



CSV Import/Export Guide

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CHAPTER 1

Introduction

Welcome to the Verity CSV Import/Export Guide.

Who Should Use This Guide

This document is intended for election subject matter experts wanting to create one or more files that can be imported into Verity for use in an election and to export data from an election for use outside of Verity. For best success, you should have the following:

- A working knowledge of computer navigation
- This document in its entirety
- A text editor capable of saving data in comma-separated values (CSV) file format

CAUTION: If you use Microsoft Excel, do so with caution. Excel may change the data in your file.

Purpose of This Guide

The purpose of this guide is to assist election specialists in creating one or more files that can be imported into Verity or in exporting election data from Verity for use in another application.

It is not within the scope of this guide to explain how to use third party applications to create a CSV file.

What is In This Guide

This document comprises the following chapters and appendices:

- [Introduction](#)
- [Creating a CSV File](#)
- [File Formats](#)
- [Importing a CSV File](#)
- [Exporting a CSV File](#)

About Verity Import and Export

Verity Data provides users with the option of importing and exporting data. Users may create a file in a non-Verity application, such as a voter registration system, and then import the data into Verity Data, rather than create an election by hand. In addition, data can be exported in order to edit the data in another application.

Verity Data was designed to accept CSV files for import. In CSV files, each piece of data is separated from other pieces of data by a comma. When you create your file, you must save it as a CSV file so that it will import into Verity Data. Data accepts CSV files with the extensions .csv and .txt.

In addition to CSV files, Verity Data accepts image, text, and audio files. Image files can be .bmp, .png, .jpg, and .gif. Ballot text files can be .rtf. Audio files specifications are noted below:

- AAC-encoded MP4 format
- 8 or 16 bits per sample
- Sample rate between 11.025 KHz and 48 KHz
- Fewer than 6 minutes long

CHAPTER 2

Creating a CSV File

This chapter walks you through the steps needed to create a CSV file that you can import into Verity Data. Our goal is not to teach you how to use a given application to build files, but rather how to build the files themselves.

Using the Chapter

CSV files created for import into Verity Data must follow [File Formats, starting on page 13](#), so that Verity Data can read the file.

Basic Rules

The following rules must be adhered to when creating a file for import. Otherwise, the file may not import correctly.

- All import files are ASCII text files containing CSV records. Allowed file extensions are .csv and .txt.
- CSV files require that commas be used to delineate field boundaries. Two successive commas define an empty field (i.e. ",,").
- Non-numeric fields do not need to be enclosed by double quotation marks unless a comma is intended to be part of the text.

- For fields in which a comma is intended to be part of the field text, the entire field text must be inside the double quotation marks. A double quotation mark followed by a comma is used to identify field boundaries and to separate fields. The following table provides examples.

Example: Correctly Typed	Description
"Lorem, Ipsum"	Comma intended to be part of text
"Lor "em" Ipsum"	Can use double quotes within double quotes
"Lor "em" I,psum"	Comma does not immediately follow double quotes
Lorem Ipsum	Double quotes not required when comma not used
Example: Incorrectly Typed	Description
"Lor "em", Ipsum"	Double quote followed by comma is not allowed

- If you select Full Election Dataset on the Import screen, the import process allows you only to *replace* the data in the existing repository. You cannot *append* a full election dataset. You can append only individual datasets.
- Line breaks within fields in the database are displayed as "\n" in CSV file fields, as shown in the following two examples.
This text: This example shows how to create\n a line break.
Displays as: This example shows how to create
a line break.
This text: This example shows how to create "\n" a line break too.
Displays as: This example shows how to create "
" a line break too.
- External IDs can be any integer value other than zero (0).
- External IDs are optional for individually imported files.
- For Full Election Dataset files, External IDs are mandatory when importing.
- Association files require External IDs. If no External ID exists when exporting, then Verity Data creates one. Association files are files that associate two election elements. For example, PollingPlaces and Parties becomes PollingPlacePartyAssociation.
- Both files to be associated must already be present in Verity Data before Association files can be imported. Otherwise, the corresponding Association file will not be imported into Data and an error message will be displayed.
- For Full Election Dataset import, all files are required. For all files except ElectionBasicInfo, the file must be present, but it can be

empty. The only file for which content is required is ElectionBasicInfo.

- When importing data for a single election element (e.g., VotingTypes), the Images and RTFs folders must be present (even when empty) only if the election element has a corresponding field in the data table. For example, VotingTypes has the fields ID, Name, VotingDuration, and SequenceNumber, so the Images and RTFs folders are not required. However, the Contests element calls for ID, Title, Type,...PaperImage, ElectronicImage, and PropositionText. The last three data fields require that the Images and RTFs folders be included.
- Some files are supported only in specific election types. The files that depend on election type are identified in the following table.

File	Election Type
AdditionalTextPartyAssociation	Supported only in Closed Primaries
PollingPlacePartyAssociation	Supported only in Closed Primaries
ContestPartyAssociation	Supported only in Open or Closed Primaries

- Verity Data validates all of the dependencies before trying to import a file. If importing files one at a time, you must import files in the following order (also listed on the Edit Data>Import screen) in Verity Data or Data may not be able to import the files:
 - Election Basic Info
 - Voting Types
 - Parties
 - Precincts
 - Districts
 - District to Precinct Associations
 - Polling Places
 - Polling Place to Party Associations (Closed Primary)
 - Polling Place to Precinct Associations
 - Contests
 - Contest to Precinct Associations
 - Contest to District Associations
 - Contest to Party Associations (Open and Closed Primary)
 - Choices
 - Choice-Additional Text Elements Associations

- Choice to Party Associations
- Contest Precinct Split Rotations
- Ballot Instructions
- Additional Texts
- Additional Texts to Party Association (Closed Primary)
- Additional Text to Precinct Association
- Additional Text to District Association
- Ballot Order
- Translations
- Audio

Note: While translation and audio files are not CSV files, they are included here because translation and audio files can be exported to be modified outside the Verity system, and then re-imported.

Building the Import File

To begin, determine the file that you want to import into Verity Data. Your options are listed on pages 9 and 10, and on the Edit Data>Import screen.

Once you have determined which file you want to import, refer to [Chapter 3, File Formats, starting on page 13](#), to find the table with the same file name as the file that you want to import. You may refer to this table several times.

Open the application that you will use to create your CSV file. Bearing in mind the basic rules set out earlier in this chapter, type the data to be saved as a CSV file. For instruction purposes, we use the [VotingTypes File Format, starting on page 14](#). The first row of data is the header row.

Note: The header row does not contain election data, nor is it required for import. To mark this row so that Verity Data does not read the row as election data, first type a hash mark (#). Then type the column headings, separated by commas, across the first row.

Type each of the *Field Names* from the [VotingTypes File Format](#) table on [page 14](#). The first field name is ID, followed by Name, VotingDuration, and SequenceNumber. Remember to separate each field name with a comma. In Notepad, the first line is shown in the following image.

```
#Id,Name,VotingDuration,SequenceNumber
```

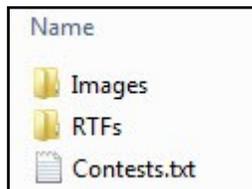
Complete typing the data.

In the second row, type the first value for each field name. For example, using the sample data from “VotingTypes File Format” on page 14, the first row ID is “4,” the Name is “AbsenteeVoting,” the VotingDuration is “MultipleDay,” and the SequenceNumber is “1.”

Using the rules in the [VotingTypes File Format](#) table, complete adding data for all of your rows.

Once your file is complete, prepare it for import. For VotingTypes, the prepared files consists of *VotingTypes.txt* or *VotingTypes.csv*. If we were to import, for example, Contests, we would create a file folder and add the following items to it:

- A folder containing your image files (i.e. .bmp, .jpg, .png, and .gif)
- A folder containing your rich text files (i.e. .rtf)
- Your *Contests.csv* or *Contests.txt* file



When you are finished, the file is ready to be imported into Verity Data.

Next

For the full set of file formats, see “File Formats” on page 13.

For instructions on importing and exporting data, see “Importing a CSV File” on page 45 and “Exporting a CSV File” on page 51, respectively.

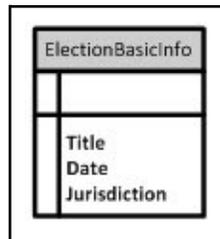
CHAPTER 3

File Formats

This chapter lists the file formats for each of the data files that can be imported into and exported from Verity Data. An entity-relationship (ER) diagram is provided for each data file, followed by a file format table and an example. Descriptions include field names, data types, and a short description of the data file.

ElectionBasicInfo File Format

ElectionBasicInfo contains the election Title, Date, and Jurisdiction, and contains no element associations.



The following table lists the file format for the *ElectionBasicInfo.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

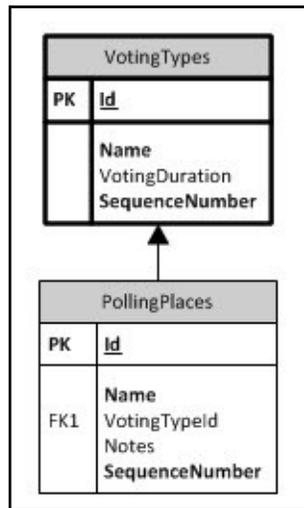
Field No.	Field Name	Data Type (field limit)	Description
1	Title	VarChar (100)	Title of the election as it appears on the ballot.
2	Date	String	Date of the election in Month dd, yyyy (e.g., October 21, 2015). NOTE: The date should have 4 digits for year.
3	Jurisdiction	VarChar (100)	Name of the jurisdiction.

File Sample

```
#Title,Date,Jurisdiction
"General Election","November 8, 2016","Jurisdiction 21-12"
```

VotingTypes File Format

The VotingTypes file contains VotingType name, duration, and sequence number. PollingPlaces uses the VotingTypes ID (VotingTypeId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *VotingTypes.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

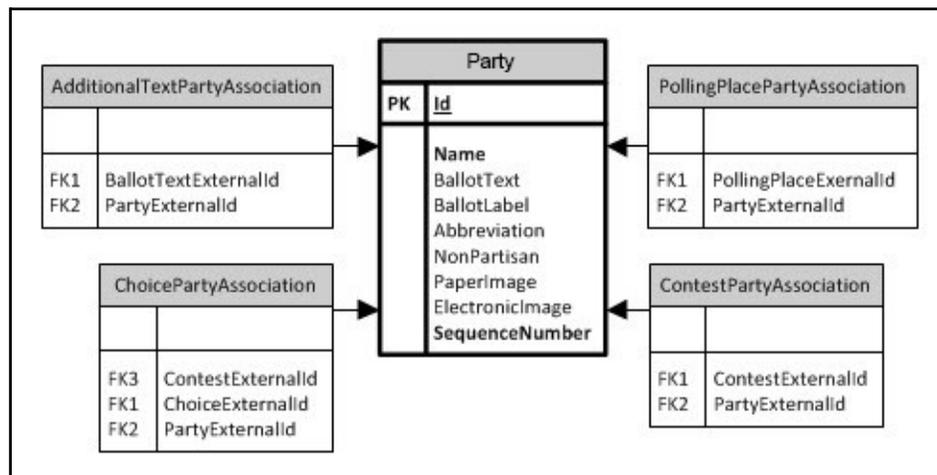
Field No.	Field Name	Data Type (field limit)	Description
1	ID	Integer	Primary key. Unique external identifier for VotingTypes ID used by: <ul style="list-style-type: none"> • PollingPlaces Limited to 5 voting types per election.
2	Name	VarChar (50)	Name of the voting type.
3	VotingDuration	Enumeration	Possible values are: <ul style="list-style-type: none"> • SingleDay • MultipleDay
4	SequenceNumber	Integer	Order the voting types should appear in reports and interfaces. Sequence number should be unique, contiguous, and start at 1.

File Sample

```
#Id,Name,VotingDuration,SequenceNumber
4,"Absentee Voting",MultipleDay,1
2,"Early Voting",MultipleDay,2
3,"Election Day Voting",SingleDay,3
1,"Voting Type 1",MultipleDay,4
```

Parties File Format

The Parties file contains data for the election parties, including name, related ballot text, party abbreviation, images, and the sequence number for each party. Each of the peripheral elements uses the Party ID (PartyExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *Parties.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type (field limit)	Description
1	ID	Integer	Primary key. Unique external identifier for Parties used by: <ul style="list-style-type: none"> • AdditionalTextPartyAssociation • ChoicePartyAssociation • PollingPlacePartyAssociation • ContestPartyAssociation
2	Name	VarChar (50)	Party name is the text displayed in party selector contests and UI drop down selections within the application suite; must be unique.
3	BallotText	VarChar (50)	Ballot text will appear with affiliated candidates on the ballot and some reports.
4	BallotLabel	VarChar (100)	Label for the party that appears in the header of closed primary ballots.
5	Abbreviation	Char (3)	Abbreviation of the party; must be unique.
6	NonPartisan	Boolean	Nonpartisan indicator.
7	PaperImage	Varchar	Image file name. The image file should be inside Images subdirectory.
8	ElectronicImage	Varchar	Image file name. The image file should be inside Images subdirectory.
9	SequenceNumber	Positive Integer	Order in which the party list should appear in reports and interfaces. Sequence number should be unique, contiguous, and start at 1.

File Sample

```
#Id,Name,BallotText,BallotLabel,Abbreviation,NonPartisan,PaperImage,ElectronicImage,SequenceNumber
```

```
1,"Republican Party","Republican","Republican Party Ballot","REP",False,Image8.jpg,Image9.jpg,1
```

```
2,"Democratic Party","Democrat","Democratic Party Ballot","DEM",False,Image10.jpg,Image11.jpg,2
```

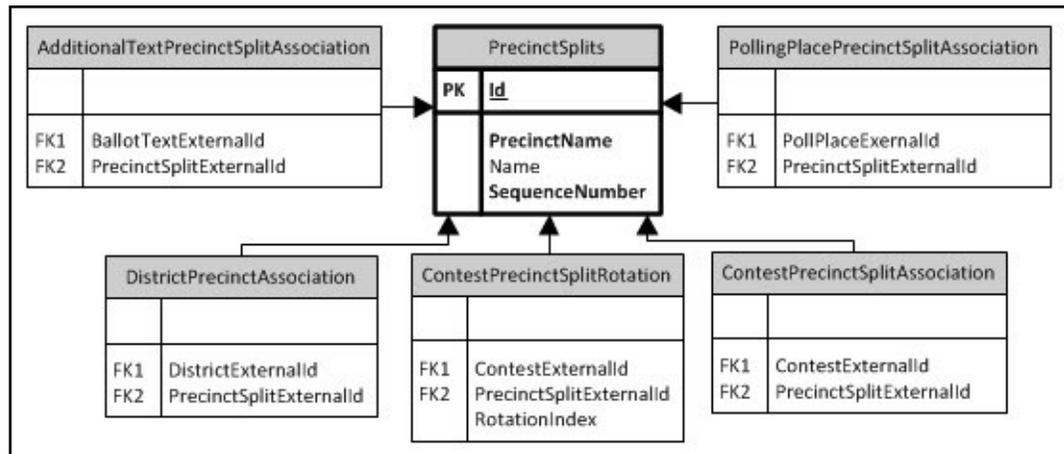
```
4,"Nonpartisan Party","Nonpartisan","Nonpartisan Ballot","NON",True,Image12.jpg,Image13.jpg,3
```

```
3,"Green Party","Green","Green Party Ballot","GRN",False,,,4
```

Note that the last line of data contains no images. The commas remain as place holders marking the empty data field.

PrecinctSplits File Format

The PrecinctSplits file contains the Precinct/PrecinctSplit name and sequence number. Each of the peripheral elements uses the PrecinctSplits ID (PrecinctSplitExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *PrecinctSplits.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type (field limit)	Description
1	ID	Positive Integer	Primary key. Unique external identifier for PrecinctSplits used by: <ul style="list-style-type: none"> • AdditionalTextPrecinctSplitAssociation • DistrictPrecinctAssociation • ContestPrecinctSplitRotation • ContestPrecinctSplitAssociation • PollingPlacePrecinctSplitAssociation
2	PrecinctName	VarChar (40)	Name of the precinct.
3	Name	VarChar (10)	Name of the precinct split.
4	SequenceNumber	Positive Integer	Order the precincts should appear in reports and interfaces. Sequence number should be unique, contiguous, and start at 1.

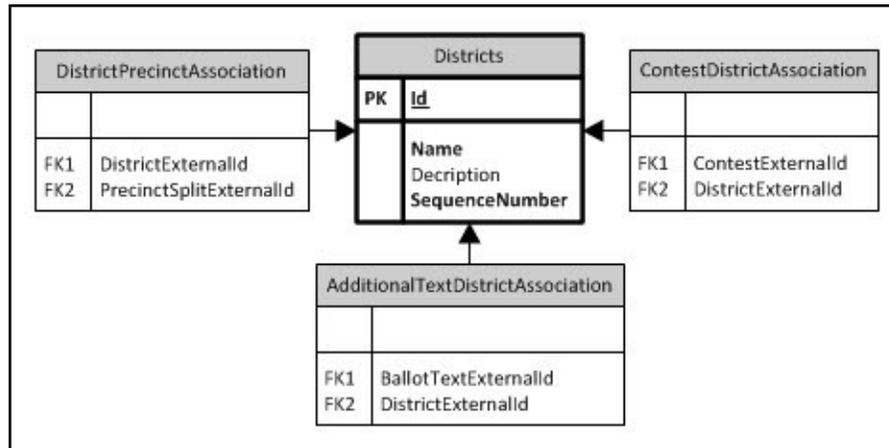
File Sample

```

#Id , PrecinctName , Name , SequenceNumber
2 , "101" , "A" , 1
3 , "101" , "B" , 2
4 , "102" , "C" , 3
  
```

Districts File Format

The Districts file contains the districts for the election along with the descriptions and sequence numbers. Each of the peripheral elements uses the Districts ID (DistrictExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *Districts.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

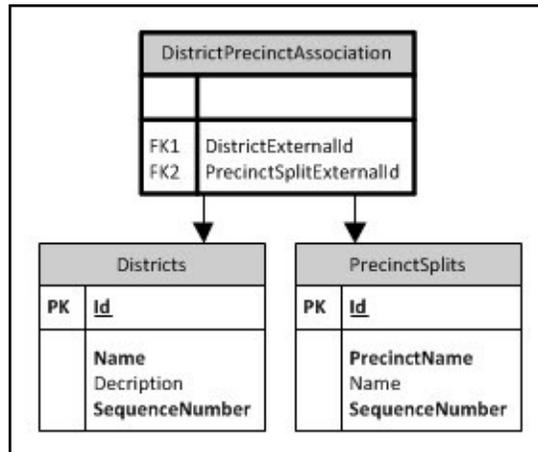
Field No.	Field Name	Data Type (field limit)	Description
1	ID	Integer	Primary key. Unique external identifier for Districts used by: <ul style="list-style-type: none"> • DistrictPrecinctAssociation • ContestDistrictAssociation • AdditionalTextDistrictAssociation Limited to 100 districts per election.
2	Name	VarChar (100)	Name of the district.
3	Description	VarChar (500)	Description of the district. Description does not appear on the ballot.
4	SequenceNumber	Integer	Order in which the district displays in the list. Sequence number should be unique, contiguous, and start at 1

File Sample

```
#Id,Name,Description,SequenceNumber
2,"Austin","Austin District Description",1
1,"Round Rock","Round Rock District Description",2
3,"Cedar Park","Cedar Park District Description",3
```

DistrictPrecinctSplitAssociation File Format

The DistrictPrecinctSplitAssociation file associates districts with precincts and precinct splits through Districts ID (DistrictExternalId) and PrecinctSplits ID (PrecinctSplitExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *DistrictPrecinctSplitAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type	Description
1	DistrictExternalId	Integer	Foreign key. Should match Districts ID.
2	PrecinctSplitExternalId	Integer	Foreign key. Should match PrecinctSplits ID.

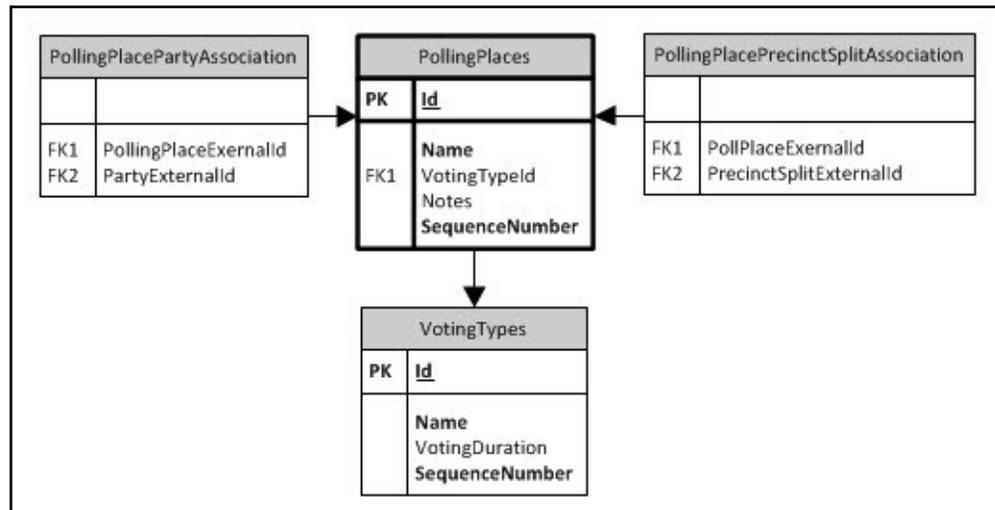
File Sample

```

#DistrictExternalId,PrecinctSplitExternalId
1,1
1,2
2,1
2,2
2,3
  
```

PollingPlaces File Format

The PollingPlaces file contains the voting type (VotingTypeId), notes, and sequence numbering for polling places. Each of the peripheral PollingPlace elements uses the PollingPlaces ID (PollingPlaceExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *PollingPlaces.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

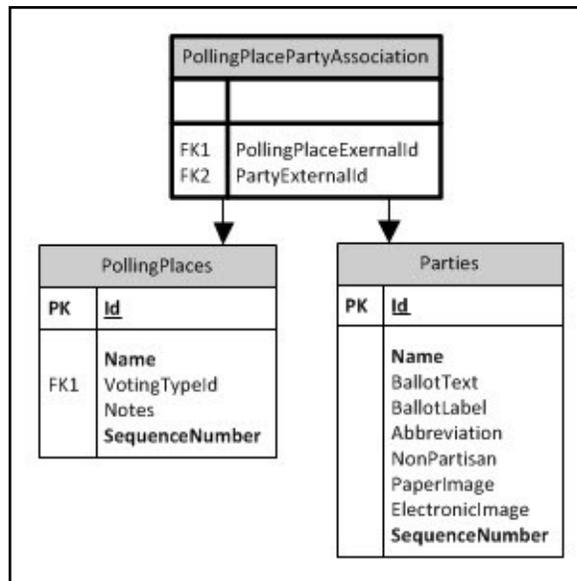
Field No.	Field Name	Data Type (field limit)	Description
1	ID	Integer	Primary key. Unique external identifier for PollingPlaces used by: <ul style="list-style-type: none"> • PollingPlacePartyAssociation • PollingPlacePrecinctSplitAssociation
2	Name	VarChar (50)	Name of the polling place.
3	VotingTypeID	Integer	Foreign key. Should match VotingTypes ID.
4	Notes	VarChar (1000)	An alternate description of the polling place, used only for display. Notes do not appear on the ballot.
5	SequenceNumber	Integer	Order in which the polling places should appear in reports and interfaces. Sequence number should be unique, contiguous, and start at 1

File Sample

```
#Id,Name,VotingTypeID,Notes,SequenceNumber
2,"Taylor School",2,"Side entrance",1
1,"Nottingham School",4,"Enter through gymnasium",2
3,"Carver Recreation Center",3,"Main door entry",3
```

PollingPlacePartyAssociation File Format

The PollingPlacePartyAssociation file associates polling places with parties through the PollingPlaces ID (PollingPlaceExternalId) and the Parties ID (PartyExternalId). The following ER diagram shows the relationships between elements.



PollingPlacePartyAssociation appears in Closed Primary Elections. The following table lists the file format for the *PollingPlacePartyAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

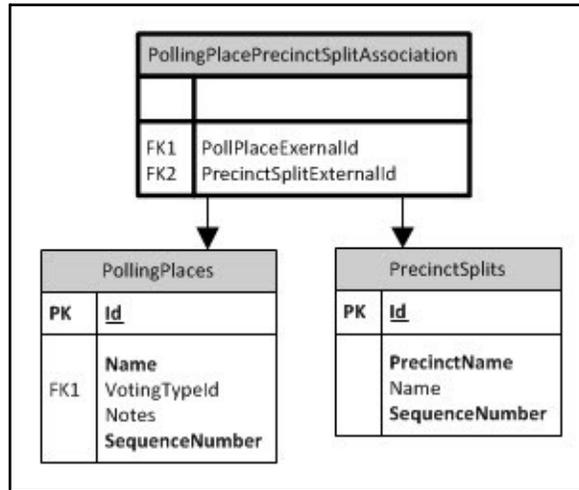
Field No.	Field Name	Data Type	Description
1	PollPlaceExternalId	Positive Integer	Foreign key. Should match PollingPlaces ID.
2	PartyExternalId	Positive Integer	Foreign key. Should match Parties ID.

File Sample

```
#PollPlaceExternalId,PartyExternalId
1,1
1,2
2,1
```

PollingPlacePrecinctSplitAssociation File Format

The PollingPlacePrecinctSplitAssociation file associates polling places with precincts and precinct splits through the PollingPlaces ID (PollingPlaceExternalId) and the PrecinctSplits ID (PrecinctSplitExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *PollingPlacePrecinctSplitAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type	Description
1	PollPlaceExternalId	Positive Integer	Foreign key. Should match PollingPlaces ID.
2	PrecinctSplitExternalId	Positive Integer	Foreign key. Should match PrecinctSplits ID.

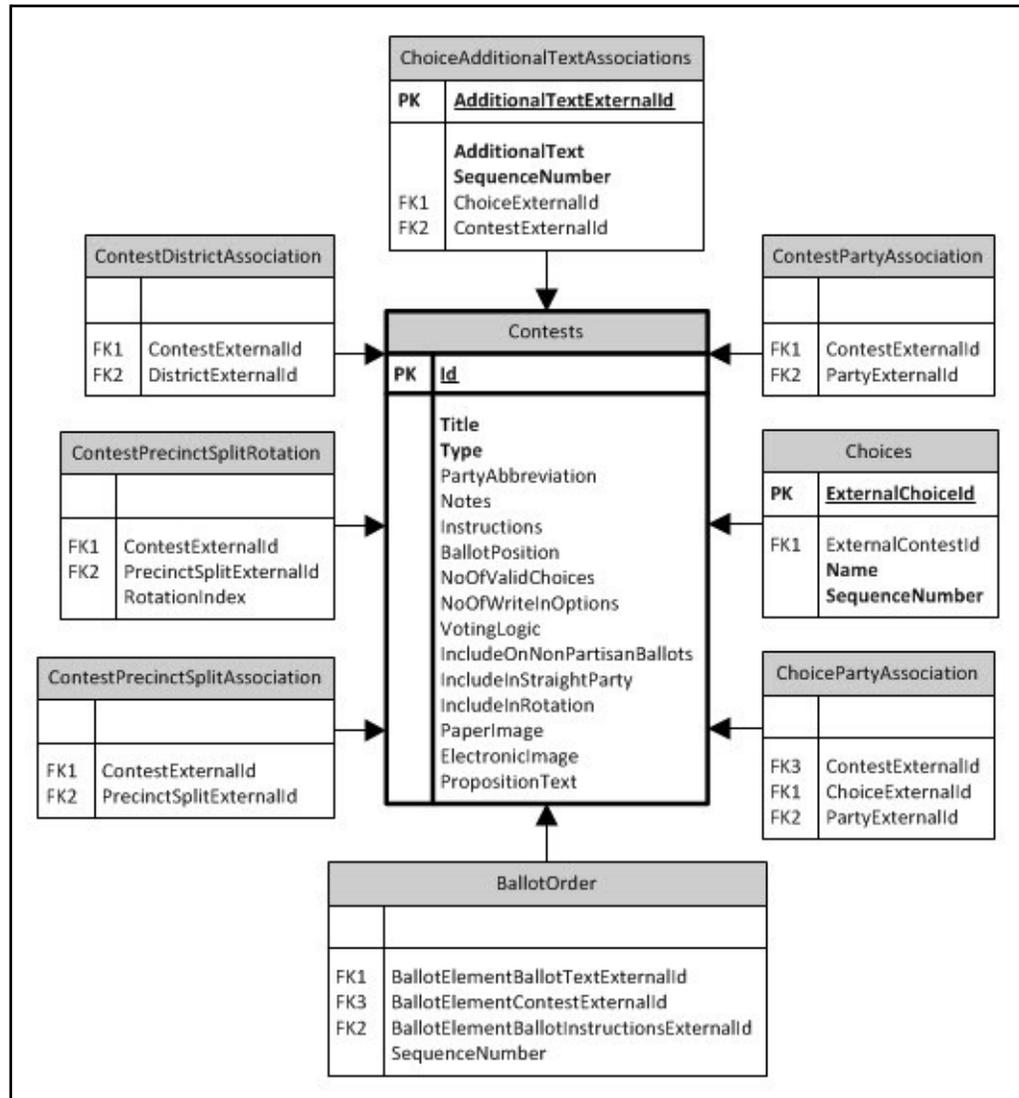
File Sample

```

#PollPlaceExternalId,PrecinctSplitExternalId
1,4
1,1
2,2
  
```

Contests File Format

The Contests file contains the contests that appear on ballots along with instructions, contest specifications, logic, images, and layout. Each of the peripheral elements uses the Contests ID (ContestExternalId, BallotElementContestExternalId, ExternalContestId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *Contests.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type (field limit)	Description
1	ID	Integer	Primary key. Unique external identifier for Contests used by: <ul style="list-style-type: none"> • ContestPrecinctSplitAssociation • Choices • ChoicePartyAssociation • ContestPartyAssociation • BallotOrder • ContestPrecinctSplitRotation • ChoiceAdditionalTextAssociations • ContestDistrictAssociation
2	Title	VarChar (100)	Title of the contest.
3	Type	Enumeration	Indicates the type of contest. Possible values are: <ul style="list-style-type: none"> • Office = Contest with partisan choices • Proposition = Proposition contest • Party = Straight party contest
4	PartyAbbreviation	VarChar (3)	Abbreviation of the party.
5	Notes	VarChar (500)	An alternate description of the contest, used only for display. Notes do not appear on the ballot.
6	Instructions	VarChar (50)	Instruction for the contest.
7	BallotPosition	Enumeration	Column force setting for the contest. Possible values are: <ul style="list-style-type: none"> • None = No column forcing applied • NextColumn = Force to next column • NextPage = Force to next page
8	NoOfValidChoices	Integer	Indicates the number of choices the voter may make in this contest.
9	NoOfWriteInOptions	Integer	Number of write-ins that should be created for the contest. This number is not to exceed the NoOfValidChoices value.

Field No.	Field Name	Data Type (field limit)	Description
10	VotingLogic	Enumeration	Sets the voting logic for the contest. Possible values are: <ul style="list-style-type: none"> • Null = Blank voting logic • Normal = Indicates the contest has a 1 vote:1 choice configuration. • RankedChoice = Indicates the contest has a ranked choice configuration for choices. • Cumulative = Indicates the contest has a many votes:1 choice configuration.
11	IncludeOnNonPartisanBallots	Boolean	Indicates if this contest should be available to non-partisan voters in closed primary elections. Possible values are: TRUE = Include FALSE = Do not include
12	IncludeInStraightParty	Boolean	Indicates that this party should be included in the straight party contest. Possible values are: TRUE = Include FALSE = Do not include
13	IncludeInRotation	Boolean	Indicates that this contest should be included in any specified rotation scheme. Possible values are: TRUE = Include FALSE = Do not include
14	PaperImage	String	Image file name. The image file should be inside Images subdirectory.
15	ElectronicImage	String	Image file name. The image file should be inside Images subdirectory.
16	PropositionText	String	RTF file name. The RTF file should be inside RTFs subdirectory.

File Sample

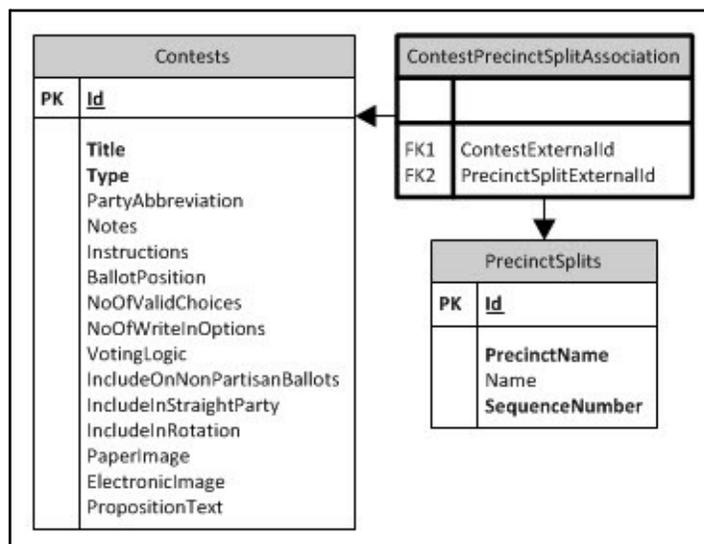
Only Propositions contain PropositionText items (see field number 16 in the table). Other contest types contain a comma to hold the place, but the field remains empty (see the end of ID number 1 in the sample below).

Many Contest items do not have images, so those fields are left blank with the commas in place (see the end of ID number 2 in the sample below). The commas identify the fields as present but empty.

```
#Id,Title,Type,PartyAbbreviation,Notes,Instructions,BallotPosition,
NoOfValidChoices,NoOfWriteInOptions,VotingLogic,IncludeOnNonPartisanBallots,
IncludeInStraightParty,IncludeInRotation,PaperImage,ElectronicImage,PropositionText
1,"Contest_Cumulative3",Office,REP,"notes","Contest with 2 VC
lwrite-in &1 Choice defined",None,2,1,Cumulative,True,False,
False,Image1.jpg,Image2.jpg,
2,"Contest_Cumulative1",Office,REP,,,"Contest with 10 VC only
choices defined",None,10,0,Cumulative,True,False,, ,
3,"Question 1",Proposition,NON,,,"Select one
option",None,1,0,Normal,False,False,False,, ,Contest6.rtf
```

ContestPrecinctSplitAssociation File Format

The ContestPrecinctSplitAssociation file associates contests with precincts and precinct splits through the Contest ID (ContestExternalId) and the PrecinctSplits ID (PrecinctSplitExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *ContestPrecinctSplitAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

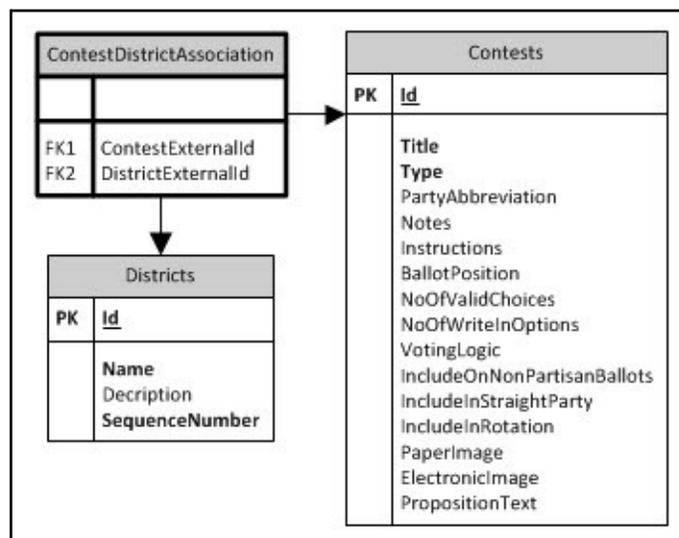
Field No.	Field Name	Data Type	Description
1	ContestExternalId	Integer	Foreign key. Should match Contests ID.
2	PrecinctSplitExternalId	Integer	Foreign key. Should match PrecinctSplits ID.

File Sample

```
#ContestExternalId,PrecinctSplitExternalId
1,2
1,3
1,1
2,2
2,3
2,1
```

ContestDistrictAssociation File Format

The ContestDistrictAssociation file associates contests with districts through the Districts ID (DistrictExternalId) and Contests ID (ContestExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *ContestDistrictAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

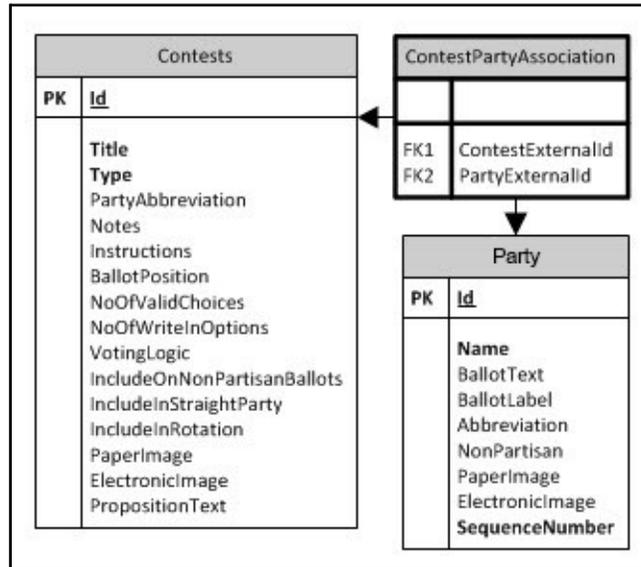
Field No.	Field Name	Data Type	Description
1	ContestExternalId	Integer	Foreign key. Should match Contests ID.
2	DistrictExternalId	Integer	Foreign key. Should match Districts ID.

File Sample

```
#ContestExternalId,DistrictExternalId  
1,1  
1,2  
2,1
```

ContestPartyAssociation File Format

The ContestPartyAssociation file associates contests with parties through the Contests ID (ContestExternalId) and Party ID (PartyExternalId). The following ER diagram shows the relationships between elements.



ContestPartyAssociation appears in open primary elections and closed primary elections. The following table lists the file format for the *ContestPartyAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

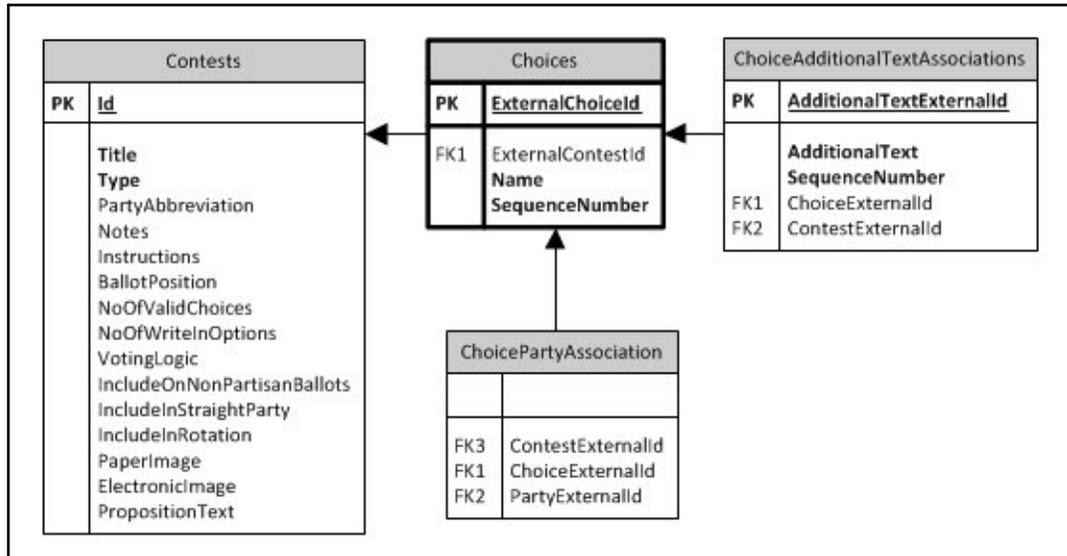
Field No.	Field Name	Data Type	Description
1	ContestExternalId	Integer	Foreign key. Should match Contests ID.
2	PartyExternalId	Integer	Foreign key. Should match Parties ID.

File Sample

```
#ContestExternalId,PartyExternalId
1,1
2,1
3,1
4,2
```

Choices File Format

The Choices file contains the choices that appear in contests, the sequence number in which each choice appears within a contest, and the Contests ID (ExternalContestId). Each of the peripheral elements ChoicePartyAssociation and ChoiceAdditionalTextAssociations uses the Choices ID (ChoiceExternalId). The following ER diagram shows the relationships between elements.



Note: The Choice name of the party selector contest must match one of the Party Names. However, if the Party Name is marked as nonpartisan the file will be rejected.

The following table lists the file format for the *Choices.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

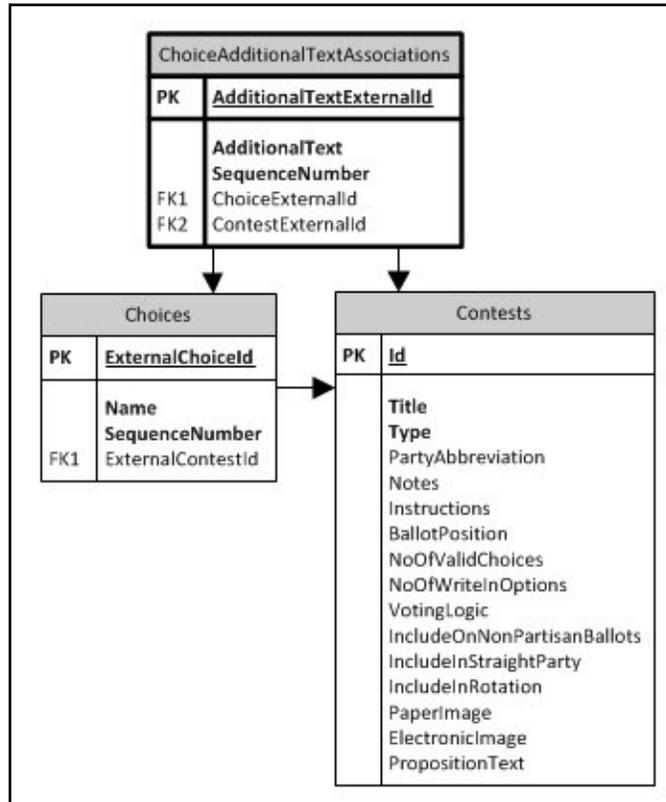
Field No.	Field Name	Data Type (field limit)	Description
1	ExternalChoiceId	Integer	Primary key. Unique external identifier for Choices used by: <ul style="list-style-type: none"> ChoiceAdditionalTextAssociations ChoicePartyAssociation This ID should be unique within a given contest.
2	ExternalContestId	Integer	Foreign key. Should match Contests ID.
3	Name	VarChar (100)	Name of the choice for a contest. Choice name must be unique for the contest.
4	SequenceNumber	Positive Integer	The sequence in which the candidates should appear on the ballot. Sequence numbers within a given contest should be unique, contiguous, and start at 1.

File Sample

```
#ExternalChoiceId,ExternalContestId,Name,SequenceNumber
6,2,"Choice 1",1
11,2,"Choice 2",2
4,8,"Roby Martha",1
1,8,"Rogers Mike",2
3,6,"Yes - for the Proposal",1
1,6,"No - for the Proposal",2
2,6,"Not Decided",3
```

ChoiceAdditionalTextAssociations File Format

The ChoiceAdditionalTextAssociations file contains additional text for ballot choices and the sequence in which they appear on ballots. The file also associates choices with contests through the Choices ID (ChoiceExternalId) and the Contests ID (ContestExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *ChoiceAdditionalTextAssociations.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

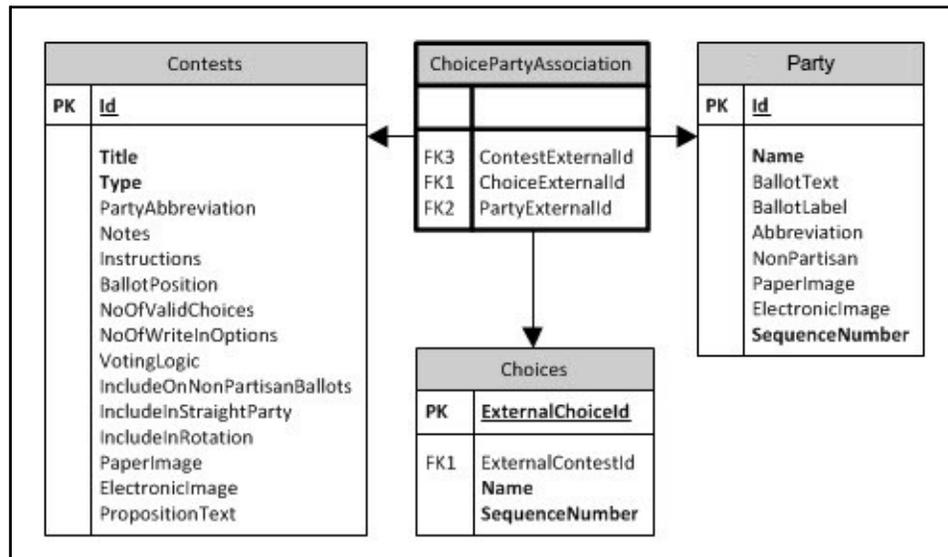
Field No.	Field Name	Data Type	Description
1	AdditionalTextExternalId	Integer	Primary key. This ID should be unique for a given contest and choice.
2	AdditionalText	VarChar (100)	Additional text of the choice.
3	SequenceNumber	Positive Integer	The sequence of how each AdditionalText element should appear on the ballot. Sequence numbers within a given contest should be unique, contiguous, and start at 1.
4	ChoiceExternalId	Integer	Foreign key. Should match the Choices ID.
5	ContestExternalId	Integer	Foreign key. Should match Contests ID.

File Sample

```
#AdditionalTextExternalId,AdditionalText,SequenceNumber,ChoiceE
xternalId,ContestExternalId
1,"Additional Text for Roby Martha",1,4,8
```

ChoicePartyAssociation File Format

The ChoicePartyAssociation file associates contests, choices, and parties through the Contests ID (ContestExternalId), the Choices ID (ChoiceExternalId), and the Party ID (PartyExternalId). The following ER diagram shows the relationships between elements.



On Import, the ChoicePartyAssociation file format does not allow a Party to be associated with a Choice in a *party selector* contest. When Choices are added to a party selector contest using the *Choices.txt* file, the system automatically assigns a Party to the Choice of a party selector contest.

Similarly, we cannot export the Party associations with a Choice for a party selector contest.

The following table lists the file format for the *ChoicePartyAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

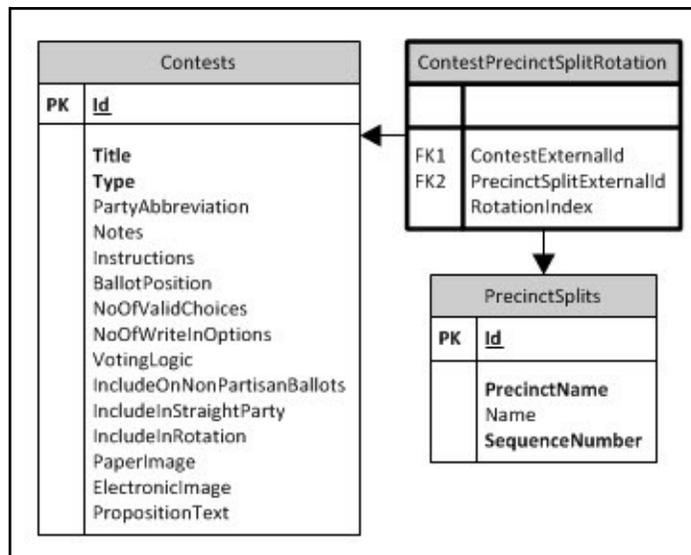
Field No.	Field Name	Data Type	Description
1	ContestExternalId	Integer	Foreign key. Should match Contests ID.
2	ChoiceExternalId	Integer	Foreign key. Should match Choices ID.
3	PartyExternalId	Integer	Foreign key. Should match Parties ID.

File Sample

```
#ContestExternalId,ChoiceExternalId,PartyExternalId
9,1,3
9,2,3
9,3,3
9,4,3
```

ContestPrecinctSplitRotation File Format

The ContestPrecinctSplitRotation file associates contests with precincts and precinct splits through Contests ID (ContestExternalId) and the PrecinctSplits ID (PrecinctSplitExternalId). The file also contains the Rotation index. The following ER diagram shows the relationships between elements.



The following table lists the file format for the *ContestPrecinctSplitRotation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

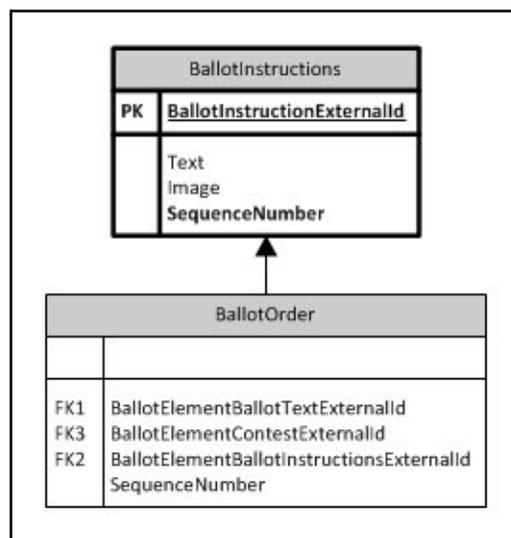
Field No.	Field Name	Data Type	Description
1	ContestExternalId	Integer	Foreign key. Should match Contests ID.
2	PrecinctExternalId	Integer	Foreign key. Should match PrecinctSplits ID.
3	RotationIndex	Integer	Rotation index for the contest: <ul style="list-style-type: none"> • 1 = Base rotation, or "First Rotation" • 2 = Second rotation

File Sample

```
#ContestExternalId,PrecinctExternalId,RotationIndex
1,1,1
1,2,1
```

BallotInstructions File Format

The BallotInstructions file contains the instructions, related images, and the sequence in which they appear on ballots. BallotOrder also uses the BallotInstructionExternalId (BallotElementBallotInstructionsExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *BallotInstructions.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type	Description
1	BallotInstructionExternalId	Integer	Primary key. Unique identifier for the ballot instruction.
2	Text	String	RTF file name. The RTF file should be inside the RTFs subdirectory.
3	Image	String	Paper image file name. The image file should be inside the Images subdirectory.
4	SequenceNumber	Positive Integer	Unique identifier for the order in which BallotInstructions should appear on ballots. SequenceNumber should be unique, contiguous, and start at 1.

Note: Only paper ballot instruction elements are imported and exported.

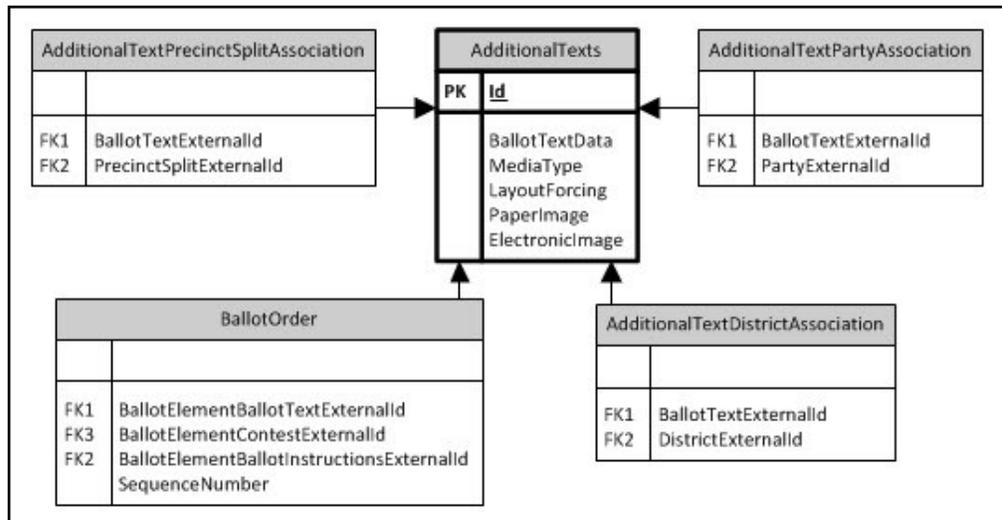
File Sample

```
#BallotInstructionExternalId,Text,Image,SequenceNumber
1,BallotInstructionElement1.rtf,Image1.jpg,1
```

AdditionalTexts File Format

The AdditionalTexts file contains non-contest text that appears on ballots (paper, electronic, or both) and the specifications that Verity Data uses to place the data on the ballot(s). Each of the peripheral elements uses the AdditionalTexts ID (BallotTextExternalId and BallotElementBallotTextExternalId). The following ER diagram shows the relationships between elements.

Note: Additional Text is not related to Choice-Additional Text.



The following table lists the file format for the *AdditionalTexts.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type (field limit)	Description
1	ID	Integer	Primary key. Unique external identifier for AdditionalTexts used by: <ul style="list-style-type: none"> • AdditionalTextPrecinctSplitAssociation • AdditionalTextPartyAssociation • AdditionalTextDistrictSplitAssociation • BallotOrder
2	BallotTextData	Varchar (1000)	Title of the additional text item.
3	MediaType	Enumeration	Indicates on which media the additional text box should appear. Possible values are: <ul style="list-style-type: none"> • Paper = Appears on paper ballots only • Electronic = Appears on electronic ballots only • Both = Appears on both paper and electronic ballots

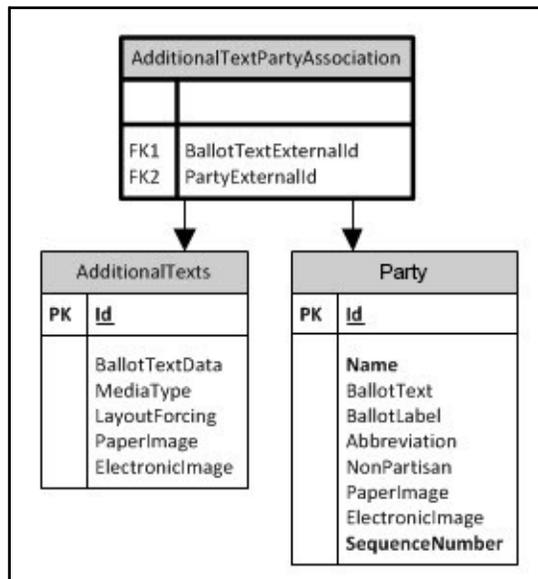
Field No.	Field Name	Data Type (field limit)	Description
4	LayoutForcing	Enumeration	Column-force setting for the ballot text box. Possible values are: <ul style="list-style-type: none"> • None = No column forcing applied • NextColumn = Force to next column • NextPage = Force to next page
5	PaperImage	Text	Paper image file name. The image file should be inside the Images subdirectory.
6	ElectronicImage	Text	Electronic image file name. The image file should be inside the Images subdirectory.

File Sample

```
#Id,BallotTextData,MediaType,LayoutForcing,PaperImage,ElectronicImage
1,"Additional Text1",Both,None,Image1.jpg,Image2.jpg
```

AdditionalTextPartyAssociation File Format

The AdditionalTextPartyAssociation file associates additional text items with parties through the AdditionalTexts ID (BallotTextExternalId) and the Party ID (PartyExternalId). The following ER diagram shows the relationships between elements.



AdditionalTextPartyAssociation appears in Closed Primary Elections only. The following table lists the file format for the *AdditionalTextPartyAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

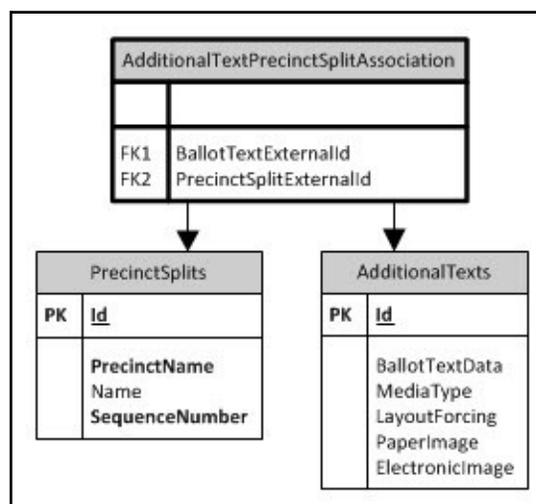
Field No.	Field Name	Data Type	Description
1	BallotTextExternalId	Integer	Foreign key. Should match AdditionalTexts ID.
2	PartyExternalId	Integer	Foreign key. Should match Party ID.

File Sample

```
#BallotTextExternalId,PartyExternalId
1,1
1,2
1,4
1,3
```

AdditionalTextPrecinctSplitAssociation File Format

The AdditionalTextPrecinctSplitAssociation file associates precincts and precinct splits with additional text items through the PrecinctSplits ID (PrecinctSplitExternalId) and the AdditionalTexts ID (BallotTextExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *AdditionalTextPrecinctSplitAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

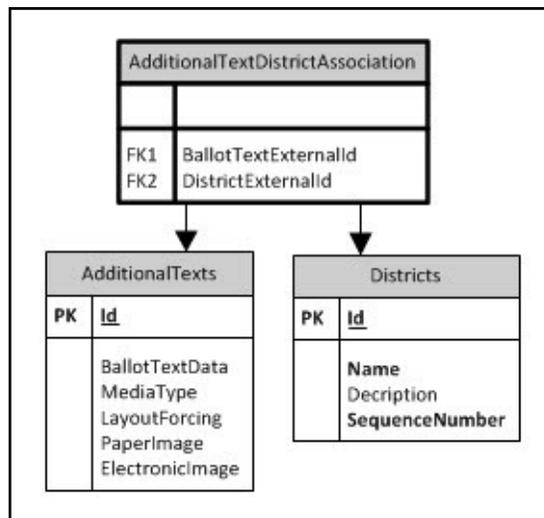
Field No.	Field Name	Data Type	Description
1	BallotTextExternalId	Integer	Foreign key. Should match AdditionalTexts ID.
2	PrecinctSplitExternalId	Integer	Foreign key. Should match PrecinctSplits ID.

File Sample

```
#BallotTextExternalId,PrecinctSplitExternalId
1,2
1,3
1,4
1,1
```

AdditionalTextDistrictAssociation File Format

The AdditionalTextDistrictAssociation file associates additional text items with districts through the AdditionalTexts ID (BallotTextExternalId) and the Districts ID (DistrictExternalId). The following ER diagram shows the relationships between elements.



The following table lists the file format for the *AdditionalTextDistrictAssociation.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

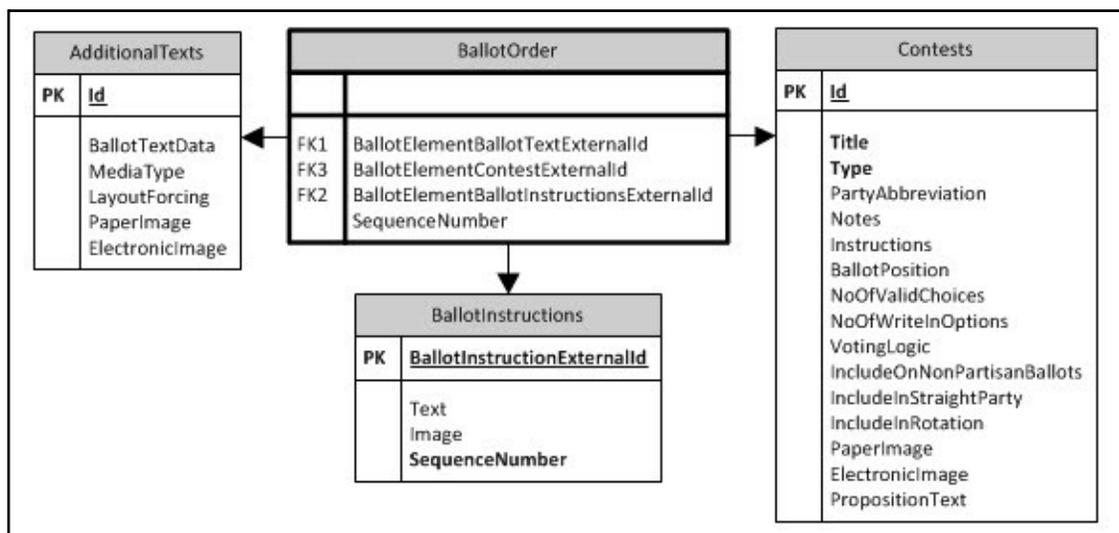
Field No.	Field Name	Data Type	Description
1	BallotTextExternalId	Integer	Foreign key. Should match AdditionalTexts ID.
2	DistrictExternalId	Integer	Foreign key. Should match Districts ID.

File Sample

```
#BallotTextExternalId,DistrictExternalId
1,1
2,2
```

BallotOrder File Format

The BallotOrder file contains the sequencing and associations for additional text, instruction, and contest items through the AdditionalTexts ID (BallotElementBallotTextExternalId), BallotInstructions ID (BallotElementBallotInstructionsExternalId), and Contests ID (BallotElementContestExternalId). The following ER diagram shows the relationships between elements.



The BallotOrder file must contain all of the contests and additional texts, and 1 ballot instruction element.

If the file is empty or does not meet the criteria in the above rule with a *single file* import, the import process will fail. If the file is empty or does not meet the criteria in the above rule with *full election* import, the import process ignores the file and proceeds processing other files.

If the file contains duplicate sequence numbers or the sequence numbers are not sequential, the import will fail.

The import updates the ballot order only for the elements for which an External ID is provided.

The following table lists the file format for the *BallotOrder.txt* file. The field order in the file should be as specified in the **Field No.** column in the table.

Field No.	Field Name	Data Type (field limit)	Description
1	BallotElementBallotTextExternalId	Integer	Foreign key. Should match AdditionalTexts ID.
2	BallotElementContestExternalId	Integer	Foreign key. Should match Contests ID.
3	BallotElementBallotInstructionsExternalId	Integer	Value will always be 1; fixed value.
4	SequenceNumber	Integer	Unique and should be sequential within the file.

File Sample

For each row, only one of the first three columns should contain a value and the others should be blank.

```
#BallotElementBallotTextExternalId,BallotElementContestExternal
Id,BallotElementBallotInstructionsExternalId,SequenceNumber
,,1,1
,7,,5
1,,,12
```


APPENDIX A

Importing a CSV File

To import election data, you must have Verity Data installed. The import function is found under the Edit Data workflow.

CAUTION: The Verity CSV precinct import checks for duplicates in a more aggressive way than the data entry user interface. In very specific cases, users may encounter duplicate entry errors on import that do not appear on the screen. This can happen if *all* of the following are true:

- The election has a mix of precincts with splits and precincts without splits.
- The precinct and split identifiers are both numeric.
- The full name of one precinct and split is identical to the precinct name of a different precinct AND that precinct has no splits.

EX:

Precinct Name	Split Name	Combined
101	1	101-1
101-1		101-1

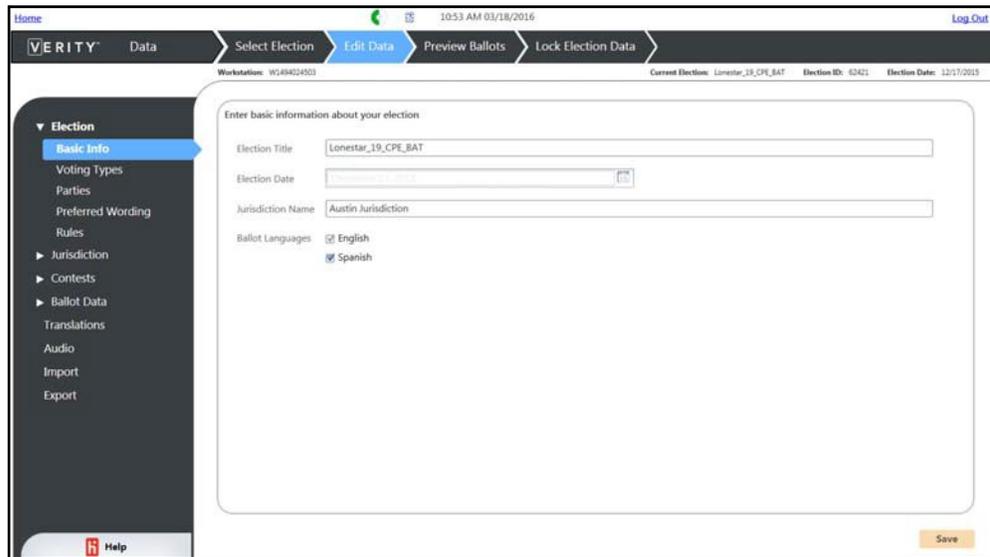
Finding the Import Function

First log in to Verity Data. Once you are logged in, the Elections screen displays by default. If your election does not appear in the list, use the Election Management application to add, import, or restore your election. For instructions on using Election Management, refer to the *Verity Data Quick Reference Manual*.

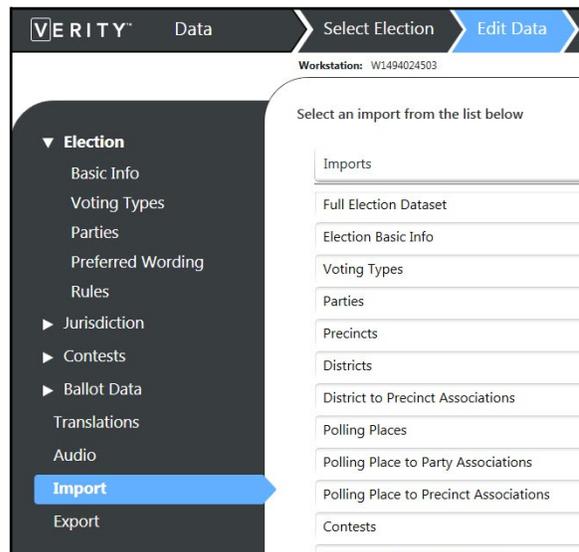
Note: Election data can only be imported into elections that are in Open for Editing status.

1. In Data, under Select Election, ensure the Elections tab is selected.
2. Locate your election in the list.

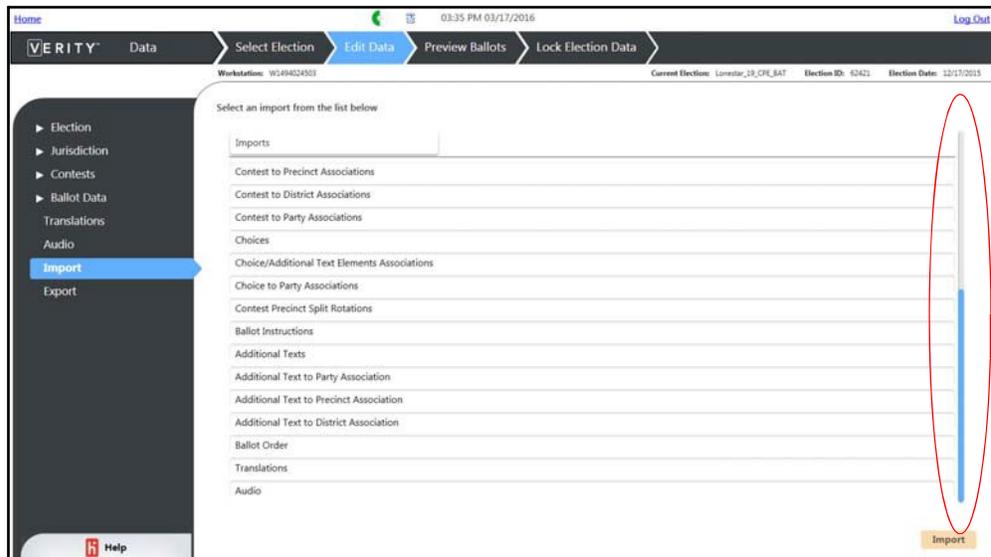
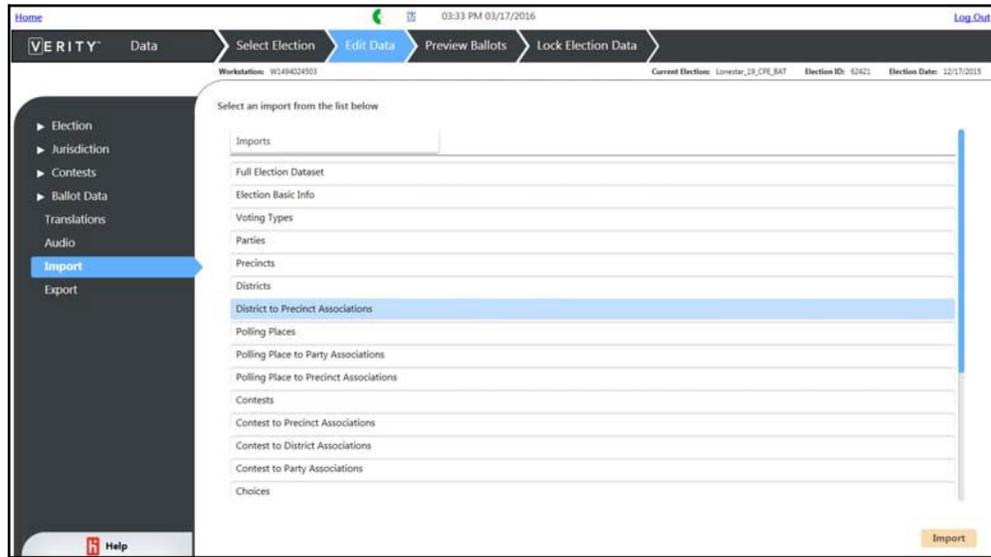
3. Double-click the election to open it (or click the election and then click the **Open** button). Data displays the Edit Data>Basic Info screen by default.



4. On the left side of the screen is the list of functions available under the Edit Data workflow.

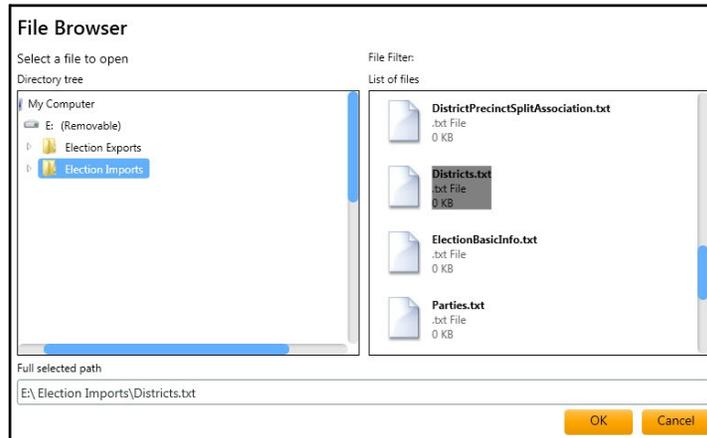


- Click to select **Import** at the bottom of the list. The list of files that you can import is displayed.



- Use the scroll bar on the right to view the entire list of import files.
- Click to select the file you want to import. The **Import** button becomes active.

8. Click the **Import** button. The File Browser window displays.



9. Navigate to the location from which you want to import files. Verity Data automatically fills in the *Full selected path* field. Choose a file if you are importing data individually; choose a folder if you are performing a Full Dataset import.

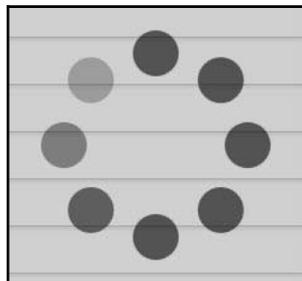
Note: For Full Dataset imports, all import files must be present and the file names must match the default file names.

10. Click the **OK** button to continue. (Click the **Cancel** button to close the File Browser window without importing data.) The Verity Dialog window is displayed.



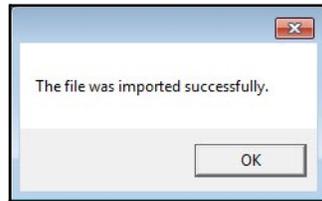
If you are replacing data, click **Replace**. If you are appending data (for individual datasets only), click **Append**. Full datasets cannot be appended; they can only be replaced in their entirety.

During the import process, the progress wheel rotates on the screen.



If any errors occur during import, an error message displays on the screen.

11. When the import is finished, a confirmation message displays.



12. Click **OK** to close the window.

The import is complete.

APPENDIX B

Exporting a CSV File

To export a CSV file, you must have Verity Data installed. The export function is found under the Edit Data workflow.

Finding the Export Function

First log in to Verity Data. Once you are logged in, the Elections screen displays by default. If your election does not appear in the list, use the Election Management application to add, import, or restore your election. For instructions on using Election Management, refer to the *Verity Data Quick Reference Manual*.

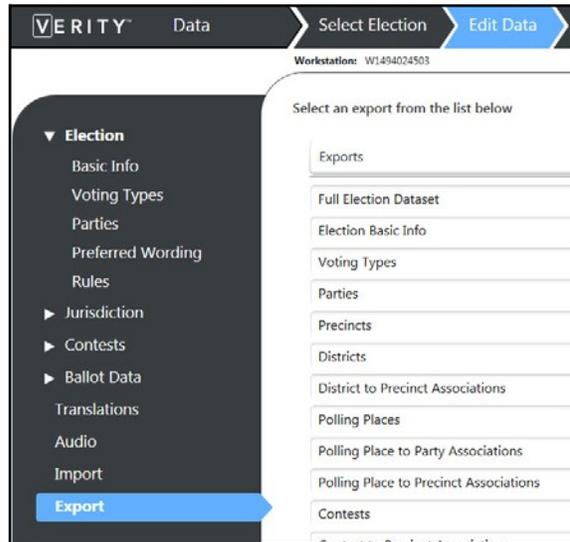
1. In Data, under Select Election, ensure the Elections tab is selected.
2. Locate your election in the list.
3. Double-click the election to open it (or click the election and then click the **Open** button). Data displays the Edit Data>Basic Info screen by default.

The screenshot shows the Verity Data application interface. At the top, there is a navigation bar with tabs: Home, Data, Select Election, Edit Data (active), Preview Ballots, and Lock Election Data. Below the navigation bar, the current election information is displayed: Workstation: W5494024503, Current Election: Lonestar_19_CPE_BAT, Election ID: 62421, Election Date: 12/17/2015. The main content area is titled 'Enter basic information about your election' and contains the following fields:

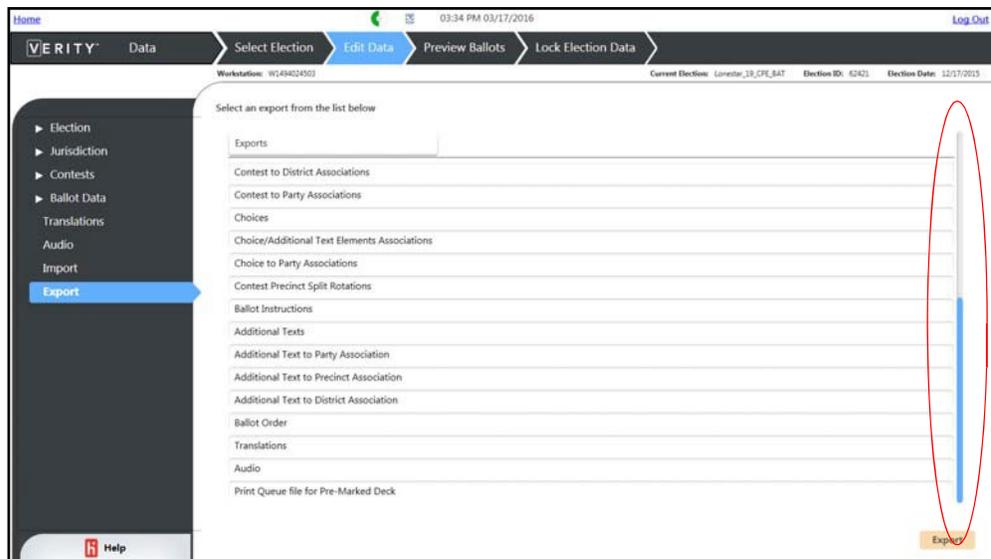
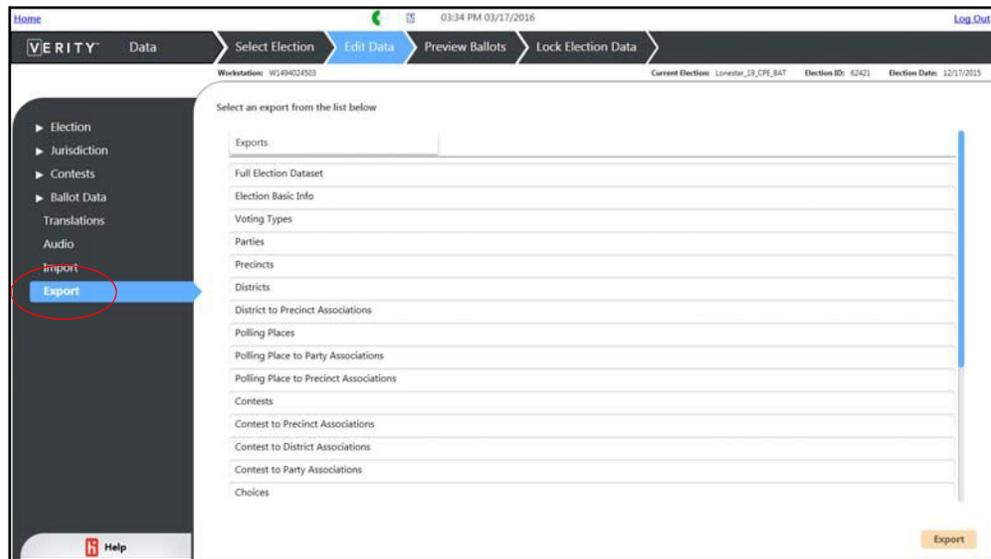
- Election Title: Lonestar_19_CPE_BAT
- Election Date: [Empty field]
- Jurisdiction Name: Austin Jurisdiction
- Ballot Languages: English, Spanish

A 'Save' button is located at the bottom right of the form. A 'Help' icon is visible in the bottom left corner of the interface.

4. On the left side of the screen is the list of functions available under the Edit Data workflow.



- Click to select **Export** at the bottom of the list. The list of files that you can export is displayed.



- Use the scroll bar on the right to view all of the files.
- Click to select the file that you want to export. The **Export** button becomes active.

- Click the **Export** button. The File Browser window displays.

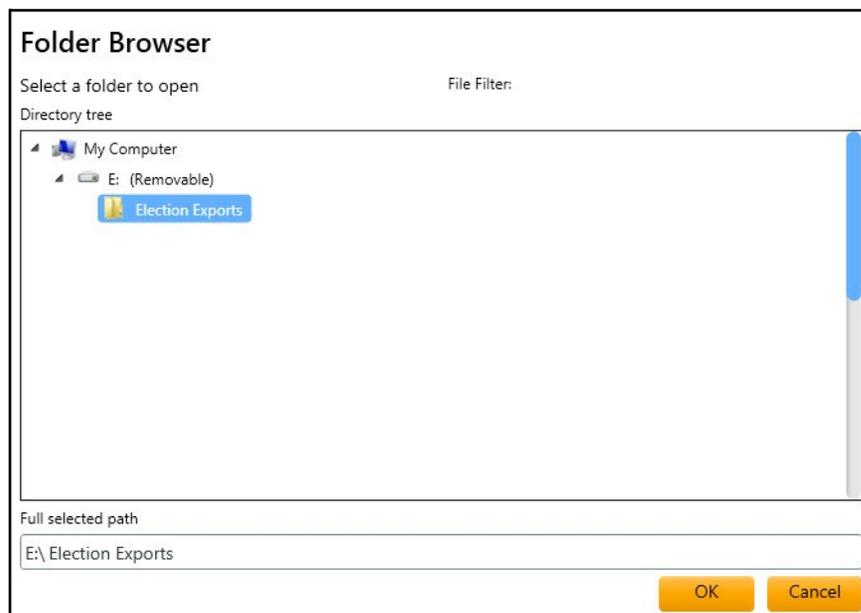


- Navigate to the location where you want to save the files.

Files are exported as CSV files with a .txt extension.

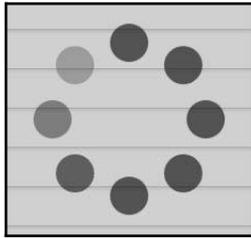
Verity Data automatically provides a file name to indicate what type of data you are exporting. You can type over the file name to change it, if desired.

Note: Full election dataset exports do not include a file rename option, as shown in the following image.



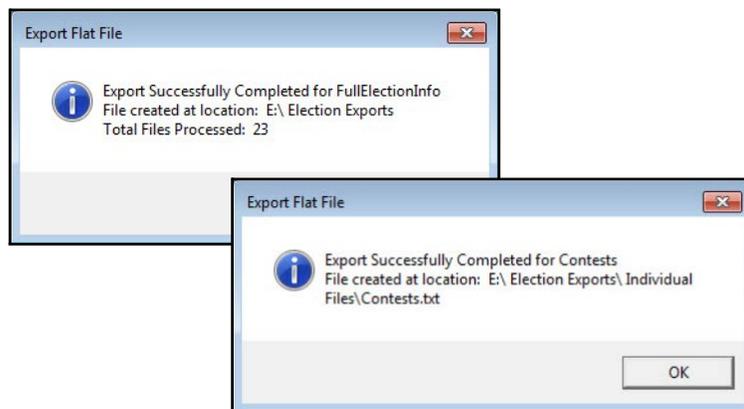
- Click the **OK** button to continue. Click the **Cancel** button to close the File Browser window without exporting data.

During the export process, the progress wheel rotates on the screen.



If any errors occur during export, an error message displays on the screen.

11. When the export is finished, a confirmation message displays.



12. Click **OK** to close the window.

The export is complete.

Note

Full Election Dataset exports require that all of the data files are included in the export. Files must be present but may be empty.

The following example is from a contest in which there are no Contest-District associations. Because it was exported as part of a Full Election Dataset export, the header row is automatically generated, but no data is included.

```
#ContestExternalId,DistrictExternalId
```

If data were included, the fields would be populated, as in the following example.

```
#ContestExternalId,DistrictExternalId 1,1
```

```
1,2
```

```
2,1
```