# Boundary and Annexation Survey (BAS): Digital Quick Start Guide

## Initial Steps

1) Report if making updates by one of the following methods:
   - Complete the Annual Response Form on the BAS website: <https://www.census.gov/geo/partnerships/bas/bas_ar_form.html>.
   - Call: 1-800-972-5651.
   - Email: <geo.bas@census.gov>.
2) Obtain the following materials from the BAS website, BAS Annual Response email, or DVD (if requested):
   - ***Boundary and Annexation Survey (BAS) Respondent Guide: Digital***: <https://www2.census.gov/geo/pdfs/partnerships/bas/21_BASRespondentGuide_Digital.pdf>.
   - **BAS Partnership Toolbox** and **BAS Partnership Toolbox Overview**: <https://www.census.gov/programs-surveys/bas/geographies/map-tools/arcmap-tools.html>.
   - **BAS ID**: Refer to the subject line in the BAS annual response email. It includes the BAS ID.
   - **BAS Partnership Shapefiles**: <https://www.census.gov/geographies/mapping-files/2021/geo/bas/2021-bas-shapefiles.html>.
3) Review respondent guide and training videos.
   - Review the *BAS Respondent Guide: Digital* along with the training videos at <https://www.census.gov/programs-surveys/bas/library/bas-videos.html> before beginning any boundary or linear feature updates.

## Boundary Review

1) Compare the Census Bureau's representation of the participating government's boundary to the local representation of the boundary and extract the differences (change polygons). The differences can be extracted using one of the sample methods in the *BAS Respondent Guide: Digital* or using the geoprocessing tools in ArcGIS. The BAS Partnership Toolbox, Create Changes tool, does this for the BAS participant.
2) Populate the applicable mandatory fields for each change polygon. The Census Bureau will not be able to accept changes without the appropriate attribution or documentation. The following are mandatory fields:
   - NAME: Government name (all changes).
   - CHNG_TYPE: Type of area update; see Table 1 (all changes).
   - AUTHTYPE: Authorization type; see Table 1 and (all legal changes – annexations, deannexations, new incorporations, disincorporations).
   - DOCU: Supporting documentation (all legal changes).
   - EFF_DATE: Effective date of change (all legal changes).
   - RELATE: Relationship description; IN or OUT (all boundary corrections).
3) BAS participants have the option to return linear feature (road, railroad, hydrology) and landmark updates. Review the *BAS Respondent Guide: Digital* for more information on these types of changes.

| Geographic Area Changes | CHNG_TYPE |
|---|---|
| Disincorporation | X |
| New Incorporation | E |
| Annexation | A |
| Boundary Correction | B |
| Geographic Corridor | C |
| Deannexation | D |
| Geographic Offset | F |
| **Authorization Types** | **AUTHTYPE** |
| Ordinance | O |
| Resolution | R |
| Local Law | L |
| State Level Action | S |
| Other | X |

**Table 1**. Geographic Area Changes and Change Types

## Boundary Review – Quality Control

1) Verify that all mandatory fields are populated.
2) Verify that all legal changes have appropriate legal documentation, authorization types, and effective dates.
3) Verify that all boundary changes are greater than thirty feet, unless they include housing units.
4) Verify that all boundary corrections less than thirty feet do not dissolve boundary to feature relationships with roads, railroads, hydrography, etc. (Example: road right of ways) unless the feature is incorrectly located.

## File Naming Conventions and Submission Preparation

**Note:** The BAS Partnership Toolbox will complete these requirements for BAS participants. For participants not using the toolbox, please follow the steps below.

1) Name all return files (change polygons, linear feature updates, whole entity files, etc.) using the file naming conventions outlined in the *BAS Respondent Guide: Digital*. **Table 2** contains examples of the file naming conventions.
2) Include important metadata information. It is critical that all return files have correct *.prj files.
3) Include a text file with the BAS Contact and Highest Elected Official contact information or update the contact information using the online Annual Response Form. (See *Initial Steps* section for link).
4) Zip all return files together and name the file bas21_<BASID>_return.zip. <BASID> should be replaced with the eleven-digit BAS ID code (e.g. bas21_20100100000_return.zip).

**Table 2: File Naming Conventions**

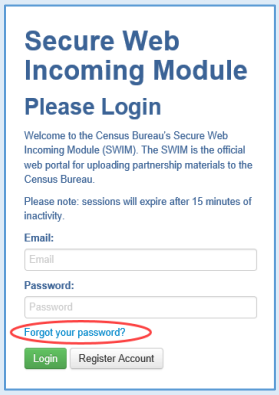
| Changes Submitted for | Change Shapefile Naming Conventions | Whole Entity Shapefile Naming Conventions |
|---|---|---|
| County | bas21_<basID>_changes_county | bas21_<basID>_WholeEntity_county.shp |
| Minor Civil Division | bas21_<basID>_changes_cousub | bas21_<basID>_WholeEntity_cousub.shp |
| Incorporated Place | bas21_<basID>_changes_incplace | bas21_<basID>_WholeEntity_incplace.shp |
| Consolidated City | bas21_<basID>_changes_concity | bas21_<basID>_WholeEntity_concity.shp |
| Edges | bas21_<basID>_LN_Changes | N/A |
| Area/Hydrographic Landmarks | bas21_<basID>_Alndk_Changes | N/A |
| Point Landmarks | bas21_<basID>_Plndk_Changes | N/A |

## Return Updates Using the Secure Web Incoming Module (SWIM)

1) Open a web browser window and enter the SWIM URL: <https://respond.census.gov/swim/>.
2) Participants who already have a SWIM account should skip to Step 4 and enter their email address and password to log in.
3) Participants who do not have a SWIM account click 'Register Account':
   - **Enter the 12-digit token provided by the Census Bureau.**
   - **Create a password following the five criteria below:**
     1) It must be at least eight characters in length.
     2) It must have at least one upper case character.
     3) It must have at least one lower case character.
     4) It must have at least one number.
     5) It must have at least one special character (valid characters are: #, !, $, &,?, ~). Do not use commas since they are for spacing purposes only.
   - Complete the registration information form.
4) Log in into SWIM.
5) Upload BAS submission:
   - Select the **Start New Upload** button.
   - Select the **BAS** radio button.
   - Select the **Entity** Type (State, Place, County, Minor Civil Division (MCD), Tribal Area, or Consolidated City).
   - Select the State and County.
   - Click the **+ Add File** button.
   - Double-click on the **.ZIP file** to upload. Add additional files in the same manner.
   - Add any additional information to the Comments field.
   - Click **Next**. A **Thank You** screen will appear.
6) Logout of SWIM.

**Note**: SWIM email addresses and passwords are case sensitive.

**Forgot your password?**
Participants may reset their password using the "Forgot your password?" link on the login page. Follow the prompts to enter the case-sensitive email address and provide the security answer. If the security answer is correct, the SWIM system sends a password reset link to the email account for use in resetting the password. Once logged into SWIM, users can modify their password and security answer by selecting the 'Change Security' link at the top, right-hand side of the page.



## Key Dates for BAS Respondents

- **January 1** – Boundary updates must be legally in effect on or before this date to be reported in the current survey year.
- **March 1** – Boundary updates returned by this date will be reflected in the ACS and PEP data and in next year's BAS materials.
- **May 31** – Boundary updates returned by this date will be reflected in next year's BAS materials.

## Contact Information

Please contact the Census Bureau for questions:

- Email: < geo.bas@census.gov >.
- Phone: 1-800-972-5651.
- Fax: 1-800-972-5652.