

# HW\_2

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This is a data set containing data about projects that have been completed or are in development associated with the solar incentive program run by the New York State Energy Research and Development Authority beginning in the year 2000.

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.3    v purrr  0.3.4
## v tibble  3.0.5    v dplyr  1.0.3
## v tidyr   1.1.2    v stringr 1.4.0
## v readr   1.4.0    v forcats 0.5.1
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(tinytex)
```

```
Solar_Electric_Programs_NYSERDA <- read.csv("Solar_Electric_Programs_NYSERDA.csv", header=T)
head(Solar_Electric_Programs_NYSERDA)
```

```
##   Reporting.Period Project.Number Legacy.Project.Number      City
## 1      12/31/2020 2011-161208-SLPR                      Merrick
## 2      12/31/2020 2011-159947-SLPR                South Jamesport
## 3      12/31/2020      0000270652                Laurel Hollow
## 4      12/31/2020 2011-156225-SLPR                      Bethpage
## 5      12/31/2020 2011-156480-SLPR                      Bay Shore
## 6      12/31/2020      0000277778                Saint James
##   County State Zip.Code      Sector      Program.Type
## 1 Nassau    NY    11566 Residential Residential/Small Commercial
## 2 Suffolk  NY    11970 Residential Residential/Small Commercial
## 3 Nassau    NY    11791 Residential Residential/Small Commercial
## 4 Nassau    NY    11714 Residential Residential/Small Commercial
## 5 Suffolk  NY    11706 Residential Residential/Small Commercial
## 6 Suffolk  NY    11780 Residential Residential/Small Commercial
##   Solicitation      Electric.Utility Purchase.Type
## 1 SLPR 2010 Residential Long Island Power Authority Purchase
## 2 SLPR 2010 Residential Long Island Power Authority Purchase
## 3      PON 2112 Long Island Power Authority Purchase
## 4 SLPR 2010 Residential Long Island Power Authority Purchase
```

##	Date.Application.Received	Date.Completed	Project.Status	Contractor
5	SLPR 2010 Residential Long Island Power Authority		Purchase	
6	PON 2112 Long Island Power Authority		Purchase	
1	12/07/2010	12/07/2010	Complete	
2	12/07/2010	12/07/2010	Complete	
3	10/16/2020		Pipeline	
4	12/21/2000	12/21/2000	Complete	
5	08/15/2002	08/15/2002	Complete	
6	11/27/2020		Pipeline	
##	Primary.Inverter.Manufacturer	Primary.Inverter.Model.Number		
1				
2				
3				
4				
5				
6				
##	Total.Inverter.Quantity	Primary.PV.Module.Manufacturer	PV.Module.Model.Number	
1	0			
2	0			
3	0			
4	0			
5	0			
6	0			
##	Total.PV.Module.Quantity	Project.Cost	X.Incentive	Total.Nameplate.kW.DC
1	0	40100.0	1010	0.54
2	0	1915.0	1365	0.39
3	0	NA	1650	0.00
4	0	10433.2	3600	1.20
5	0	6651.0	3960	0.66
6	0	NA	4275	0.00
##	Expected.KWh.Annual.Production	Remote.Net.Metering	Affordable.Solar	
1	634		No	
2	458		No	
3	0		No	
4	1409		No	
5	775		No	
6	0		No	
##	Community.Distributed.Generation	Green.Jobs.Green.New.York.Participant		
1	No		No	
2	No		No	
3	No		No	
4	No		No	
5	No		No	
6	No		No	
##	Location.1			
1	Merrick, NY 11566\n(40.668671, -73.555545)			
2	South Jamesport, NY 11970\n(40.937264, -72.573603)			
3	Laurel Hollow, NY 11791\n(40.818622, -73.502403)			
4	Bethpage, NY 11714\n(40.740895, -73.484996)			
5	Bay Shore, NY 11706\n(40.729218, -73.255404)			
6	Saint James, NY 11780\n(40.885427, -73.164651)			

dim(Solar\_Electric\_Programs\_NYSERDA)

## [1] 114716 31