

ERHS 535 Homework #4

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Unsolved homicides in Baltimore, MD

```
##
## 1-sample proportions test with continuity correction
##
## data:  baltimore$n_unsolved out of baltimore$n_homicides, null probability 0.5
## X-squared = 239.01, df = 1, p-value < 2.2e-16
## alternative hypothesis: true p is not equal to 0.5
## 95 percent confidence interval:
##  0.6275625 0.6631599
## sample estimates:
##           p
## 0.6455607
```

Unsolved homicides by city

```
unsolved_prop %>%
  mutate(city_name = fct_reorder(city_name,
                                estimate)) %>%

  ggplot(aes(x = city_name,
             y = estimate)) +
  geom_point(color = "white") +
  geom_errorbar(color = "white",
               aes(x = city_name,
                  ymin = conf.low,
                  ymax = conf.high,
                  width = 0)) +

  coord_flip() +
  labs(title = "Unsolved homicides by city",
       subtitle = "Bars show 95% confidence interval",
       x = NULL,
       y = "Percent of homicides that are unsolved") +
  scale_y_continuous(limits = c(.2, .75),
                    breaks = c(.2, .3, .4, .5, .6, .7),
                    labels = percent) +

  theme_dark()
```

Unsolved homicides by city

Bars show 95% confidence interval

