

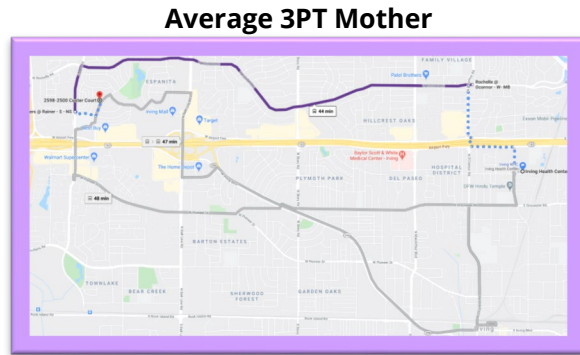
## Background/Project

Each year around 3% of all mothers who deliver at Parkland have no prenatal care prior to delivery. The aim of this project was to:

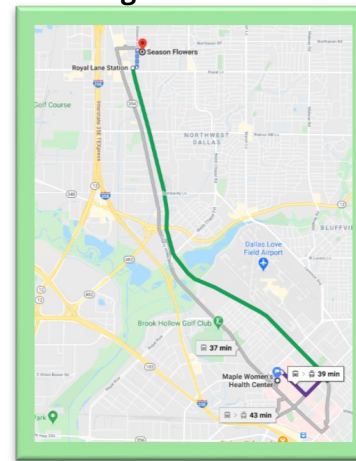
- Identify mothers who had not received prenatal care
- Evaluate perinatal outcomes for mothers with (PNCP) and without prenatal care (3PT)
- Analyze geographical locations and grouping of cohorts
- Identify and analyze barriers to care at individual and census block group level.

## Actionable Data-insights Visualizations

**It's All About Location:** Expectant Mothers Relying on Public Transportation are Less Likely to Receive Prenatal Care



**Average 3PT Mother**  
**Time to Clinic Driving:** 7 minutes  
**Time to Clinic by Bus:** 52 minutes  
**Number of Bus/Trains:** 2  
**Additional Walking Distance:** 1 mile

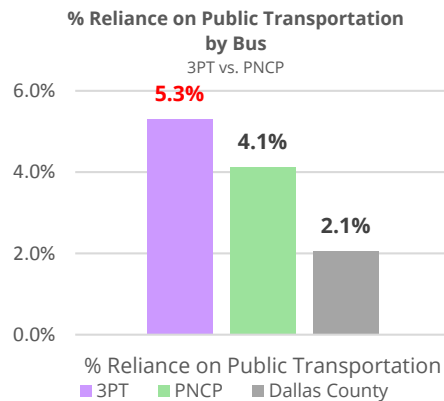
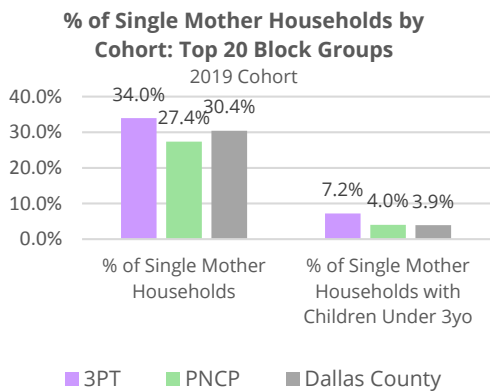


**Average PNCP Mother**  
**Time to Clinic Driving:** 16 minutes  
**Time to Clinic by Bus:** 43 minutes  
**Number of Bus/Trains:** 2  
**Number of Stops:** 10  
**Distance:** 0.7 mile

## Results/Impact

- 326 mothers out of 10,374 total did not receive prenatal care
- Mothers in the 3PT cohort rely more on public transportation
- Expectant mothers without prenatal care who use public transportation spend longer time on the bus and have more stops than their peers who receive prenatal care
- Single mothers with young children are less likely to receive prenatal care
- Mothers without prenatal care are 2.5 times more likely to have preterm births
- Infants who do not receive prenatal care are 24% more likely to spend time in the NICU

### Single Mothers With Young Children Who Rely on Public Transportation Are Less Likely to Receive Prenatal Care



## Methodology

- Original cohort of mothers who delivered infants at Parkland Hospital in 2019 identified
- Maternal and neonatal data abstracted from electronic health records and Community Data Initiative (CDI)
- Maternal characteristics and perinatal outcomes examined
- Barriers to care, including transportation and family structure, analyzed
- Statistical analysis and logistic regression performed for adjustment of demographic features

### Infants With Mothers Who Did Not Receive Prenatal Care are More Likely to be Born Prematurely and Require Intensive Care.

