# Impacts of Closure Periods on BU $CO_2$ and $CH_4$ Emissions and Local Concentrations

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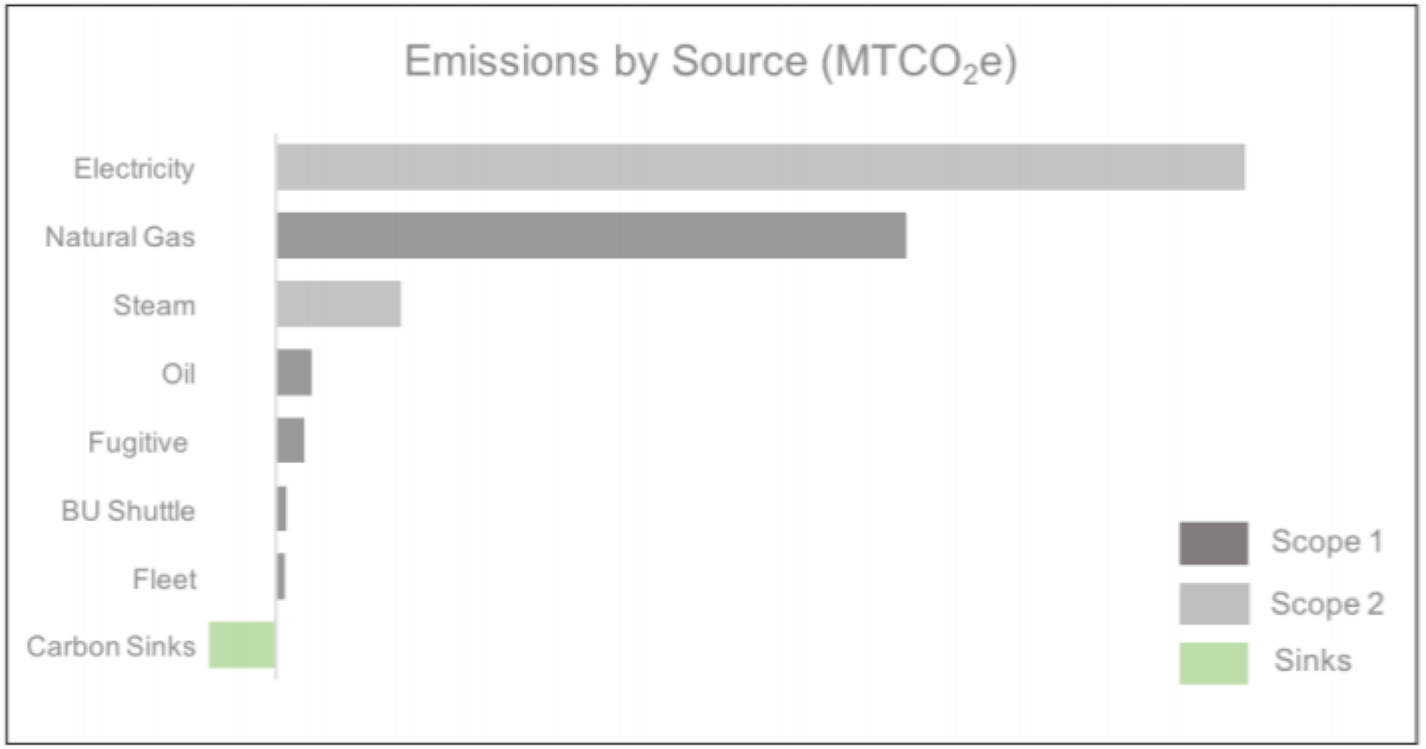
# BU emissions sources and causes

- **Problem:** emissions of greenhouse gases and other pollutants are causing climate change and creating adverse health effects

- **Goal:** establish ways to decrease emissions by determining their sources and how our behaviors affect these sources

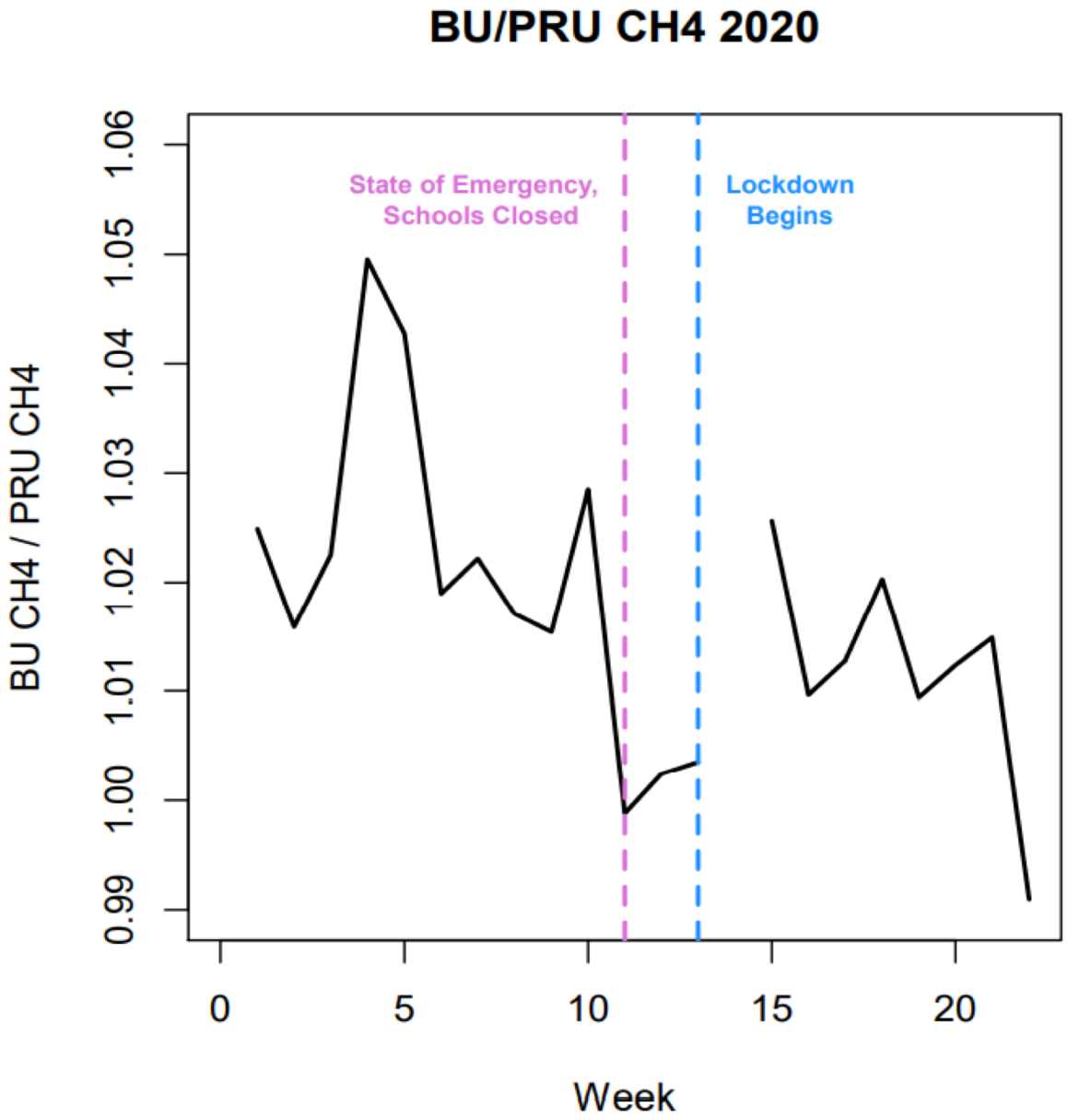
**FIGURE 5:** CURRENT BU EMISSIONS BY SOURCE




Boston University's Climate Action Plan

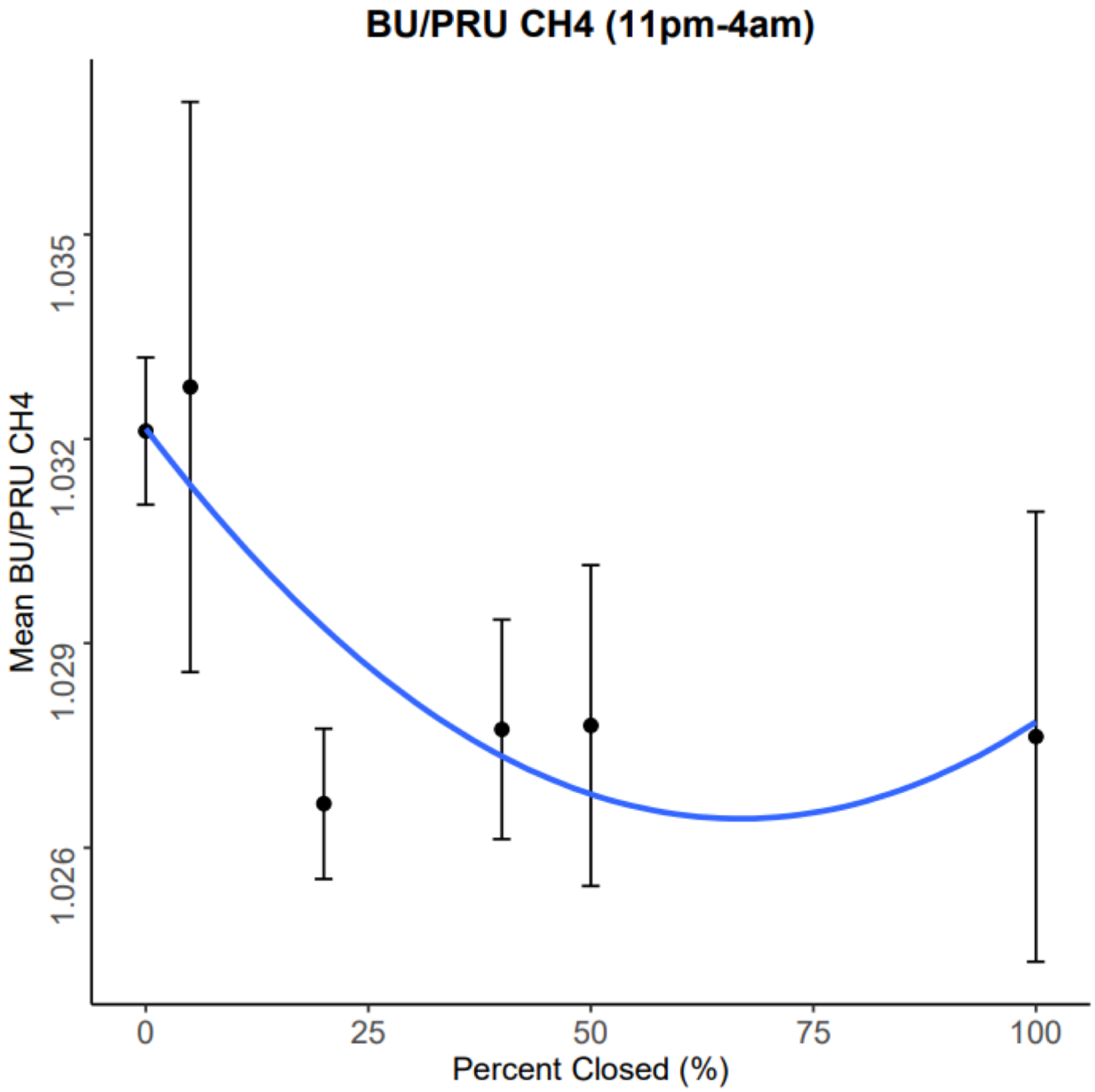
# $CH_4$ concentrations and COVID

- Looked at the ratio of methane concentrations at Boston University and the Prudential building
- There is a decrease in $CH_4$ concentrations that occurs at the time of the COVID lockdown

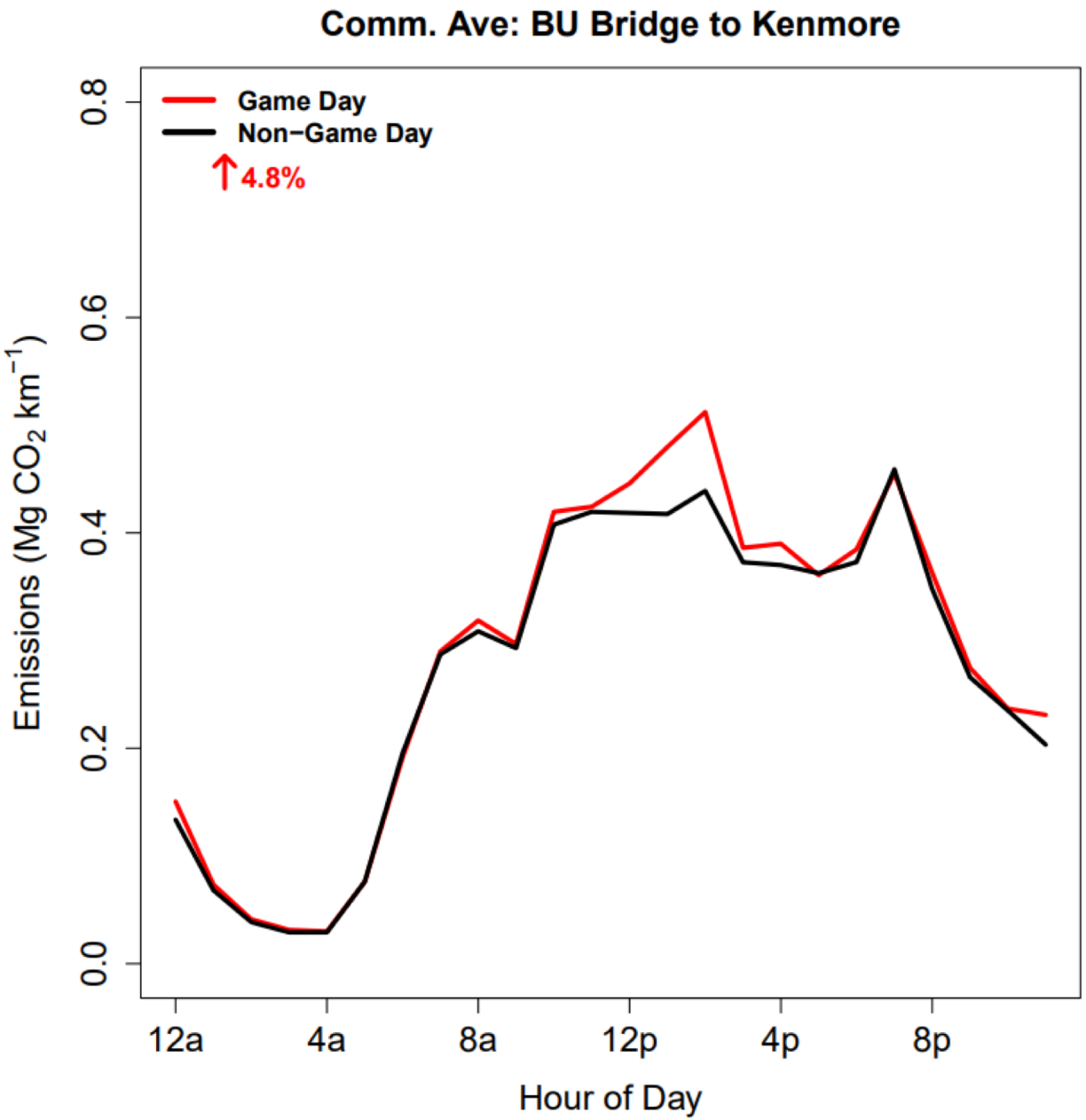


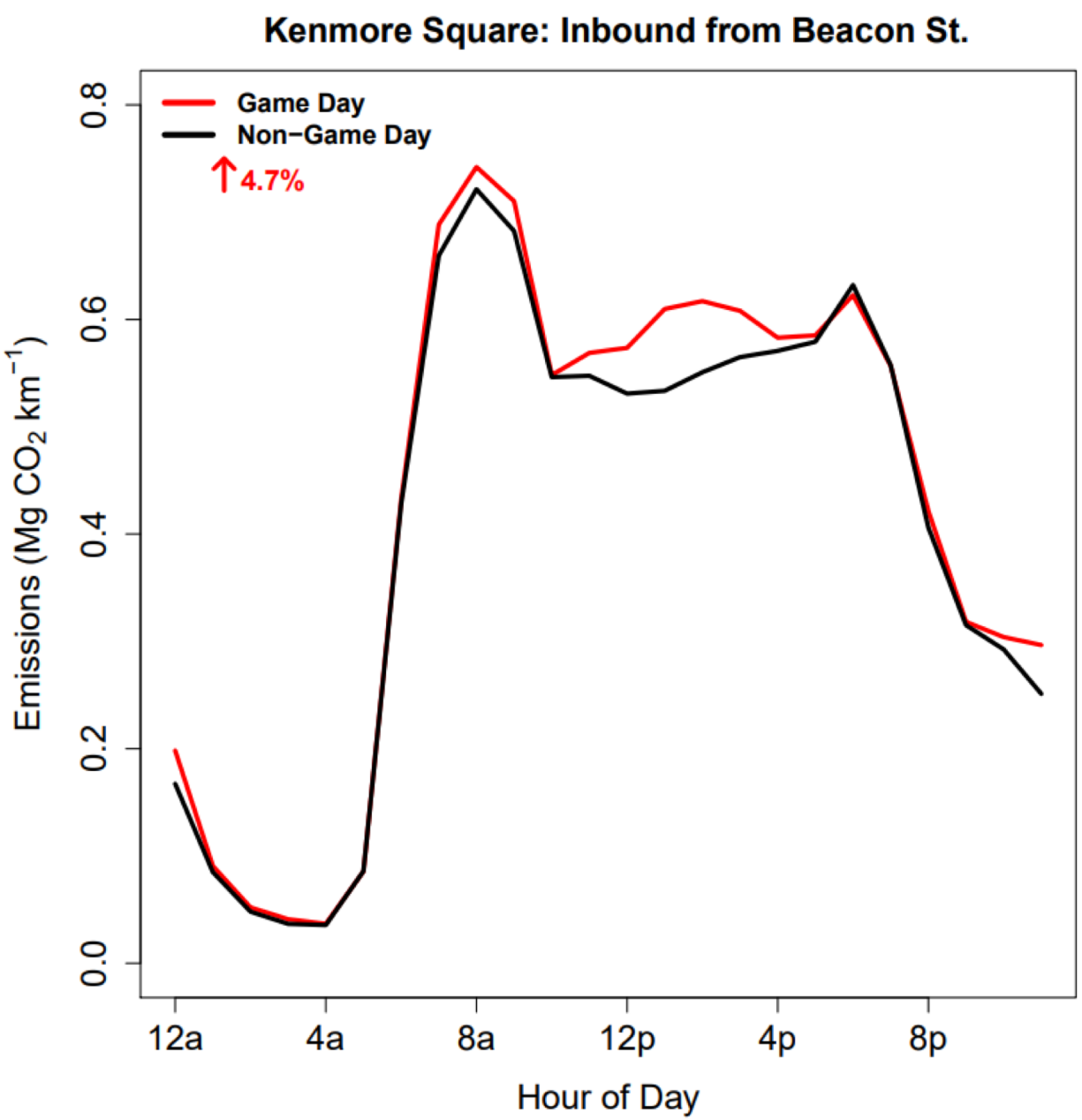
# $CH_4$ concentrations and BU closure periods

- Looked at the effects of closure periods at BU on local methane concentrations
- There is a decrease in methane concentrations when BU closes



# $CO_2$ emissions and Red Sox games



# Lessons and next steps

- The Boston University climate action plan has a goal to reach net zero direct greenhouse gas emissions by 2040
- Through further analysis of $CO_2$ and $CH_4$ concentrations and emissions, closure data, and events data, we hope to uncover opportunities for future emissions reductions