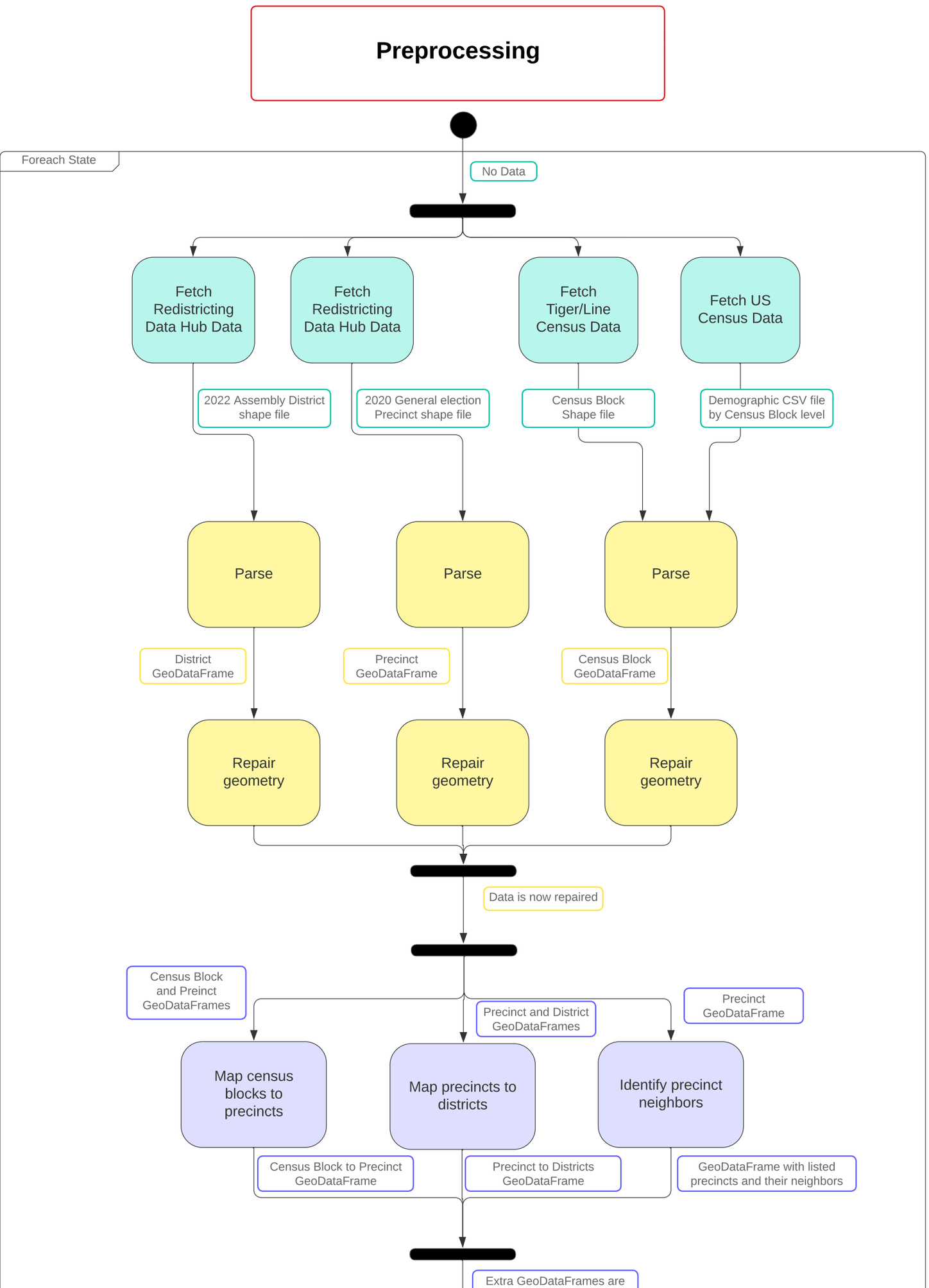
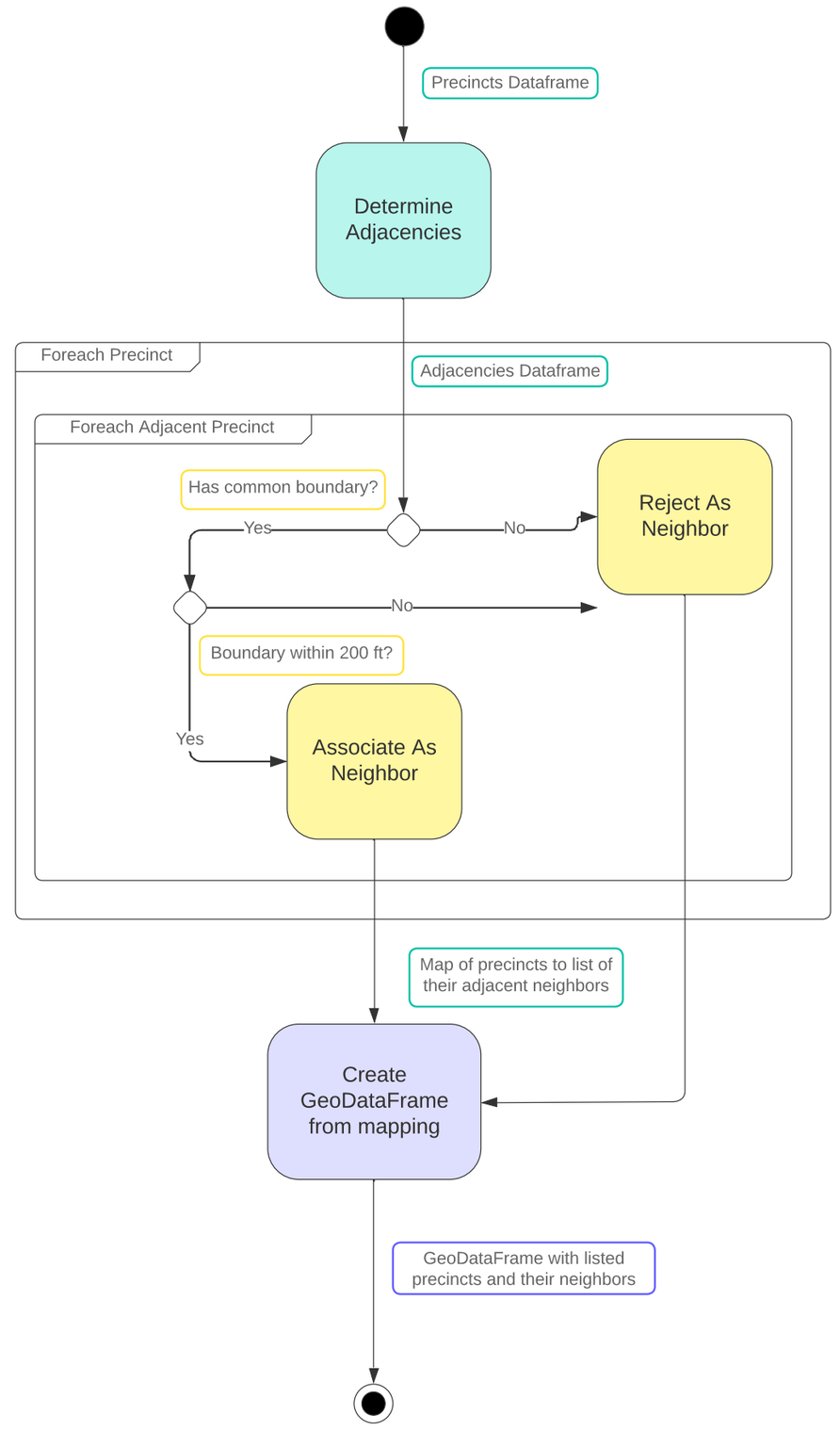
Preprocessing



Identifying Precinct Neighbors



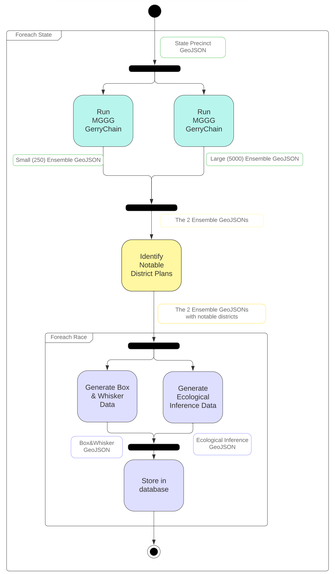
New Precinct GeoDataFrame Columns:

ID: The precinct's ID
DISTRICT: The district that the precinct belongs to
STATE: The state that the precinct belong to
TOT_POP: The precinct's total population
WHITE_POP: The precinct's white population
BLACK_POP: The precinct's black population
HISP_POP: The precinct's hispanic population
ASIAN_POP: The precinct's asian population
2020_DEMOCRATIC: The precinct's number of democratic votes for the 2020 presidential election
2020_REPUBLICAN: The precinct's number of republican votes for the 2020 presidential election
2020_WINNER: The precinct's elected party in the 2020 presidential election
NEIGHBORS: The precinct's neighbooring precincts
GEOMETRY: The precinct's geometry

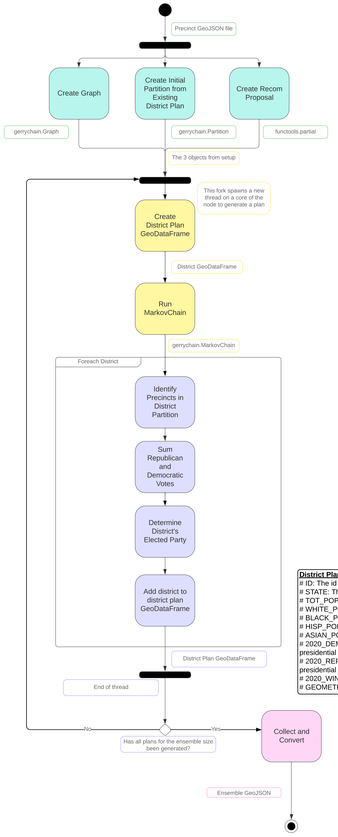
New District GeoDataFrame Columns:

ID: The district's ID
STATE: The state that the precinct belongs to
REP_NAME: The district's representative's name
REP_PARTY: The district's representative's party
REP_RACE: The district's representative's race
REP_PIC: The link to the district's representative's picture
REP_VOTE_MARGIN: The vote margin of the district's representative
TOT_POP: The district's total population
WHITE_POP: The district's white population
BLACK_POP: The district's black population
HISP_POP: The district's hispanic population
ASIAN_POP: The district's asian population
2020_DEMOCRATIC: The district's number of democratic votes for the 2020 presidential election
2020_REPUBLICAN: The district's number of republican votes for the 2020 presidential election
2020_WINNER: The district's elected party in the 2020 presidential election
GEOMETRY: The district's geometry

SeaWulf Top Level

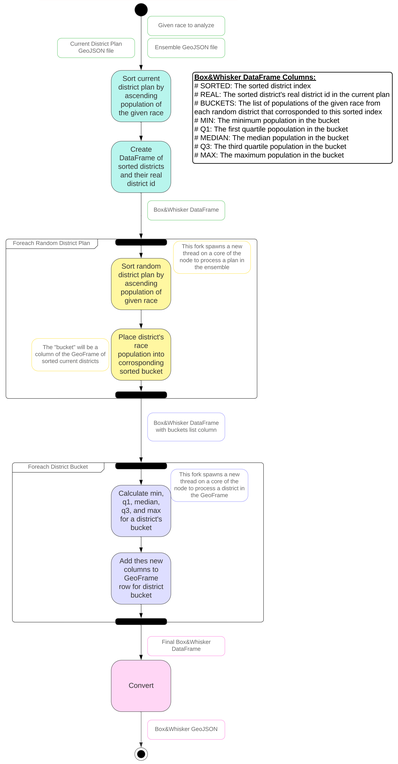


MGGG GerryChain



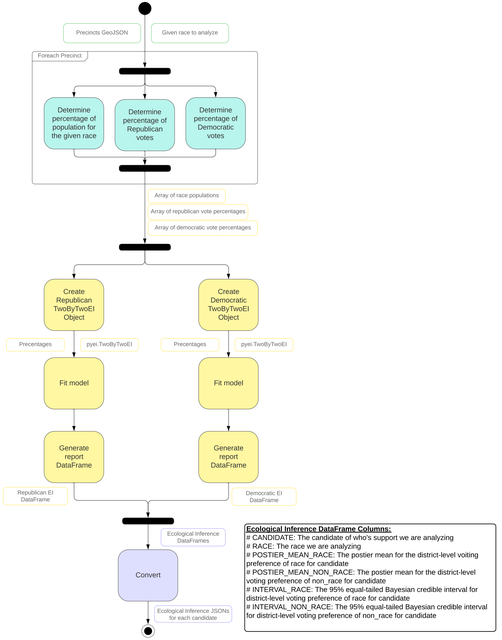
District Plan GeoDataFrame Columns:
ID: The id of the district in the plan
STATE: The state that the district belong to
TOT_POP: The district's total population
WHITE_POP: The district's white population
BLACK_POP: The district's black population
HISP_POP: The district's hispanic population
ASIAN_POP: The district's asian population
2020_DEMOCRATIC: The district's number of democratic votes for the 2020 presidential election (aggregated from precincts that make up the partiton)
2020_REPUBLICAN: The district's number of republican votes for the 2020 presidential election (aggregated from precincts that make up the partition)
2020_WINNER: The district's elected party in the 2020 presidential election
GEOMETRY: The district's geometry

Generate Box & Whisker Data



Box&Whisker DataFrame Columns:
SORTED: The sorted district index
REAL: The sorted district's real district id in the current plan
BUCKETS: The list of populations of the given race from each random district that corresponded to this sorted index
MIN: The minimum population in the bucket
Q1: The first quartile popoulation in the bucket
MEDIAN: The median population in the bucket
Q3: The third quartile population in the bucket
MAX: The maximum population in the bucket

Generate Ecological Inference Data



Ecological Inference DataFrame Columns:
CANDIDATE: The candidate of who's support we are analyzing
RACE: The race we are analyzing
POSTIER_MEAN_RACE: The postier mean for the district-level voting preference of race for candidate
POSTIER_MEAN_NON_RACE: The postier mean for the district-level voting preference of non_race for candidate
INTERVAL_RACE: The 95% equal-tailed Bayesian credible interval for district-level voting preference of race for candidate
INTERVAL_NON_RACE: The 95% equal-tailed Bayesian credible interval for district-level voting preference of non_race for candidate

Identify Notable District Plans