preschool_recat

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```
data <- read.csv("preschool_assessment.csv")
```

Including Plots

You can also embed plots, for example:

```
n_distinct(data$RequiredAssessmentforpreK)
```

```
## [1] 27
```

```
unique(data$RequiredAssessmentforpreK)
```

```
##  [1] "Multiple Assessments"
##  [2] NA
##  [3] "Work Sampling System"
##  [4] "Desired Results Developmental Profile (DRDP)"
##  [5] "Georgia Pre-K Child Assessment"
##  [6] "Required assessment instruments are determined locally"
##  [7] "Developing Skills Checklist"
##  [8] "Preschool Exit Observational Assessment"
##  [9] "Performance-based assessment"
## [10] "New Mexico PreK Observational Assessment "
## [11] "Kindergarten Readiness Assessment-Literacy"
## [12] "Phonological Awareness Literacy Screening (PALS)"
## [13] "Online assessment for Creative Curriculum"
## [14] "Get it; Got it; Go!"
## [15] "Creative Curriculum Developmental Continuum"
## [16] "Teaching Strategies GOLD"
## [17] "Early Learning Scale (ELS)"
## [18] "Voluntary Prekindergarten (VPK) Assessment"
## [19] "Kansas Early Learning Inventory for Fours (KELI-4) "
## [20] "Pearson Work Sampling Online System Georgia Kindergarten Inventory of Developing Skills"
## [21] "ISTAR-KR"
## [22] "Early Learning Assessment"
## [23] "mCLASS CIRCLE"
## [24] "Indiana Standards Tool for Alternate Reporting of Kindergarten Readiness"
## [25] "Mississippi State Kindergarten Readiness Assessment"
## [26] "Brigance"
## [27] "Growth Portfolio Model"
```

```
# Function to categorize assessments
categorize_assessment <- function(assessment) {
  direct <- c("Kindergarten Readiness Assessment-Literacy", "Phonological Awareness Literacy Screening
            "Get it; Got it; Go!", "Voluntary Prekindergarten (VPK) Assessment",
```

```r
                 "Pearson Work Sampling Online System Georgia Kindergarten Inventory of Developing Skills"
                 "ISTAR-KR", "Mississippi State Kindergarten Readiness Assessment", "Brigance")
  observation_based <- c("Work Sampling System", "Desired Results Developmental Profile (DRDP)",
                         "Georgia Pre-K Child Assessment", "Developing Skills Checklist",
                         "Preschool Exit Observational Assessment", "New Mexico PreK Observational Asse
                         "Creative Curriculum Developmental Continuum", "Teaching Strategies GOLD",
                         "Early Learning Scale (ELS)", "Kansas Early Learning Inventory for Fours (KELI-
                         "Early Learning Assessment", "Growth Portfolio Model")
  combined <- c("Multiple Assessments", "Required assessment instruments are determined locally",
                "Performance-based assessment", "Online assessment for Creative Curriculum",
                "mCLASS CIRCLE", "Indiana Standards Tool for Alternate Reporting of Kindergarten Readin

  if (assessment %in% direct) {
    return("Direct")
  } else if (assessment %in% observation_based) {
    return("Observation-Based")
  } else if (assessment %in% combined) {
    return("Combined")
  } else {
    return("No Assessment")
  }
}
data$PrekAssessment <- sapply(data$RequiredAssessmentforpreK, categorize_assessment)

write.csv(data, "PreK_recat.csv", row.names=FALSE)

library(ggplot2)

p <- ggplot(data, aes(x=PrekAssessment)) +
        geom_bar() +
        facet_wrap(~Year) +
        theme_minimal() +
        theme(axis.text.x = element_text(angle = 45, hjust = 1)) +  # Rotate x-axis labels
        xlab("Pre-K Assessment") +
        ylab("Count") +
        ggtitle("Count of Pre-K Assessment Types by Year")
p
```
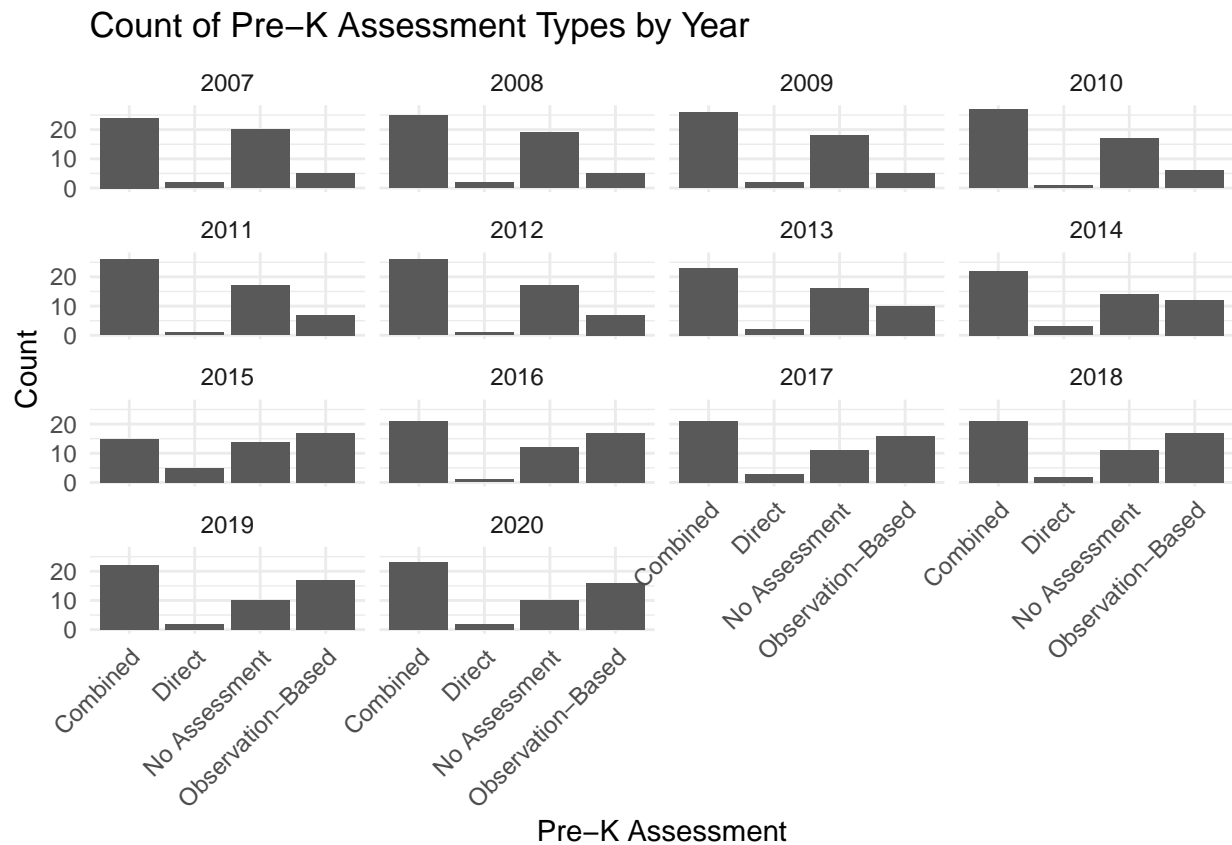
Count of Pre−K Assessment Types by Year


```r
states <- unique(data$State)

# Loop through each state and create a plot
for (state in states) {
    # Filter the data for the current state
    state_data <- data[data$State == state, ]

    # Create the plot
    q <- ggplot(state_data, aes(x=Year, fill=PrekAssessment)) +
        geom_bar() +
        theme_minimal() +
        xlab("Year") +
        ylab("Count of Assessments") +
        ggtitle(paste("Annual Pre-K Assessment Counts in", state)) +
        theme(axis.text.x = element_text(angle = 45, hjust = 1))  # Rotate x-axis labels

    print(q)
}
```

Annual Pre−K Assessment Counts in ALABAMA

Annual Pre−K Assessment Counts in ALASKA

Annual Pre−K Assessment Counts in ARIZONA

Annual Pre−K Assessment Counts in ARKANSAS

Annual Pre–K Assessment Counts in CALIFORNIA

Annual Pre–K Assessment Counts in COLORADO

Annual Pre-K Assessment Counts in CONNECTICUT

Annual Pre-K Assessment Counts in DELAWARE
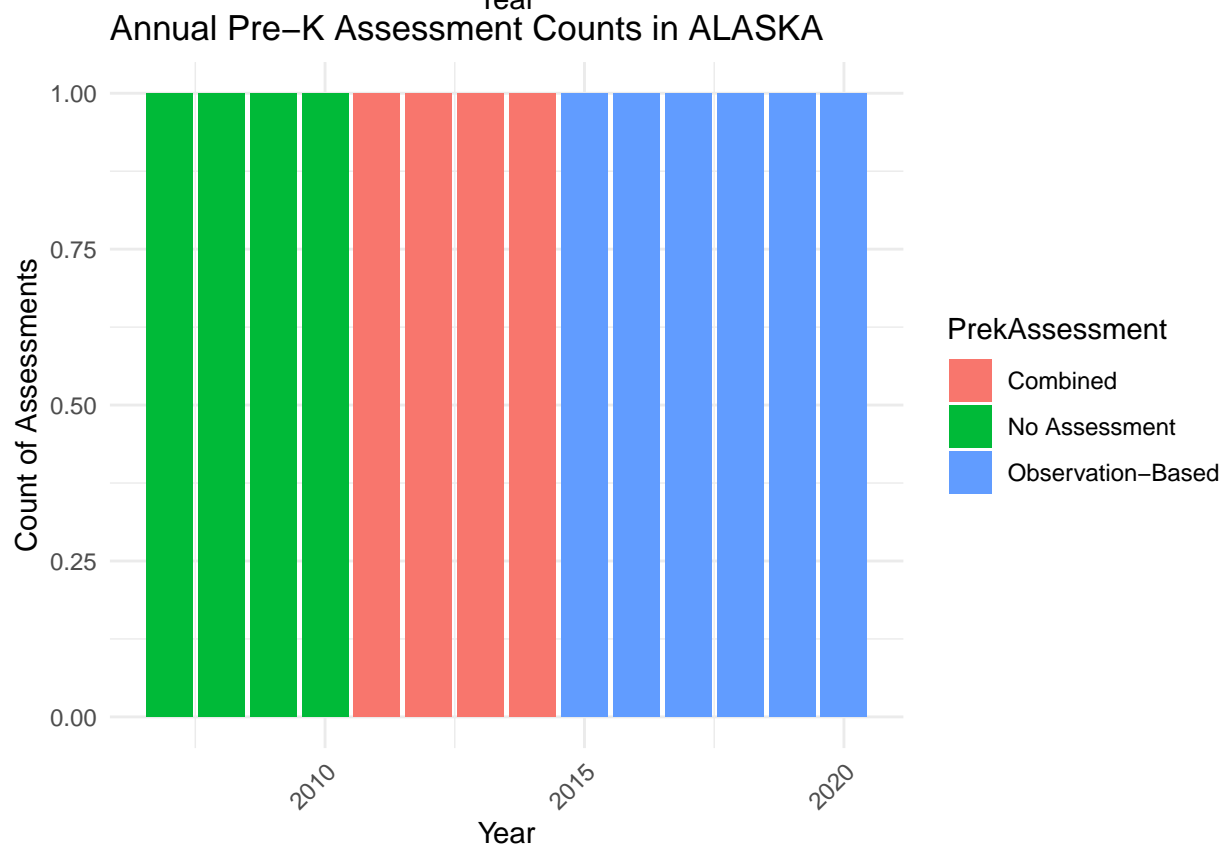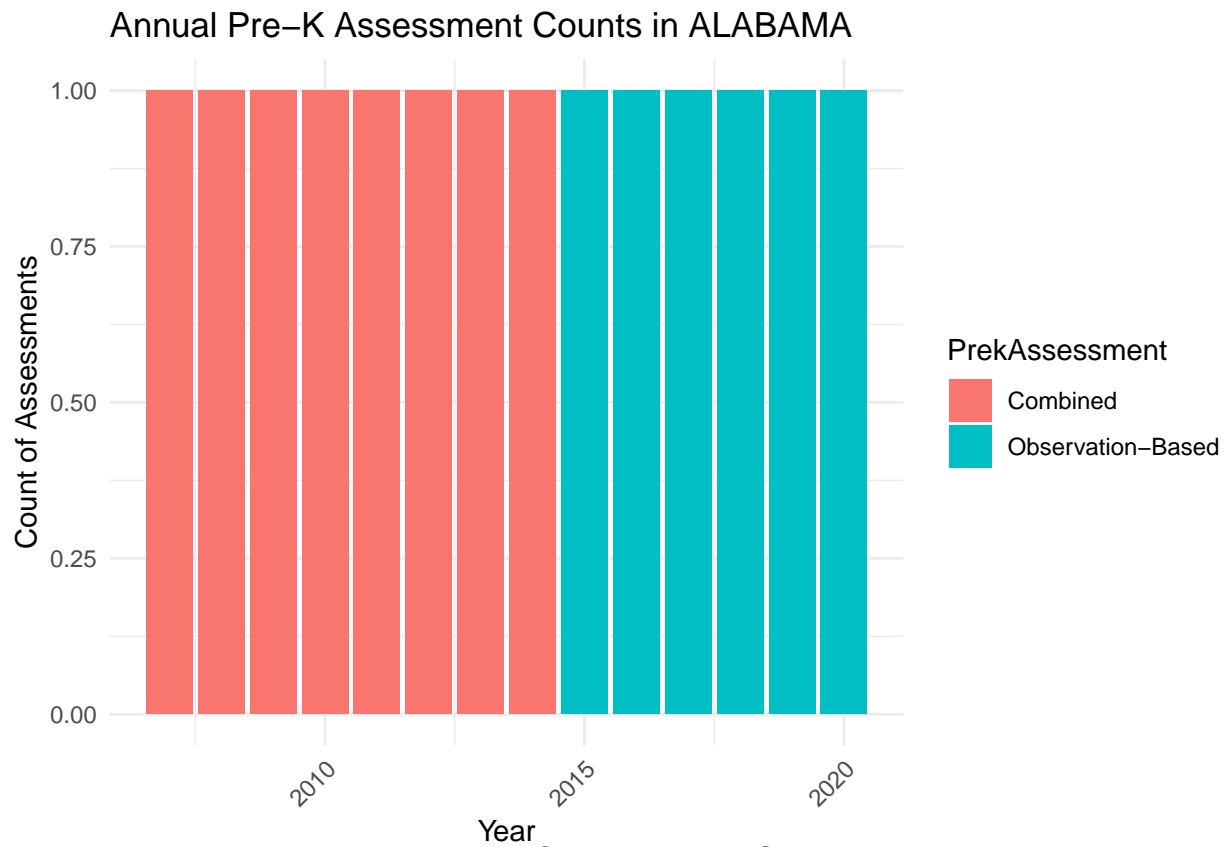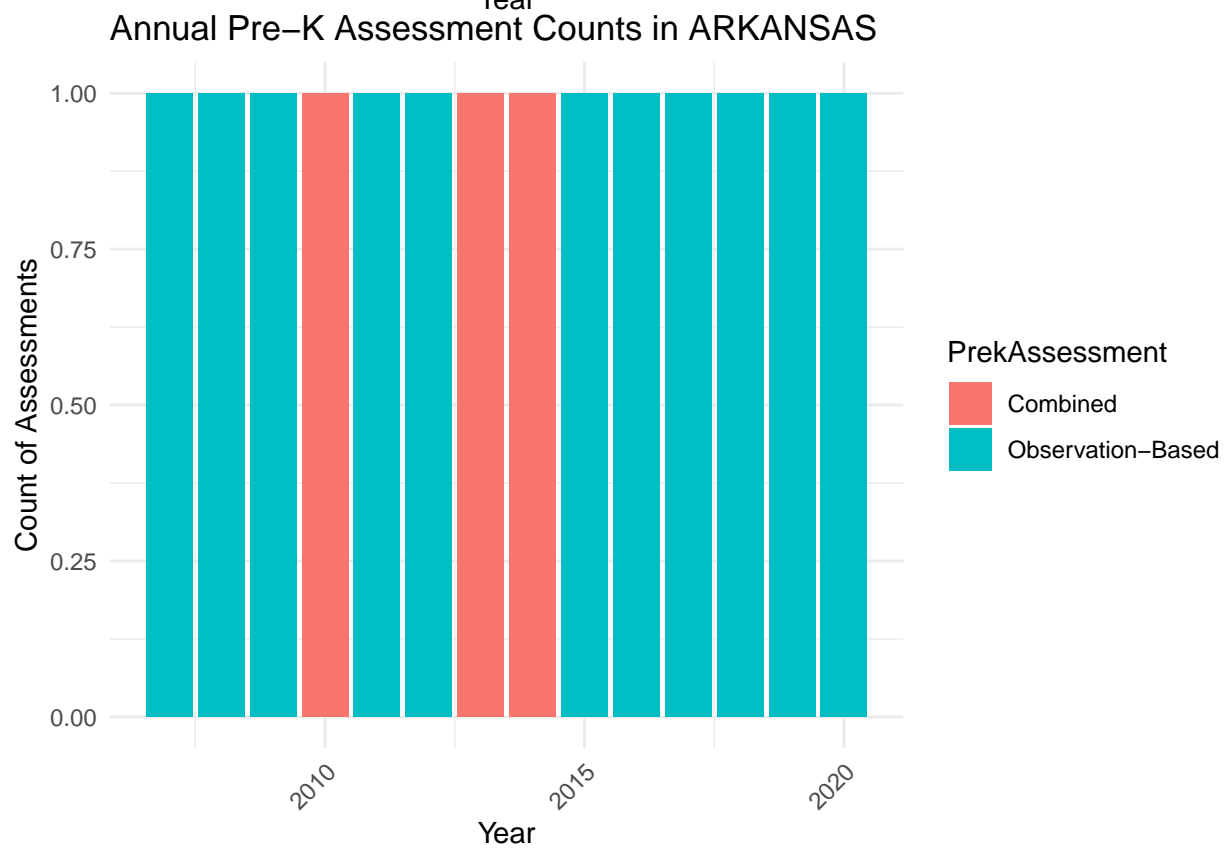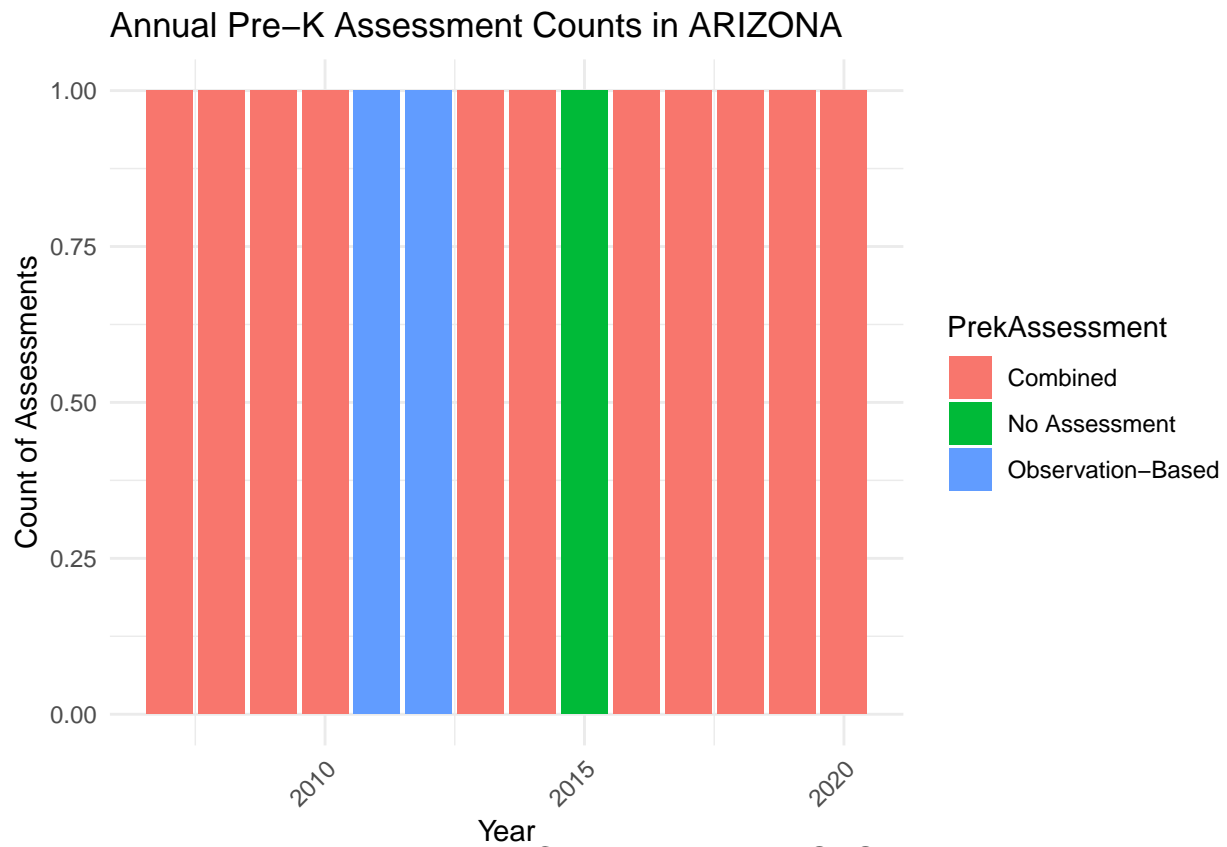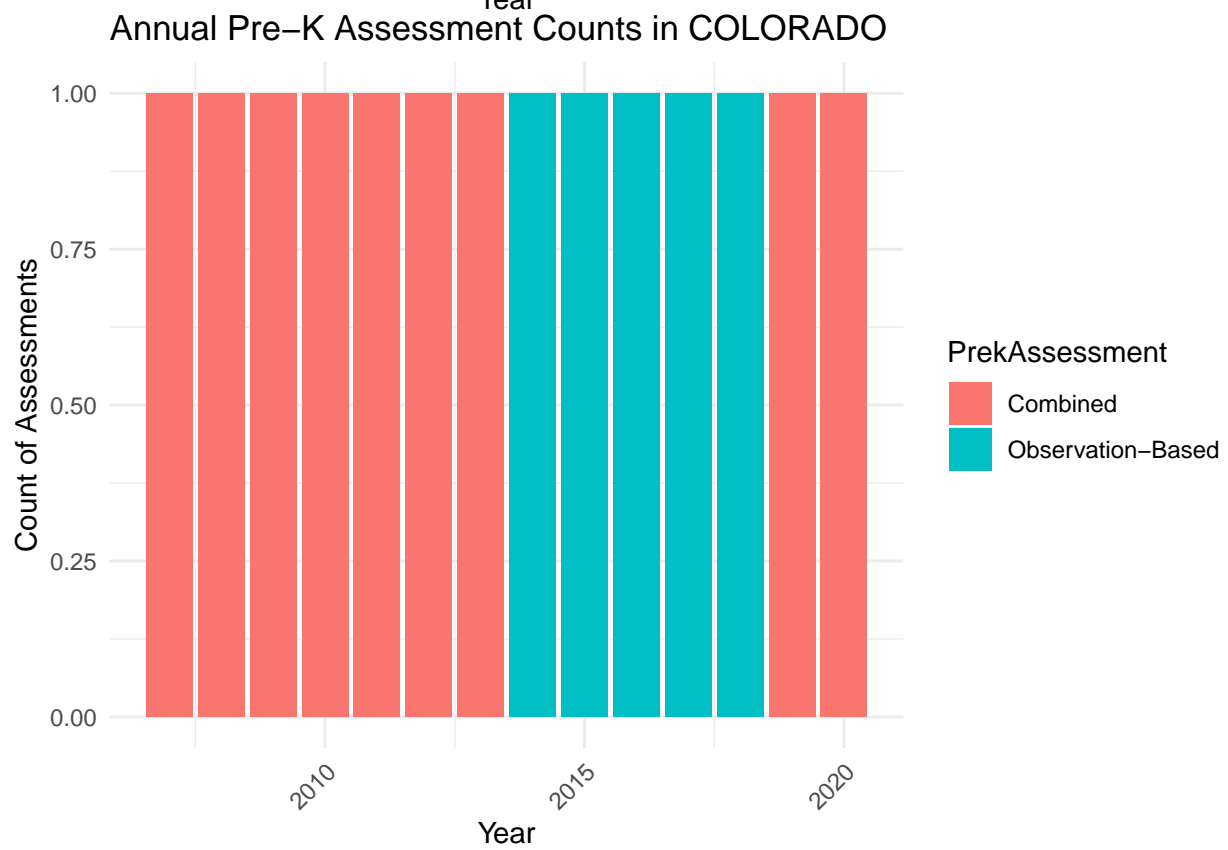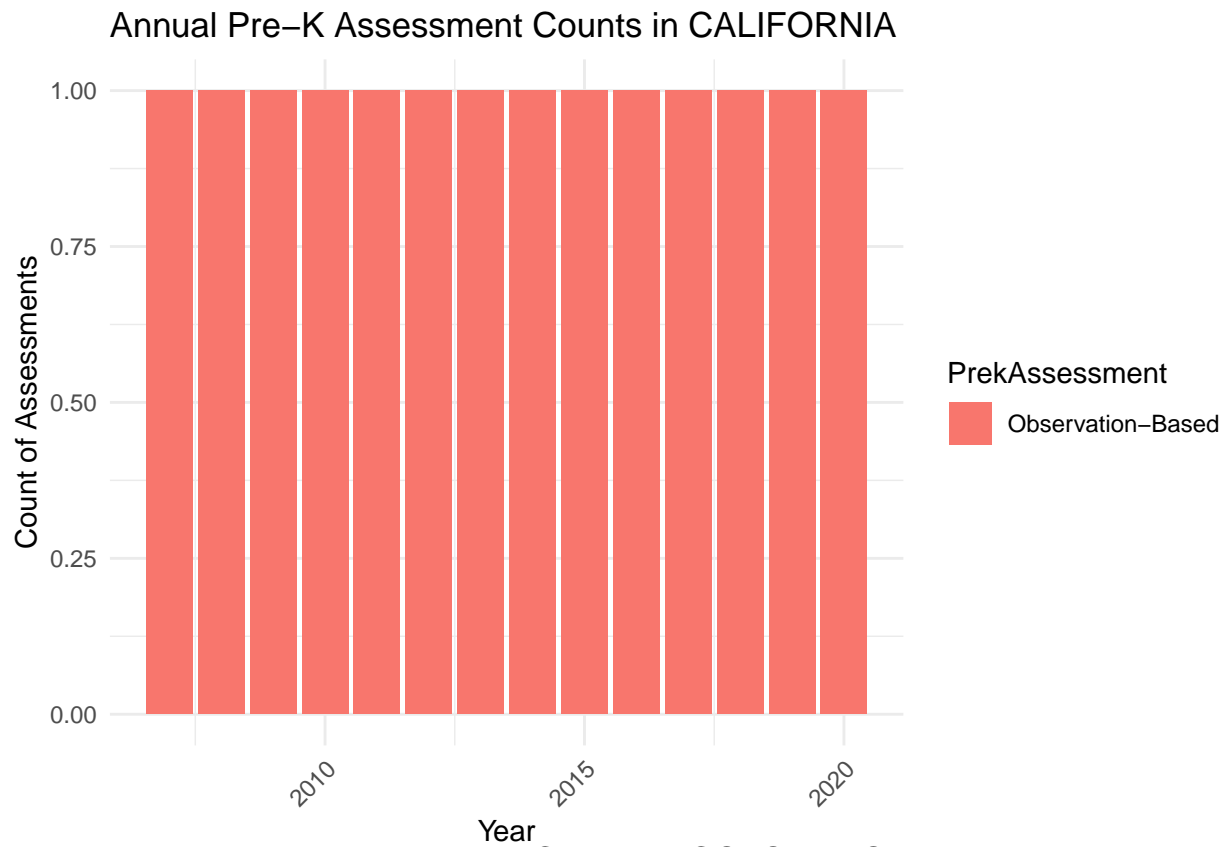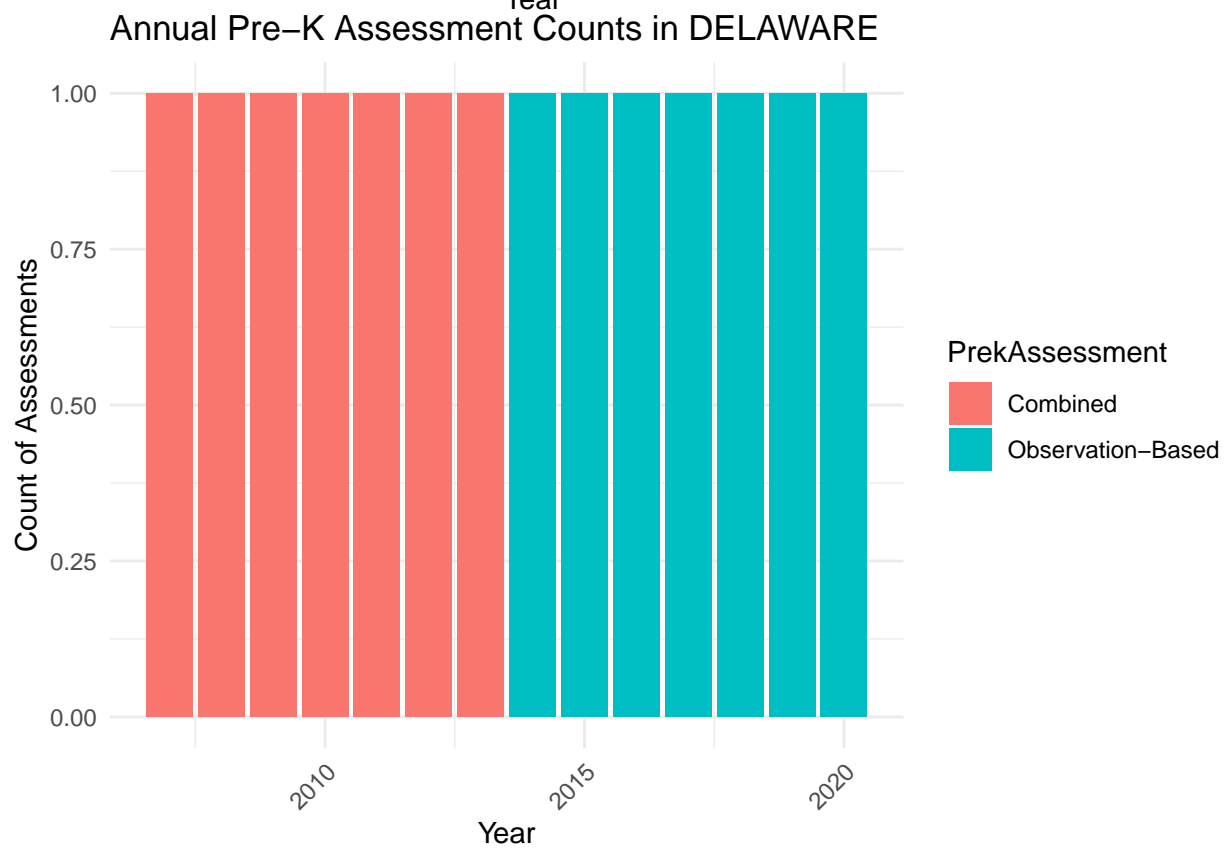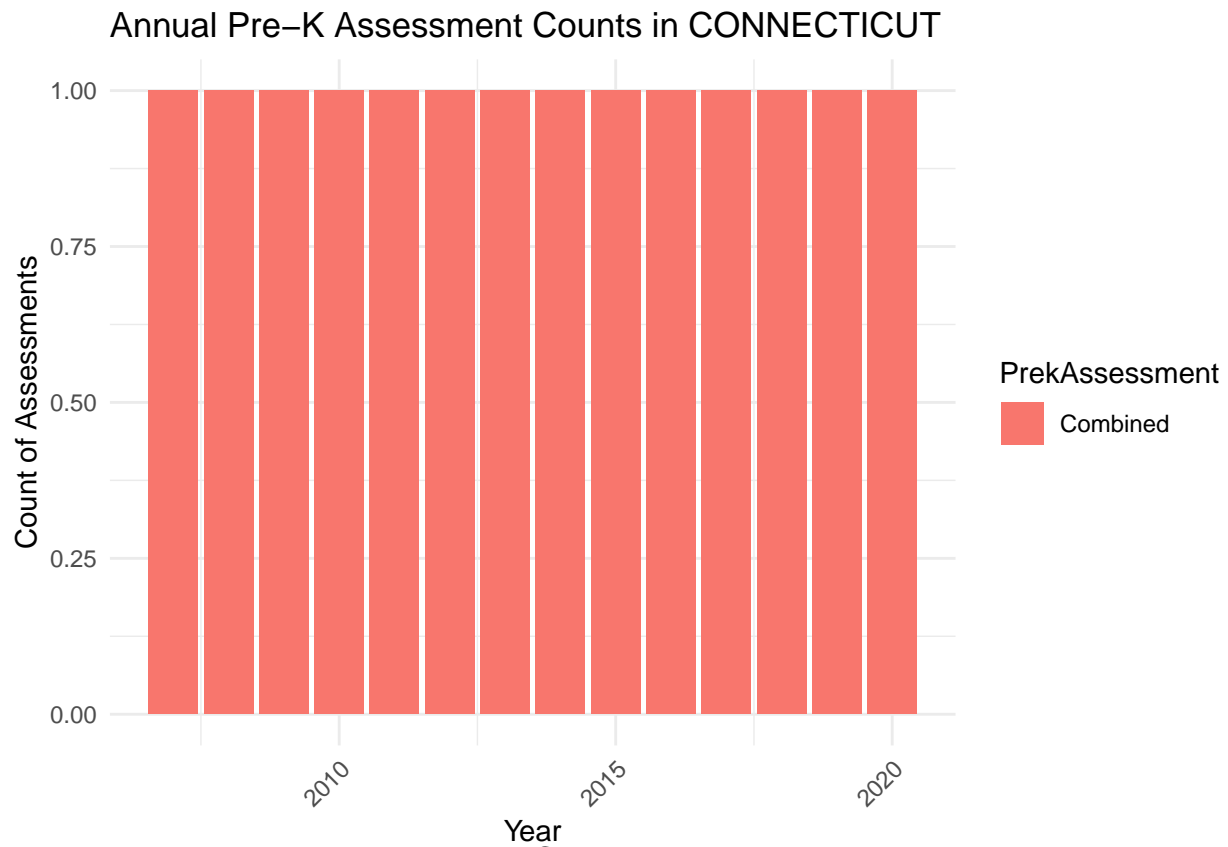
Annual Pre-K Assessment Counts in DISTRICT OF COLUMBIA
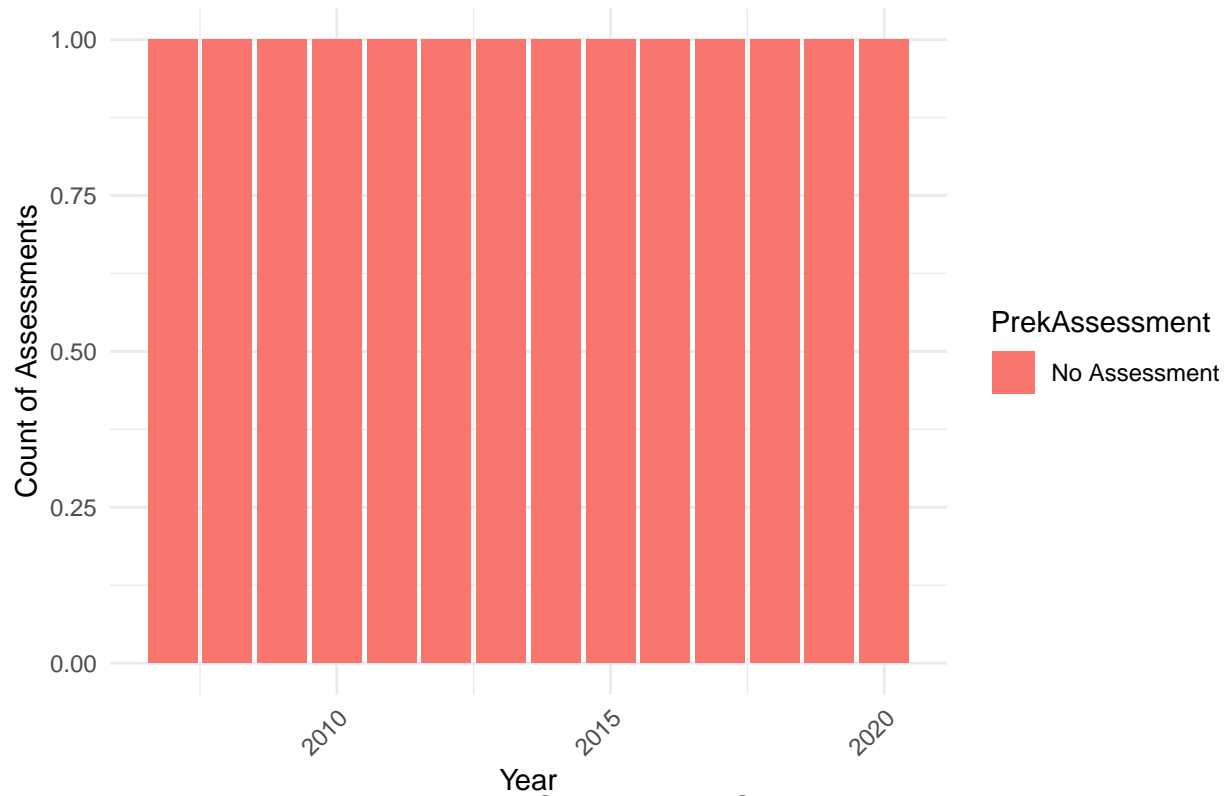
Annual Pre-K Assessment Counts in FLORIDA

Annual Pre−K Assessment Counts in GEORGIA

Annual Pre−K Assessment Counts in HAWAII

Annual Pre−K Assessment Counts in IDAHO

Annual Pre−K Assessment Counts in ILLINOIS

Annual Pre−K Assessment Counts in INDIANA

Annual Pre−K Assessment Counts in IOWA

Annual Pre−K Assessment Counts in KANSAS

Annual Pre−K Assessment Counts in KENTUCKY

Annual Pre-K Assessment Counts in LOUISIANA

Annual Pre-K Assessment Counts in MAINE

Annual Pre−K Assessment Counts in MARYLAND

Annual Pre−K Assessment Counts in MASSACHUSETTS

Annual Pre−K Assessment Counts in MICHIGAN

Annual Pre−K Assessment Counts in MINNESOTA

Annual Pre–K Assessment Counts in MISSISSIPPI

Annual Pre–K Assessment Counts in MISSOURI

Annual Pre-K Assessment Counts in MONTANA

Annual Pre-K Assessment Counts in NEBRASKA

Annual Pre-K Assessment Counts in NEVADA

Annual Pre-K Assessment Counts in NEW HAMPSHIRE

Annual Pre–K Assessment Counts in NEW JERSEY

Annual Pre–K Assessment Counts in NEW MEXICO

Annual Pre–K Assessment Counts in NEW YORK

Annual Pre–K Assessment Counts in NORTH CAROLINA

Annual Pre−K Assessment Counts in NORTH DAKOTA

Annual Pre−K Assessment Counts in OHIO

Annual Pre-K Assessment Counts in OKLAHOMA

Annual Pre-K Assessment Counts in OREGON

Annual Pre–K Assessment Counts in PENNSYLVANIA

Annual Pre–K Assessment Counts in RHODE ISLAND

Annual Pre−K Assessment Counts in SOUTH CAROLINA

Annual Pre−K Assessment Counts in SOUTH DAKOTA

Annual Pre−K Assessment Counts in TENNESSEE

Annual Pre−K Assessment Counts in TEXAS

Annual Pre-K Assessment Counts in UTAH

Annual Pre-K Assessment Counts in VERMONT

Annual Pre–K Assessment Counts in VIRGINIA

Annual Pre–K Assessment Counts in WASHINGTON

Annual Pre-K Assessment Counts in WEST VIRGINIA

Annual Pre-K Assessment Counts in WISCONSIN

Annual Pre−K Assessment Counts in WYOMING