High Country News

Land-Grab Universities: User Guide
Morrill Act of 1862 Indigenous Land Parcels Database
Robert Lee

Contents

I. Overview

This document describes the contents of the "Morrill Act of 1862 Indigenous Land Parcels Database."

The database is the result of a High Country News investigation that has located more than 99% of all acres distributed through the Morrill Act of 1862 (or in lieu thereof), identified their original, Indigenous inhabitants and care-takers, and researched the principal raised from their sale in the late 19th and early 20th centuries. The database reconstructs approximately 10.7 million acres taken from nearly 250 tribes, bands, and communities through over 160 violence-backed land cessions.

This unique database was created through research into primary source materials including land patent records, congressional documents, historical bulletins, archival and print resources at the National Archives, state repositories, and special collections at universities, digitized historical maps and more. Information for the database was extracted programmatically where possible, primarily from the Bureau of Land Management's General Land Office Database, but in some cases it was transcribed manually from print records, microfilm and microfiche reproductions, or poor quality digital images.

For a full discussion of the project methodology, scope and sources, see the separate essay and source list: "Methodology: Land-Grab Universities." For a bibliographic background on the study of land-grant universities, especially their ties to Indigenous dispossession, see the separate

High Country News

essay and bibliography: "Further Reading: Land-Grab Universities." For the article produced from this database, which gives a sense of how this data set can be deployed for research, see Robert Lee and Tristan Ahtone, "Land-Grab Universities," *High Country News*, April 2020.

II. Use of the Database

The database contained CSV and shapefiles, as well as a multi-tab spreadsheet that aggregates/summarizes key data points. No coding skills are necessary to work with this dataset, but a basic working knowledge of tabular data files and/or GIS is necessary.

The data in the CSV files can be analyzed alone or linked to shapefiles for mapping and analysis with GIS software (e.g. ArcGIS Desktop). The files are organized so users can join the data following the model used by IPUMS-NHGIS for making historical census data publicly available. For basic instructions on joining shapefiles to tabular data in a ArcGIS, see the NHGIS user's guide. This video tutorial on joining census data (i.e. tabular data) to a GIS file (i.e. a shapefile) walks new users through the process. The join fields are noted in the data descriptions below. Given the size of the parcel data users may find it preferable to import the data into a file geodatabase if working with ArcGIS (the program the shapefiles were created with).

We encourage exploration and use of the database for research, teaching, publication, and other public uses. We also invite feedback if you see omissions, errors or miscalculations. Since no other database of its kind exists—location and financial analysis linked to approximately 80,000 individual land parcels distributed through a Civil War-era law—we are committed to making it publicly available and as robust as possible.

The database administrator can be contacted at: landgrabu@hcn.org

III. Creative Commons License

The database is licensed under the Open Database License, and the contents under the Creative Commons Attribution-ShareAlike license.

https://opendatacommons.org/licenses/odbl/1.0/

https://creativecommons.org/licenses/by-sa/3.0/

IV. Citation

If you re-publish this data or otherwise draw on it as a source for publication, in part or whole, cite as:

High Country News

Robert Lee, "Morrill Act of 1862 Indigenous Land Parcels Database," *High Country News,* March 2020.

V. Files Descriptions

The database is comprised of 7 files: 3 shapefiles, 3 CSV files, and 1 excel spreadsheet with 4 internal tabs. Descriptions of the contents of the following files appear below.

Shapefiles
1. Parcels_Polygons.shp
2. Cessions_Polygons.shp
3. Universities_Points.shp

CSV files
4. Parcels.csv
5. Cessions.csv
6. Universities.csv

Excel file
7. Summaries_Uni_State_Treaty_Tribe.xlsx

Shapefiles

1. Parcel_Polygons.shp

This shapefile contains 79,360 unique polygons representing parcels distributed through the Morrill Act (or acts in lieu thereof). It can be joined to the Parcels.csv using the field named *MTRSA_LG*.

2. Cession_Polygons.shp

This shapefile contains 162 unique polygons representing Indigenous land cessions that overlap with one or more of the parcels distributed through the Morrill Act (or acts in lieu thereof). It can be joined to the Cessions.csv using the field named *Royce_Num*.

3. University_Points.shp

This shapefile contains 52 unique points representing the location of universities that benefited from the Morrill Act (or acts in lieu thereof). It can be joined to the Universities.csv using the field named *Universities*.

CSV files

High Country News

4. Parcels.csv

This file contains data on 79,461 land parcels redistributed through the Morrill Act (or in lieu thereof) across 43 columns. Each row described the location of a unique parcel, along with information about the tract, its original Indigenous owners, its acquisition by the United States, and its benefit to one or more land-grant universities. It also contains source material on how the parcel was identified and retrieved, and material on how—and how accurately—it was mapped.

The data can be mapped by joining the file to Parcel_Polygons.shp using the field named *MTRSA_LG*.

The file contains the following columns:

MTRSA_LG
> This is a unique identifier for the parcel. It stands for "Meridian, Township, Range, Section, Aliquot, Land Grant." MTRSA describes the parcel location within Public Land Survey System (PLSS). MTRSA stands for "Meridian, Township, Range, Section, Aliquot." LG is the postal abbreviation of the state granted the parcel for the benefit of a land-grant university. To map the parcel, this field can be joined to a field with the same name in "Morrill_Act_Parcels.shp."

Loc_State
> The postal code of the state where the parcel is located.

Loc_County
> The name of the county where the parcel is located. Marked "unidentified" if parcel location not identified.

Acres
> The size of the parcel in acres, either listed on patents or state selection lists, or surmised from the aliquot description.

LG_State
> The postal code of the state granted the parcel for the benefit of a land-grant university. Marked "unidentified" if state grantee (*LG_State*) not identified.

LG_Reason
> Explanation for the identification of the *LG_State*. Marked "unidentified" if state grantee (*LG_State*) not identified.

University

The current university beneficiary or beneficiaries of the endowment generated from the land grant this parcel was contained in. Marked "unidentified" if state grantee (*LG_State*) not identified.

Uni_Ben_History

The university beneficiary or beneficiaries present and past, including the years of the benefit, and percentage of the benefit (if shared). Marked "unidentified" if state grantee (*LG_State*) not identified.

Royce_ID

The ID numbers for the Indian land cession maps. This uniquely identifies the Indigenous land cession, as drawn by Charles Royce, that the parcel lies within. Note that there are 156 of these numbers and 6 non-Royce areas derived from other maps and given IDs like "None_CA" or "LA_Atakapa." Marked "unidentified" if parcel location not identified.

Tribal_Nation

The name(s) of the tribal nation(s) that ceded the land according to Charles Royce's schedule of Indian land cessions. Note the names appear as they do on Royce's schedule from the nineteenth century. Many of the names are no longer in use. Some are considered offensive. Marked "unidentified" if parcel location not identified.

US_Acquired_Mode

Describes the mode by which the US acquired the land, e.g. treaty, unratified treaty, seizure, as well as the date of the action. Marked "unidentified" if parcel location not identified.

Cession_State

The postal code of the modern state or states where the Indigenous land cession that later supplied this parcel was located. Marked "unidentified" if parcel location not identified.

Royce_Link

A link to the web address of the cession listed in Royce's schedule of Indian land cessions. Marked "unidentified" if parcel location not identified.

Yr_US_Acquire

The year the US acquired the Indigenous land supplying this parcel (format: YYYY). Marked "na" if acquisition year not known. Marked "unidentified" if parcel location not identified.

Date_US_Acquire

The date the US acquired the Indigenous land supplying this parcel (format: YYYYMMDD). Marked "na" if acquisition date not known. Marked "unidentified" if parcel location not identified.

US_Paid_for_Parcel
The amount the United States paid to extinguish Indigenous title. Calculated from the amount paid per acre for the cession (*US_Paid_Per_Acre* in Cessions.csv) multiplied by the number of acres in the parcel. Marked "unidentified" if parcel location not identified.

Endow_Raised_Parcel
The amount of principal raised for the land-grant endowment plus the value of unsold land ca. 1914 attributable, on average, to the parcel. Based on the total amount of principal raised plus the value of unsold land ca. 1914 per acre in the grant (based on acres found), multiplied by the number of acres in the parcel. Marked "unidentified" if state grantee (*LG_State*) not identified.

Uni_Raise_US_Pay_Multiple
The *Endow_Raised_Parcel* divided by the *US_Paid_for_Parcel*. The return on the endowment raised relative to the amount paid by the United States for Indigenous title. For example, if the *Uni_Raise_US_Pay_Multiple* = 50, then $50 dollars was raised for the endowment for every $1 the U.S. paid for Indigenous title. Where *US_Paid_for_Parcel* = 0, the multiple is listed as "incalculable." Marked "unidentified" if parcel location not identified.

Yr_ST_Accept
The year the state accepted the grant (format: YYYY). Marked "unidentified" if state grantee (*LG_State*) not identified.

Yr_Uni_Assign
The year the state assigned the grant (format: YYYY). Marked "unidentified" if state grantee (*LG_State*) not identified.

Yr_Patent
The year a land patent was issued for the parcel, if known (format: YYYY).

Date_Patent
The date a land patent was issued for the parcel, if known (format: YYYYMMDD).

Patentees
The name or names of the patentee or patentees who acquired the patent for the parcel.

Patent_Source_Reason

Explanation for the assignment of the *Yr_Patent / Date_Patent/Patentees.*

Source_ID

Identification for the source document. Note that the vast majority of the entries come from the BLM's General Land Office patent database. When the ID is a number followed by AGS (Agricultural Scrip), SER (Serial Patent), or MV (Miscellaneous Volume) and a state postal code, the preceding number can be used to search for the patent in the BLM database. When the ID is a number preceded by CDI (Control Document Index), the succeeding number can likewise be used to search for the control document index entry in the BLM database. Other IDs, which generally start with a state postal code, followed by a number were created to refer back to transcribed lists of state grant parcels from various other sources, which were integrated into this master parcel list. For these sources, as well as information on their format, and how they were added to this list, see the *Source_Loc*, *Source_Type*, *Source_Form*, and *Source_Acqu* fields. For links to sources that are available online, see the *Parcel_Link* field.

Source

Indicates the source for the entry.

Source_Loc

The location of original documentation for the entry.

Source_Type

The format of the original documentation for the entry: Manuscript or Published.

Source_Form

The form of the source for the entry: Archival, Digital, Microfiche, Microfilm, Print.

Source_Acqu

How the entry data was added to the parcel list: Database extraction or Transcribed.

Source_Acqu_Detail

Details how the entry data was acquired.

Located_GIS

Indicates if the parcel was mapped in Geographic Information Science software and is represented by a polygon in "Morrill_Act_Parcels.shp": "Y" for Yes, "N" for No. Note that only 100 parcels, representing about 7,100 acres, could not be mapped.

Parcel_Link

A web address for the source of the parcel. Available for 74,270 parcels (ca. 93%). Most link to the BLM's General Land Office patent database.

High Country News

MTRSA
> Stands for "Meridian, Township, Range, Section, Aliquot." MTRSA describes the parcel's location within the Public Land Survey System.

MTRS
> Stands for "Meridian, Township, Range, Section." MTRS describes the section (typically a square mile, or 640 acres) of the Public Land Survey System where the parcel is located.

A_or_L
> Indicates if the parcel is an Aliquot ("A") part or Lot ("L") in the Public Land Survey System. Aliquots are rectilinear parts of sections, e.g. the northwest (NW) corner of section 10. Lots are irregularly shaped parcels, often due to being adjacent to bodies of water and are identified by a number.

Aliquot
> Indicates the aliquot part, e.g. NW for northwest corner or E½SW for east half of southwest corner, or the lot number.

Types
> Indicates the type of aliquot part, e.g. Q for quarter section if the aliquot is NW or HQ for half-quarter section if the aliquot is E½SW, or L if it is a lot.

GISAcres
> Area of the parcel in acres calculated in GIS using the US National Atlas Equal Area projection.

GIS_Acre_Div_List_Acre
> The ratio of the area of the polygon measured in GIS to the acres for the parcel listed in other documentation, i.e. *GISAcres* divided by *Acres*. A useful measure of polygon accuracy.

Polygon
> Describes how the polygon was reconstructed.

Accuracy
> Describes the accuracy of the polygon reconstructed in GIS. "Aliquot" indicates the highest level of accuracy. It means the polygon is accurate to the aliquot part described in PLSS notation (i.e. the "A" in MTRSA). This means the parcel is roughly accurate to the acre. "Section" indicates the polygon is accurate to the section described in the PLSS notation (i.e. the "S" in MTRSA). This means the parcel is located somewhere inside the

section (typically a square mile, or 640 acres), or part thereof, of the PLSS represented by the polygon. Roughly 97% of parcels, and over 99% of the acres, in the dataset that are mapped are accurate to the "Aliquot," or acre, level. "None" indicates the parcel has not been mapped.

LG_Royce
    Combination of the *LG_State* (the postal code of the state granted the parcel for the benefit of a land-grant university) and the *Royce_ID* (the Royce map ID number).

5. Cessions.csv

This file contains data on 162 Indigenous land cessions across 15 columns. Each row describes a unique Indigenous land cession that overlaps with one or more Morrill Act parcels (except for one row for "unknown"). The main source for the land cessions is the set of maps drawn by [Charles Royce](#) in the late nineteenth century. The rows provide information about the cession, including the Royce schedule identification number, the name or names of the tribal nations who made the cession, the date and manner of cession, the size of the cession in acres, and payments made by the United States for Indigenous title (if any). It also contains source material on the cession. Since the sheet is constructed around the cessions themselves, multiple tribes may be associated with one record. To find individual tribal nations, use the search function to "filter" the *Tribal_Nation* column. Use the same technique on the *Cession_State* column (filtering by state postal code) to identify records mentioning specific states where the cessions were located.

Note that the cessions identified as overlapping the Morrill Act parcels are restricted to initial acquisitions of title by the United States. There are certainly some parcels in this dataset that overlap with reservations of nations removed to the West that were created, then retaken, by the United States, but those cessions do not appear in this dataset.

The data can be mapped by joining the file to "Cession_Polygons.shp" using the field named *Royce_Num*.

The file contains the following columns:

Royce_Num
    The ID number for the Charles Royce Indian land cession map. This uniquely identifies the Indigenous land cession that the parcel lies within. Note that there are 156 of these numbers and 6 non-Royce areas assigned numbers starting from 1000.

Royce_ID
    Same as *Royce_Num* except non-Royce areas given descriptive IDs, e.g. 1002 = None_CA

Tribal_Nation
>The name(s) of the tribal nation(s) that ceded the land according to Charles Royce's schedule of Indian land cessions. Note the names appear as they do on Royce's schedule from the nineteenth century. Many of the names are no longer in use. Some are considered offensive.

US_Acquired_Mode
>Describes the mode by which the US acquired the land, e.g. treaty, unratified treaty, seizure, as well as the date of the action.

Cession_State
>The postal code of the modern state or states where the Indigenous land cession was located.

Yr_US_Acquire
>The year the US acquired this Indigenous land cession (format: YYYY).

Date_US_Acquire
>The date the US acquired this Indigenous land cession (format: YYYYMMDD).

Total_Acres
>Total acres ceded in the treaty or land transfer.

Total_US_Paid
>Total amount paid by the U.S. to extinguish Indigenous title via treaty or land transfer.

US_Paid_Per_Acre
>*Total_US_Paid* divided *Total_Acres*. The *US_Paid_Per_Acre* was used to calculate the amount the United States paid to extinguish Indigenous title to individual parcels (*US_Paid_for_Parcel* in the Parcels.csv).

Total_Area_Source
>Source of *Total_Acres*: either calculated in GIS or taken from a source listed.

Total_US_Paid_Source
>Source of *Total_US_Paid.*

Royce_Link
>A link to the web address of the cession listed in Royce's schedule of Indian land cessions. Or, if not covered by Royce's schedule, a link to the address of the map used to identify the Indigenous owners.

Notes
> Miscellaneous notes pertinent to quantities listed in *Total_US_Paid* or *Total_Acres*.

GIS_Source
> Sources for digital files of Royce schedule attributes and polygons.

6. Universities.csv

This file contains data on 52 land-grant universities across 54 columns. Each row described a unique university (except for one row for "unknown") that benefited from a land-grant endowment made under the Morrill Act (or in lieu thereof), along with information about the university's location, founding and assignment of the grant, what type of grant was received, whether the institutions are public or private, if the benefit was shared by multiple institutions, and the financial interest derived from the grant in terms of endowment principal raised by the early twentieth century and the value of unsold land at that time. There is also source material on how the material was collected and analyzed. To find a succinct text explaining how each state disposed of their grant, see the 'Disposal Notes' column, which is summarized primarily from Benjamin F. Andrews, "[The Land Grant of 1862 and the Land-Grant Colleges](#)" (1918).

The data can be mapped by joining the file to "Universities_Points.shp" using the field named *University*.

The file contains the following columns:

University
> The current university beneficiary or beneficiaries of the endowment generated from the land grant this parcel was contained in.

LG_State
> The postal code of the state that received the land grant.

City
> The city where the university is located.

Benefit_Share
> The university's share of the endowment income, e.g. 1 = 100%.

Endow_Shared_With
> If applicable, the other university in the state that receives a share of the endowment income. If not applicable, field reads "n/a."

Num_Unis

The number of universities that share the income from the endowment.

Current_Uni_Ben_Yr
The current university beneficiary or beneficiaries, including the years of the benefit, and percentage of the benefit (if shared).

Prior_Uni_Ben_Yr
If applicable, any past university beneficiary or beneficiaries, including the years of the benefit, and percentage of the benefit (if shared).

Uni_Ben_History
The university beneficiary or beneficiaries present and past, including the years of the benefit, and percentage of the benefit (if shared).

Uni_Type
Type of university, i.e. Public, Private, or Public HBC (Historically Black College).

Grant_Type
Type of land grant received by the state. "Scrip" means the state got vouchers (i.e. "scrip") for the selection of parcels anywhere on the surveyed public domain. "Land" means the state selected public domain parcels inside of its boundaries.

Yr_Uni_Founded
The year the university was founded (format: YYYY).

Yr_ST_Accept
The year the state accepted the grant (format: YYYY).

Yr_Uni_Assign
The year the state assigned the grant (format: YYYY).

Year_Uni_Open
The year the university opened (format: YYYY).

Uni_Site_Purchase
"Y" for yes if part of the receipts from the grant were used to purchase a university site.

Uni_Created
"Y" for yes if the university was founded to take advantage of the Morrill Act grant. "N" for no if it was not.

Bulk_Disposal

High Country News

"Y" for yes if the land-grant was sold in bulk to speculators. "N" for no if it was not.

Disposal_Complete
    The year the land-grant was finished being sold (format: YYYY). "Not all sold yet" for universities whose states still retain surface acres. "After 1963" for universities whose land has been sold but the exact year after 1963 has not been determined.

Total_Acres_Exp
    The number of physical acres reportedly in the state's grant.

Total_Acres_Found
    The number of physical acres found in the state's grant, summed from the Parcels.csv.

Sold_Acres_1914
    The number of acres in the state's grant reportedly sold by 1914.

Unsold_Acres_1914
    The number of acres in the state's grant reportedly unsold by 1914.

Endow_Raised_1914
    The endowment principal raised from the sale of the state's grant by 1914.

Value_Per_Acre_Unsold_1914
    The value per acre of land in the state's grant left unsold in 1914.

Value_Unsold_Acres_1914
    The value of unsold acres in the state's grant in 1914.

Total_Value_1914
    The endowment principal raised from the sale of the state's grant by 1914 (*Endow_Raised_1914*) plus the value of unsold acres in the state's grant in 1914 (*Value_Unsold_Acres_1914*).

Per_Acre_Total_Value_1914
    The *Total_Value_1914* divided by the *Total_Acres_Exp*.

Inf_Value_Assign_Yr_2020
    The inflation adjusted value of *Total_Value_1914* calculated in 2020 dollars from the year the university was assigned the grant (*Yr_Uni_Assign*). Inflation factors associated with that year listed in *Inf_Factor_Adjust_2020.*

Inf_Value_1914_2020

The inflation adjusted value of *Total_Value_1914* calculated in 2020 dollars from 1914 (inflation factor = .038278).

Inf_Factor_Adjust_2020
The inflation factors to calculate the dollar value in 2020 from the year the university was assigned the grant (*Yr_Uni_Assign*).

Unsold_Acres_Value_1918
The value of acres in the state's grant unsold in 1918.

Unsold_Acres_1918
The acres in the state's grant sold by 1918.

Per_Acre_Value_Unsold_1918
The per acre value of the acres in the state grant unsold by 1918.

US_Paid
The amount the United States paid to extinguish Indigenous title to the state's grant. The sum of the amount paid per parcel (*US_Paid_for_Parcel* in Parcels.csv) for parcels in the state's grant.

No_Indig_Cessions
The number of Indigenous land cessions (i.e. *Royce_Num*) that the university's grant falls within.

No_Loc_States
The number of states (i.e. *Loc_State*) that the university's grant falls within.

Adjusted_Acreage
The number of acres in the state's grant (*Total_Acres_Found*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Adjusted_US_Paid
The amount paid by the United States to extinguish Indigenous title (*Total_US_Paid*) for the land in the state's grant multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Adjusted_Endow_Raised_1914
The endowment principal raised from the sale of the state's grant by 1914 (*Endow_Raised_1914*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

High Country News

Adjusted_ Value_Unsold_Acres_1914
> The value of unsold acres in the state's grant in 1914 (*Value_Unsold_Acres_1914*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Adjusted_ Total_Value_1914
> The endowment principal raised from the sale of the state's grant by 1914 (*Endow_Raised_1914*) plus the value of unsold acres in the state's grant in 1914 (*Value_Unsold_Acres_1914*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Pay_Raise_Multiple
> The *Adjusted_ Total_Value_1914* divided by the *Adjusted_US_Paid*. The return on the endowment raised relative to the amount paid by the United States for Indigenous title. For example, if the *Pay_Raise_Multiple* = 50, then $50 dollars was raised for the endowment for every $1 the U.S. paid for Indigenous title. Where *Adjusted_US_Paid* = 0, the multiple is listed as "incalculable." This field calculates for the university what the *Uni_Raise_US_Pay_Multiple* field calculates for the parcel.

Adjusted_Inf_Value_Assign_Yr_2020
> The inflation adjusted value of *Total_Value_1914* calculated in 2020 dollars from the year the university was assigned the grant (*Yr_Uni_Assign*), multiplied by the share of the endowment assigned to the university (*Benefit_Share*). Inflation factors associated with that year listed in *Inf_Factor_Adjust_2020.*

Adjusted_Inf_Value_1914_2020
> The inflation adjusted value of *Total_Value_1914* calculated in 2020 dollars from 1914 (inflation factor = .038278), multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Disposal_Notes
> Brief texts describing how the land grant was disposed of and the proceeds invested.

Disposal_Notes_Source
> The source(s) used to compose the *Disposal_Notes* field.

Notes_ Value_Unsold_Acres_1914
> Explanation for how the value of unsold acres in 1914 was determined.

Notes_Sold_Acres_1914
> Explanation for how the 1914 value per acre of sold acres was determined.

Tot_Acres_Exp_Source

High Country News

The source for the figure in the *Total_Acres_Exp* field.

Source_Principal_Acres_Sold_1914
>   The source for the principal raised (*Endow_Raised_1914*) and acres sold (*Sold_Acres_*1914) by 1914.

Inflation_Source
>   The source for the inflation factors in *Inf_Factor_Adjust_2020*, used in *Inf_Value_Assign_Yr_2020* and *Inf_Value_1914_2020.*

Source_Acre_1918
>   The source for the number acres sold and acres unsold in 1918.

Unsold_Value_Source_1918
>   The source for the value of the unsold acres in 1918.

7. Summaries_Uni_State_Treaty_Tribe.xlsx

This file, an excel spreadsheet, contains four tabs that aggregate data on university beneficiaries (*University_Summary*), the states where Morrill Act parcels were located (*Loc_State_Sums*), the treaties/land cessions that overlap the parcels (*LG_State_Treaty_List*), and the tribal nations involved with those treaties/land cessions (*Ceded_by_Single_Name*). It is useful for seeing at a glance information on the size and value of the land grants, the tribes and states that were impacted, and the universities that benefitted.

University_Summary

This spreadsheet aggregates summary data on 52 land-grant universities across 16 columns (and includes a row for acres not linked to a specific university, designated "unknown"). It provides a summary of the number of states who had parcels of land obtained from them to benefit that university's endowment, and the number of cessions that took place to enable it. It also shows the size and value of the lands, and adjusts for the percentage of the endowment benefit assigned to different universities. Much of the key summary data it highlights is duplicated from the Universities.csv.

The file contains the following columns:

University
>   The current university beneficiary or beneficiaries of the endowment.

LG_State
>   The postal code of the state that received the land grant.

High Country News

City

    The city where the university is located.

Benefit_Share

    The university's share of the endowment income, e.g. 1 = 100%.

Endow_Shared_With

    If applicable, the other university in the state that receives a share of the endowment income. If not applicable, field reads "n/a."

Total_Acres_Exp

    The number of physical acres reportedly in the state's grant.

Total_Acres_Found

    The number of physical acres identified in the state's grant.

Percent_Found

    Percentage of expected acres found, i.e. *Total_Acres_Found* divided by *Total_Acres_Exp.*

No_Indig_Cessions

    The number of Indigenous land cessions (i.e. *Royce_Num*) that the university's grant falls within.

No_Loc_States

    The number of states (i.e. *Loc_State*) that the university's grant falls within.

Adjusted_Acreage

    The number of acres in the state's grant (*Total_Acres_Found*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Adjusted_US_Paid

    The amount paid by the United States to extinguish Indigenous title (*Total_US_Paid*) for the land in the state's grant multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Adjusted_Endow_Raised_1914

    The endowment principal raised from the sale of the state's grant by 1914 (*Endow_Raised_1914*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

HighCountryNews

Adjusted_ Value_Unsold_Acres_1914
> The value of unsold acres in the state's grant in 1914 (*Value_Unsold_Acres_1914*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Adjusted_ Total_Value_1914
> The endowment principal raised from the sale of the state's grant by 1914 (*Endow_Raised_1914*) plus the value of unsold acres in the state's grant in 1914 (*Value_Unsold_Acres_1914*) multiplied by the share of the endowment assigned to the university (*Benefit_Share*).

Pay_Raise_Multiple
> The *Adjusted_ Total_Value_1914* divided by the *Adjusted_US_Paid*. The return on the endowment raised relative to the amount paid by the United States for Indigenous title. For example, if the *Pay_Raise_Multiple* = 50, then $50 dollars was raised for the endowment for every $1 the U.S. paid for Indigenous title. Where *Adjusted_US_Paid* = 0, the multiple is listed as "incalculable." This field calculates for the university what the *Uni_Raise_US_Pay_Multiple* field calculates for the parcel.

Loc_State_Sums

This spreadsheet aggregates summary data across 6 columns on 24 states where parcels issued under the Morrill Act (or under acts in lieu thereof), were located. It identifies the number of grants that contained land within a given state, the number of universities that benefited from those lands, the total number of acres involved, as well as the total amount paid by the United States for Indigenous title to those lands and the total amount raised for universities from them. For example, to understand how the Morrill Act impacted Montana, one could consult the sheet to learn that 17 states were granted lands located in Montana, and that 20 land-grant universities gleaned benefits. The United States paid $12,413 for 238,839 acres, if anything was paid at all; and the states raised $1,355,843 from those same parcels for the benefit of those 20 universities.

The file contains the following columns:

Loc_State
> The state where Morrill Act parcels were located.

Num_Grant_States
> The number of grant-receiving states (*LG_State*) that received land within *Loc_State*.

Num_LGUs
> The number of land-grant universities that benefited from land located in the *Loc_State*.

Acres

The number of total acres of grant land located in the *Loc_State*.

US_Paid
   The amount the United States paid for the grant land located in the *Loc_State*.

Endow_Raised
   The amount of endowment value generated by ca. 1914 from the grant land located in the *Loc_State*.

LG_State_Treaty_List

This spreadsheet aggregates summary data across 15 columns on 1441 unique linkages between Morrill Act grants (or grants in lieu thereof) and individual Indigenous land cessions. It ties land-grant states to the various cessions that supplied the grants. It is organized by unique combinations of land-grant states and Royce numbers (i.e., *LG_States* and *Royce_ID*) designated *LG_Royce*. So, for example, MS688 aggregates data about Mississippi's grant land inside Royce cession number 688, including the names of the tribal nations whose lands were obtained, how the lands were transferred (by agreement, treaty, unratified treaty, congressional act, executive order or seized), how many acres were obtained, how much was paid for them and how much was raised from them for land-grant university endowments.

Filtering by *LG_State* reveals at a glance a list of all the cession areas that benefitted a state, and attendant acreage and financial information. Filtering by *Royce_ID* reveals at a glance a list of all states that benefited from land inside a given Indigenous cession area, and attendant acreage and financial information. To search the data by university, filter the worksheet by the *Uni_Beneficiary* column to return records associated with a specific university. To search the data by tribal nation, filter the worksheet by the *Tribal_Nation* column to return records associated with a specific tribal nation. Note that five states — MS, VA, MA, SC and KY—have multiple university beneficiaries—that are combined in the *Uni_Beneficiary* column. Many more of the land cessions are likewise identified with multiple nations.

The file contains the following columns:

LG_Royce
   Combination of the *LG_State* (the postal code of the state receiving a grant for the benefit of a land-grant university) and the *Royce_ID* (the Royce map ID number).

LG_State
   The postal code of the state that received the land grant.

Uni_Beneficiary

The current university beneficiary or beneficiaries, and percentage of the benefit (if shared).

Royce_ID

The ID number for the Charles Royce Indian land cession map. This uniquely identifies the Indigenous land cession that the state's parcels lie within. Note that there are 156 of these numbers and 6 non-Royce areas given IDs like "None_CA" or "LA_Atakapa."

Tribal_Nation

The name(s) of the tribal nation(s) that ceded the land according to Charles Royce's schedule of Indian land cessions. Note the names appear as they do on Royce's schedule from the nineteenth century. Many of the names are no longer in use. Some are considered offensive.

US_Acquired_Mode

Describes the mode by which the US acquired the land, e.g. treaty, unratified treaty, seizure, as well as the date of the action.

Royce_Link

A link to the web address of the cession listed in Royce's schedule of Indian land cessions.

Yr_US_Acquire

The year the US acquired the Indigenous land supplying the state's parcels (format: YYYY).

Date_US_Acquire

The date the US acquired the Indigenous land supplying the state's parcels (format: YYYYMMDD).

Yr_ST_Accept

The year the state accepted the grant (format: YYYY).

Yr_Uni_Assign

The year the state assigned the grant (format: YYYY).

Acres

The number of total acres of the grant land of a state (*LG_State*) located in the Indigenous land cession (*Royce_ID*).

US_Paid

The amount the United States paid for the grant land located in the Indigenous

land cession (*Royce_ID*).

Endow_Raised
> The amount of endowment value generated by ca. 1914 for the state (*LG_State*) from land located in the Indigenous land cession (*Royce_ID*).

Pay_Raise_Multiple
> The *Endow_Raised* divided by the *US_Paid*. The return on the endowment raised for the state (*LG_State*) relative to the amount paid by the United States for Indigenous title to the Indigenous land cession (*Royce_ID*). For example, if the *Pay_Raise_Multiple* = 50, then $50 dollars was raised for the endowment of the state (*LG_State*) for every $1 the U.S. paid for Indigenous title for land inside this cession (*Royce_ID*). Where *US_Paid* = 0, the multiple is listed as "incalculable."

Ceded_by_Single_Name

This spreadsheet aggregates summary data across 17 columns on 4,463 unique linkages between Morrill Act grants (or grants in lieu thereof) and individual tribal nations. The data ties individual tribal nations, as they appear in the Royce schedule, to states and their land-grant universities, with an important caveat. Many of the treaties had multiple signers, so the acreage, amount paid and raised often can't be pinpointed to a single tribe (unless the *Tribal_Nation_Count* column = 1): the totals report the total amounts associated with the land cession in which a single tribal nation was involved, even when those totals can also be ascribed to multiple other nations. Sorting by the *Ceded_By_Single_Name* column makes it possible to see at a glance all states and universities associated with a tribal nation. The *Tribal_Nation* column lists all the tribal nations associated with the land cession identified in the *Royce_ID* column.

The file contains the following columns:

LG_Royce
> Combination of the *LG_State* (the postal code of the state receiving a grant for the benefit of a land-grant university) and the *Royce_ID* (the Royce map ID number).

Royce_ID
> The ID number for the Charles Royce Indian land cession map. This uniquely identifies the Indigenous land cession that the state's parcels lie within. Note that there are 156 of these numbers and 6 non-Royce areas given IDs like "None_CA" or "LA_Atakapa."

Ceded_By_Single_Name
> A single tribal nation from the group of tribal nations identified on the Royce schedule as nations associated with an Indigenous land cession (*Royce_ID*).

High Country News

Tribal_Nation_Count
> The number of tribal nations identified on the Royce schedule as nations associated with an Indigenous land cession (*Royce_ID*).

Tribal_Nation
> The name(s) of the tribal nation(s) that ceded the land according to Charles Royce's schedule of Indian land cessions. Note the names appear as they do on Royce's schedule from the nineteenth century. Many of the names are no longer in use. Some are considered offensive.

LG_State
> The postal code of the state that received the land grant.

Uni_Beneficiary
> The current university beneficiary or beneficiaries, and percentage of the benefit (if shared).

US_Acquired_Mode
> Describes the mode by which the US acquired the land, e.g. treaty, unratified treaty, seizure, as well as the date of the action.

Royce_Link
> A link to the web address of the cession listed in Royce's schedule of Indian land cessions.

Yr_US_Acquire
> The year the US acquired the Indigenous land supplying the state's parcels (format: YYYY).

Date_US_Acquire
> The date the US acquired the Indigenous land supplying the state's parcels (format: YYYYMMDD).

Yr_ST_Accept
> The year the state accepted the grant (format: YYYY).

Yr_Uni_Assign
> The year the state assigned the grant (format: YYYY).

Acres
> The number of total acres of the grant land of a state (*LG_State*) located in the Indigenous land cession (*Royce_ID*).

HighCountryNews

US_Paid

    The amount the United States paid for the grant land located in the Indigenous land cession (*Royce_ID*).

Endow_Raised

    The amount of endowment value generated by ca. 1914 for the state (*LG_State*) from land located in the Indigenous land cession (*Royce_ID*).

Pay_Raise_Multiple

    The *Endow_Raised* divided by the *US_Paid*. The return on the endowment raised for the state (*LG_State*) relative to the amount paid by the United States for Indigenous title to the Indigenous land cession (*Royce_ID*). For example, if the *Pay_Raise_Multiple* = 50, then $50 dollars was raised for the endowment of the state (*LG_State*) for every $1 the U.S. paid for Indigenous title for land inside this cession (*Royce_ID*). Where *US_Paid* = 0, the multiple is listed as "incalculable."