Mainline, Siding, Bridge, Tunnel, Wye)
- Analytical Alignments: This is the line that has been dissolved to be used for mileage calculations
- Mileposts
- Bridges (Center Point): Include attributes for span type (BMS, DPG, PCB, SSPA, etc.), Crossing Type (Road, Water, Tracks), Crossing Name, Bridge height and length, milepost
- Bridges (Polygon): Include attributes for span type (BMS, DPG, PCB, SSPA, etc.), Crossing Type (Road, Water, Tracks), Crossing Name, Bridge height and length, milepost
- Communication Towers (point)
- Communication Towers (Disturbance footprint (Permanent and Temporary)
- Cut/Fill lines (differentiating Cut, Fill, SS)

- Cut/Fill polygons
- Drainage Crossings (Point)
- APE (Polygons) I already have this, but if it is easy enough, it would be nice to have it packaged with the other datasets in a fresh transmittal
- Road Crossings (Points): Include attributes for milepost, Grade Separation, Type (RR over Road, RR under Road, RR over water, Road over...) If you have attributes for jurisdiction (i.e. Public vs private) and crossing name (i.e. Quarry Road, Wells Draw Rd etc.) include them, if not, I have them from previous work, and can copy attributes.
- Road Realignments (line) and Permanent/Temporary disturbance buffers if you have them (we had estimated these) include attributes for road name, milepost.
- Tunnels (polygon)

Wishlist Data:

- Station points
- Access Roads (line) and permanent/Temporary disturbance buffers I anticipate these being mostly existing roads that work crews and supplies would be hauled on, but there may be roads that need to be constructed?
- Power lines (we understand there will be powerlines running along the alignments to power switches and signals). If you have data for them, it would be appreciated.
- Facility/use types (polygons): If you have staging areas, laydown yards, worker camps, etc. polygons identifying the type of disturbance in the APE (I assume there are none outside the APE)
- Switch locations (point)

Travis also mentioned the Engineering Features Report, which will be released on Feb. 21. I understand some of the data may not be ready until then, but he is planning to send me what he has available now, and noting what will be coming later.

Travis, thanks again for hopping on the phone with me, that was very productive.

BRENT READ | +1.970.372.3907 direct

From: Read, Brent

Sent: Friday, February 14, 2020 10:24

To: 'Tzioumis, Travis' <Travis.Tzioumis@hdrinc.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>

Cc: 'Keller, Kevin' <Kevin.Keller@hdrinc.com>

Subject: RE: Grate-Separated Road Crossings/Bridges

Feel free to call my direct line if needed too.

BRENT READ | +1.970.372.3907 direct

From: Read, Brent

Sent: Friday, February 14, 2020 10:23

To: 'Tzioumis, Travis' <Travis.Tzioumis@hdrinc.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>

Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>

Subject: RE: Grate-Separated Road Crossings/Bridges

Hey Travis, lets go ahead and share screens. Can you set that up easily on your end?

In the last few minutes, I have looked at the Land Ownership you sent, and I downloaded a fresh dataset from the Utah AGRC (<https://data-sitla.opendata.arcgis.com/datasets/ut-sitla-ownership-landownership>) which is a dataset developed by SITLA. I think this is the one you were using as the source of your data.

I projected it using NAD_1983_To_WGS_1984_5 and also the WGS_1984_(ITRF00)_To_NAD_1983, and am comparing the landownership data across different projections, and the project data from different projections, and they datasets all match, without shifting, and the APE is still hitting BLM land on my end.

The APE data I am using is coming from the Google KMZ, which has the data projected in GCS-WGS84, which I have also projected using the different transformations. Is there a chance that the transformation is getting thrown off between your project data in StatePlane and the KMZ that I am receiving? I also compared the WP centerline (Route_StudyArea_Data_20200212.gdb) which I received in StatePlane to the KMZ centerline, and they also match, so I am not sure what is going on.

Lets screenshare and see if we can get to the bottom of this.

BRENT READ | +1.970.372.3907 direct

From: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>
Sent: Friday, February 14, 2020 09:57
To: Read, Brent <Brent.Read@icf.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>
Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>
Subject: RE: Grate-Separated Road Crossings/Bridges

No problem Brent. If you need I am available for a call/screen share if there are still questions or issues you are having with any of the data.

From: Read, Brent [<mailto:Brent.Read@icf.com>]
Sent: Friday, February 14, 2020 9:36 AM
To: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>
Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>
Subject: RE: Grate-Separated Road Crossings/Bridges

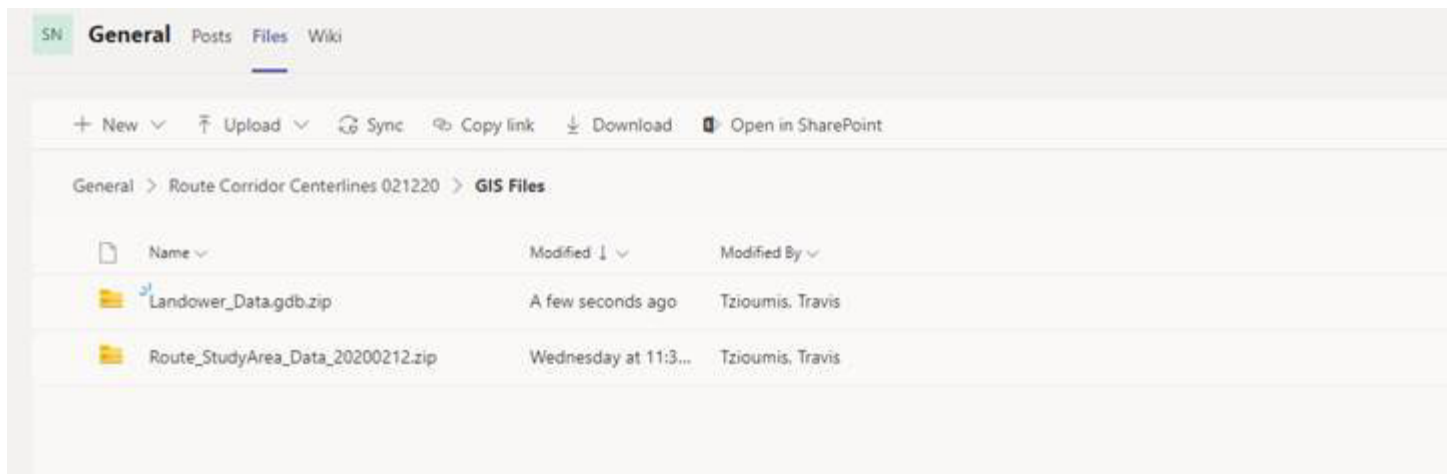
Thank you Travis, I'll take a look, and use the Transformation you mention.

BRENT READ | +1.970.372.3907 direct

From: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>
Sent: Friday, February 14, 2020 09:33
To: Read, Brent <Brent.Read@icf.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>
Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>
Subject: RE: Grate-Separated Road Crossings/Bridges

Brent,

I just added a .zip file in Route Corridor Centerlines (I meant to include it on Wednesday, it was included with the original Biological Resources data submittal in December). It was downloaded from the Utah Automated Geographic Reference Center which is the State of Utah GIS clearinghouse. <https://gis.utah.gov/> Then clipped to the Uinta Basin and then projected into Utah State Plane. I have been using the WGS_1984 (ITRF00) to NAD 1983 transformation for projecting from WGS 84 to State Plane.



From: Read, Brent [<mailto:Brent.Read@icf.com>]

Sent: Friday, February 14, 2020 7:45 AM

To: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>

Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>

Subject: RE: Grate-Separated Road Crossings/Bridges

Travis,

Thank you for the quick response. I have been using the Utah Stateplane Central (US Feet) NAD83 projection for all data, and do as you suggest, converting all data to this projection before use on the project. The Land Status data I have been using came to me in UTM 12 – NAD83, and was then re-projected to stateplane, so the WGS84-NAD83 conversion was not the issue. When data comes in WGS 84, I use the ESRI transformation WGS 84 – NAD83_5, is that consistent with the transformation that you use? (Not that it applies in this case, but for future reference).

I just checked the Teams site, and I am not seeing the land status layer you sent. Do you know if that has been posted to Teams for me to access yet? This is what I am seeing:

SN **General** Posts Files Wiki

+ New ▾ ↑ Upload ↻ Sync 🔗 Copy link ⬇ Download + Add cloud storage 🖨 Open in SharePoint

...

General

 Name ▾	Modified
 Archaeology Resources Baseline Report Revised 021320	Yesterday
 Historical Architecture Baseline Report Revised 021320	Yesterday
 Route Vertical Profiles 021220	Wednesday
 Paleontology Baseline Report Revised 021220	Tuesday
 Biological Resources Baseline Report Revised 021220	Tuesday
 Waters of the US Baseline Report Revised 021220	Tuesday
 Route Corridor Centerlines 021220	Tuesday
 Imagery and Contour Data 012820	Tuesday
 Archive Baseline Reports	Tuesday
 Draft Cultural Resources Impact Memo 2020-01-28	January 1
 Route Selection	January 1
 Bridge and Culvert Drainage Crossings 122319	December
 Imagery and Contour Data 122019	December
 Route Vertical Profiles 121319	December
 Response to STB RFI	December

Thanks again,

BRENT READ | +1.970.372.3907 direct

From: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>

Sent: Thursday, February 13, 2020 17:42

To: Read, Brent <Brent.Read@icf.com>; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>

Cc: Keller, Kevin <Kevin.Keller@hdrinc.com>

Subject: RE: Grate-Separated Road Crossings/Bridges

Brent,

To answer question 1 about the BLM crossings. Please make sure that the data is all in the same projection before running the intersect. I sent a land management file along with the GIS files yesterday that is clipped to the Uinta Basin and projected into Utah State Plane Central – US Foot (which is the projection the rest of the GIS design data is in including the centerlines and APE boundaries that I sent). I ran our model on all layers in Utah State Plane Central and there were no crossings of the APE/Cut Fill into BLM land. Projecting from WGS84 or UTM into Utah State Plane will only shift the data a few feet but it is enough to move it into BLM. ICF will just need to make sure all the data is projected into the same coordinate system.

From: Keller, Kevin

Sent: Thursday, February 13, 2020 5:05 PM

To: Tzioumis, Travis <Travis.Tzioumis@hdrinc.com>; Robe, Kyle <Kyle.Robe@hdrinc.com>

Subject: FW: Grate-Separated Road Crossings/Bridges

FYI.

Kevin

Kevin Keller, PG

D 816.347.1183 M 913.638.2571

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From: Read, Brent [<mailto:Brent.Read@icf.com>]

Sent: Thursday, February 13, 2020 6:03 PM

To: Michael Hawley <Michael@jonesanddemille.com>; Keller, Kevin <Kevin.Keller@hdrinc.com>;

Brian@jonesanddemille.com

Cc: coalition_UBRY@jonesanddemille.com; kkfloyd@venable.com; Rogers, Debra <Debra.Rogers@icf.com>; Moelter, Chris <Chris.Moelter@icf.com>

Subject: Grate-Separated Road Crossings/Bridges

Hey Michael,

We have a few initial questions for you guys regarding the data we just received (see attached). I got Josh's permission to ask you guys these questions directly again, due to the technical nature of them.

Do you have time to hop on the phone and discuss them tomorrow?

Thanks,

BRENT READ | Senior GIS Analyst | +1.970.372.3907 direct | Brent.Read@icf.com | icf.com

ICF | 3665 JFK Parkway, Building 1, Suite 300, Fort Collins, Colorado 80525 USA

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