Water Trucking Cost and Water Quantity

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## Data loading and preparation for this document  
{  
 library(odbc)  
   
 conAdmin1 <- DBI::dbConnect(odbc::odbc(),  
 Driver = "SQL Server",  
 Server = "localhost",  
 Database = "washwosassessments",  
 Trusted\_Connection = "True")  
 rs\_queryAdmin1 <- dbSendQuery(conAdmin1,"SELECT \* FROM tbl\_admin1")  
   
 rs\_Admin1 <- dbFetch(rs\_queryAdmin1)  
   
 rm(conAdmin1,rs\_queryAdmin1)  
   
 conAdmin2 <- DBI::dbConnect(odbc::odbc(),  
 Driver = "SQL Server",  
 Server = "localhost",  
 Database = "washwosassessments",  
 Trusted\_Connection = "True")  
 rs\_queryAdmin2 <- dbSendQuery(conAdmin2,"SELECT \* FROM tbl\_admin2")  
   
 rs\_Admin2 <- dbFetch(rs\_queryAdmin1)  
   
 rm(conAdmin1,rs\_queryAdmin1)  
   
   
   
 conAdmin4 <- DBI::dbConnect(odbc::odbc(),  
 Driver = "SQL Server",  
 Server = "localhost",  
 Database = "washwosassessments",  
 Trusted\_Connection = "True")  
 rs\_queryAdmin4 <- dbSendQuery(conAdmin4,"SELECT \* FROM tbl\_admin4")  
   
 rs\_Admin4 <- dbFetch(rs\_queryAdmin4)  
   
 rm(conAdmin4,rs\_queryAdmin4)  
   
   
   
   
   
 con <- DBI::dbConnect(odbc::odbc(),  
 Driver = "SQL Server",  
 Server = "localhost",  
 Database = "washwosassessments",  
 Trusted\_Connection = "True")  
 rs\_query <- dbSendQuery(con,"SELECT  
 [Gov\_Name\_Admin1]  
 ,[Gov\_PCode\_Admin1]  
 ,[Dist\_Name\_Admin2]  
 ,[Dist\_PCode\_Admin2]  
 ,[SDist\_Name\_Admin3]  
 ,[SDist\_PCode\_Admin3]  
 ,[Location\_Name]  
 ,[Location\_PCode]  
 ,[Location\_Type]  
 ,[AOI]  
 ,[WEIGHTS]  
 ,[HH\_Type]  
 ,[W\_Q1\_PotableWaterMainSource]  
 ,[W\_Q2\_SecondaryWaterSourceYN]  
 ,[W\_Q2\_SecondaryWaterSourceName]  
 ,[W\_Q2\_NetworkYN]  
 ,[W\_Q2\_WaterTruckingYN]  
 ,[W\_Q2\_ClosedWellYN]  
 ,[W\_Q2\_OpenWellYN]  
 ,[W\_Q2\_SpringsYN]  
 ,[W\_Q2\_RiverLakeYN]  
 ,[W\_Q2\_BottleYN]  
 ,[W\_Q2\_OtherYN]  
 ,[W\_Q2\_OtherYNSpecify]  
 ,[W\_Q3\_PercentNetwork]  
 ,[W\_Q3\_PercentWaterTrucking]  
 ,[W\_Q3\_PercentClosedWell]  
 ,[W\_Q3\_PercentClosedWell\_Network]  
 ,[W\_Q3\_PercentClosedWell\_HH]  
 ,[W\_Q3\_PercentOpenWell]  
 ,[W\_Q3\_PercentSprings]  
 ,[W\_Q3\_PercentRiverLake]  
 ,[W\_Q3\_PercentBottle]  
 ,[W\_Q3\_PercentOther]  
 ,[W\_Q9\_PercentIncomeOnWaterPurchase]  
 ,[W\_Q9\_SYPSpendOnWaterPurchase]  
 ,[W\_Q9\_WillingToPayForWater]  
 ,[W\_Q9\_MaxSYPWillingToPayForWater]  
 FROM tbl\_2\_Water")  
   
 rs\_WTSyria <- dbFetch(rs\_query)  
   
 rm(con,rs\_query)  
}  
  
{  
 library(sqldf)  
 temp2022WinterRound <- read.csv("C:\\Users\\udaraz\\OneDrive - UNICEF\\WASH\_WoS\_Sector\_HNOs\\HNO-2023\\Round-1\\DataReceived\_28022022\\WASH\_HH\_Survey\_Dataset\_Feb\_2022\_Main.csv")  
   
 tempAdmin1Name <- rs\_Admin4[rs\_Admin4$admin1Pcode == temp2022WinterRound$admin1,c("admin1Name\_en")]  
   
 temp2022WinterRound\_Clean$Gov\_Name\_Admin1 <-   
   
   
 rs\_Admin4[rs\_Admin4$admin1Pcode == temp2022WinterRound$admin1,c("admin1Name\_en")]  
   
 Reduce()  
 temp2022WinterRound\_Clean$Gov\_PCode\_Admin1 <- temp2022WinterRound$admin1  
 temp2022WinterRound\_Clean$Dist\_Name\_Admin2 <- rs\_WTSyria[rs\_WTSyria$Gov\_PCode\_Admin2 == temp2022WinterRound$admin2,c("Dist\_Name\_Admin2")]  
 temp2022WinterRound\_Clean$Dist\_PCode\_Admin2 <- temp2022WinterRound$admin2  
 temp2022WinterRound\_Clean$SDist\_Name\_Admin3 <- rs\_WTSyria[rs\_WTSyria$Gov\_PCode\_Admin3 == temp2022WinterRound$admin3,c("SDist\_Name\_Admin3")]  
 temp2022WinterRound\_Clean$SDist\_PCode\_Admin3 <- temp2022WinterRound$admin3  
 temp2022WinterRound\_Clean$Location\_Name <- rs\_WTSyria[rs\_WTSyria$Location\_PCode == temp2022WinterRound$admin4,c("Location\_Name")]  
 temp2022WinterRound\_Clean$Location\_PCode <- temp2022WinterRound$admin4  
 temp2022WinterRound\_Clean$Location\_Type <- ifelse(temp2022WinterRound$locationType == 1,"Community",  
 ifelse(temp2022WinterRound$locationType == 2,"Neighnorhood",  
 ifelse(temp2022WinterRound$locationType == 3,"Camp", NA)))  
 temp2022WinterRound\_Clean$AOI <- temp2022WinterRound$AoC  
 temp2022WinterRound\_Clean$WEIGHTS <- temp2022WinterRound$temp2022WinterRound  
 temp2022WinterRound\_Clean$HH\_Type <- ifelse(temp2022WinterRound$HH\_Type == 1,"Host-population",  
 ifelse(temp2022WinterRound$HH\_Type == 2,"IDPs",  
 ifelse(temp2022WinterRound$HH\_Type == 3,"Returnees", NA)))  
 temp2022WinterRound\_Clean$W\_Q1\_PotableWaterMainSource <- temp2022WinterRound$W1  
 temp2022WinterRound\_Clean$W\_Q2\_SecondaryWaterSourceYN <- temp2022WinterRound$W2\_YesNo  
 temp2022WinterRound\_Clean$W\_Q2\_SecondaryWaterSourceName <- temp2022WinterRound$W2  
 temp2022WinterRound\_Clean$W\_Q2\_NetworkYN <- temp2022WinterRound$W2.Network  
 temp2022WinterRound\_Clean$W\_Q2\_WaterTruckingYN <- temp2022WinterRound$W2.Water\_trucking  
 temp2022WinterRound\_Clean$W\_Q2\_ClosedWellYN <- temp2022WinterRound$W2.Closed\_well\_network #W2.Closed\_well\_indivisual  
 temp2022WinterRound\_Clean$W\_Q2\_OpenWellYN <- temp2022WinterRound$W2.Open\_well  
 temp2022WinterRound\_Clean$W\_Q2\_SpringsYN <- temp2022WinterRound$W2.Springs  
 temp2022WinterRound\_Clean$W\_Q2\_RiverLakeYN <- temp2022WinterRound$W2.River  
 temp2022WinterRound\_Clean$W\_Q2\_BottleYN <- temp2022WinterRound$W2.Bottle  
 temp2022WinterRound\_Clean$W\_Q2\_OtherYN <- temp2022WinterRound$W2.O  
 temp2022WinterRound\_Clean$W\_Q2\_OtherYNSpecify <- temp2022WinterRound$W2\_OtWer  
   
 temp2022WinterRound\_Clean$W\_Q3\_PercentNetwork <- temp2022WinterRound$W3\_Network  
 temp2022WinterRound\_Clean$W\_Q3\_PercentWaterTrucking <- temp2022WinterRound$W3\_Water\_trucking  
 temp2022WinterRound\_Clean$W\_Q3\_PercentClosedWell <- temp2022WinterRound$W3\_Closed\_well\_network  
 temp2022WinterRound\_Clean$W\_Q3\_PercentClosedWell\_Network <- temp2022WinterRound$W3\_Closed\_well\_network  
 temp2022WinterRound\_Clean$W\_Q3\_PercentClosedWell\_HH <- temp2022WinterRound$W3\_Closed\_well\_indivisual  
 temp2022WinterRound\_Clean$W\_Q3\_PercentOpenWell <- temp2022WinterRound$W3\_Open\_well  
 temp2022WinterRound\_Clean$W\_Q3\_PercentSprings <- temp2022WinterRound$W3\_Spring  
 temp2022WinterRound\_Clean$W\_Q3\_PercentRiverLake <- temp2022WinterRound$W3\_River  
 temp2022WinterRound\_Clean$W\_Q3\_PercentBottle <- temp2022WinterRound$W3\_Bottle  
 temp2022WinterRound\_Clean$W\_Q3\_PercentOther <- temp2022WinterRound$W3\_Other\_source  
   
 temp2022WinterRound\_Clean$W\_Q9\_PercentIncomeOnWaterPurchase <- temp2022WinterRound$W7  
 temp2022WinterRound\_Clean$W\_Q9\_SYPSpendOnWaterPurchase <- temp2022WinterRound$W7\_1  
 temp2022WinterRound\_Clean$W\_Q9\_WillingToPayForWater <- temp2022WinterRound$W7\_2  
 temp2022WinterRound\_Clean$W\_Q9\_MaxSYPWillingToPayForWater <- temp2022WinterRound$W7\_2\_Amount  
   
}

## Water Trucking Price and quantity of water:

summary(cars)

## speed dist   
## Min. : 4.0 Min. : 2.00   
## 1st Qu.:12.0 1st Qu.: 26.00   
## Median :15.0 Median : 36.00   
## Mean :15.4 Mean : 42.98   
## 3rd Qu.:19.0 3rd Qu.: 56.00   
## Max. :25.0 Max. :120.00

## Including Plots

You can also embed plots, for example:



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.