

An aerial photograph of a suburban neighborhood with many houses. Many of the houses have solar panels installed on their roofs. The houses are mostly two-story, with various colors like yellow, green, and blue. There are trees and a winding road visible in the background.

Shifting Energy Use Trends Due to COVID-19



Energy



Water



Transportation





## Field Research



## Our Approach

- 1,000 homes
- Real-time, unique data
- Expanding into CA & NY: 100 homes in each state

## Data Collection and Access



**2.5 BILLION**  
RECORDS ADDED DAILY



**2,000**  
UNIVERSITY-SPONSORED  
RESEARCHERS



**200+**  
PEER-REVIEWED PAPERS

- The world's largest residential energy research database.
- Innovative data privacy & security processes
- All available to academic and corporate researchers

## Testing & Verification Lab



- Affordable concept and prototype testing center for smart residential energy solutions
- Allows for rapid product and market verification testings
- Texas's first grid-connected V2G testing center

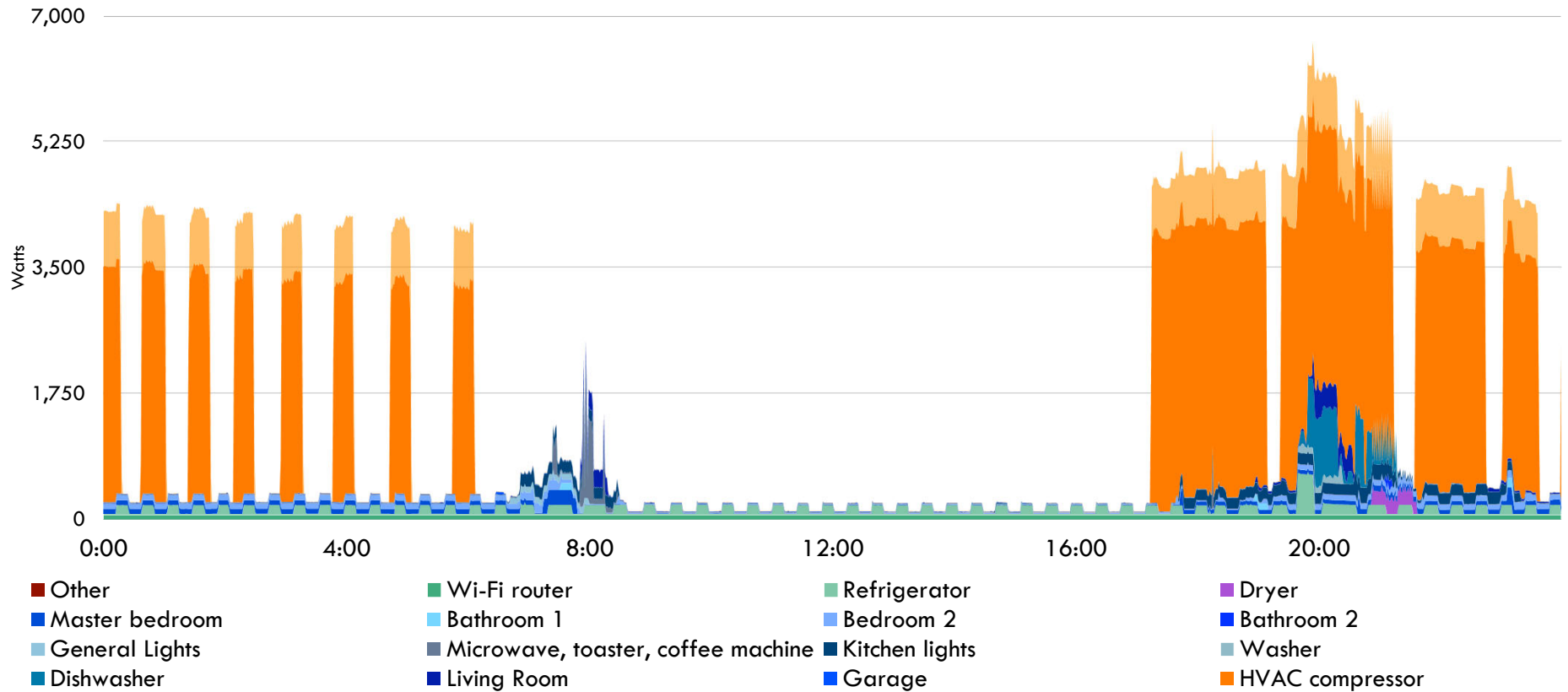




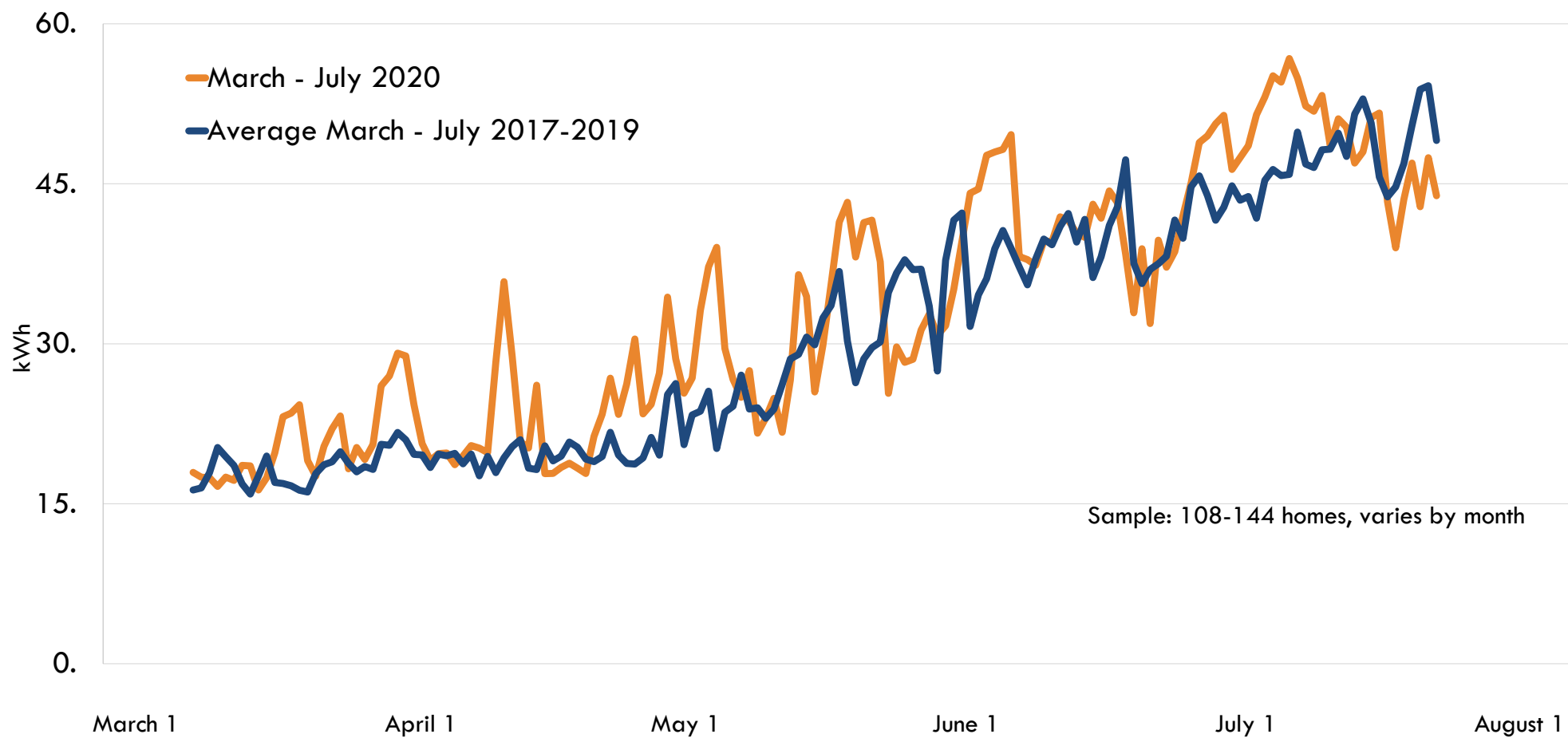


# High resolution, disaggregated data

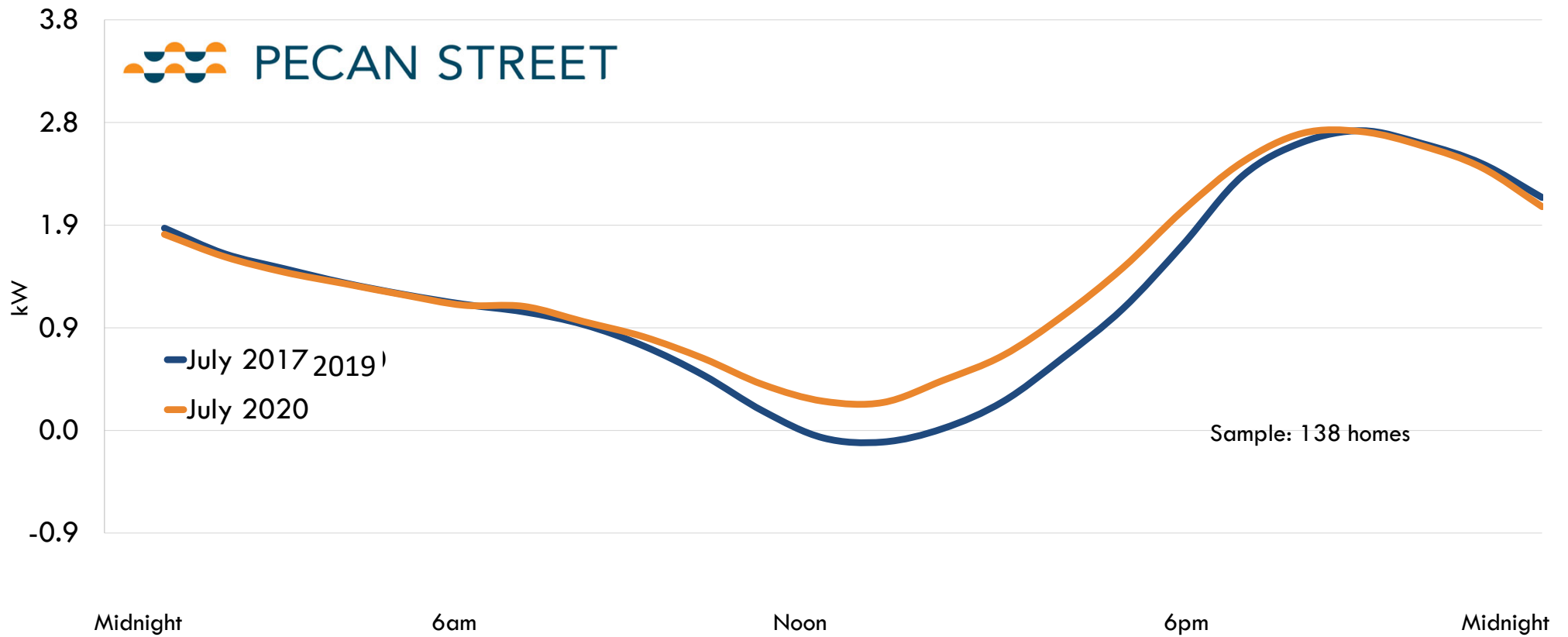
One-Minute, Circuit Level Data



## Average Daily Demand (Minus EVs)



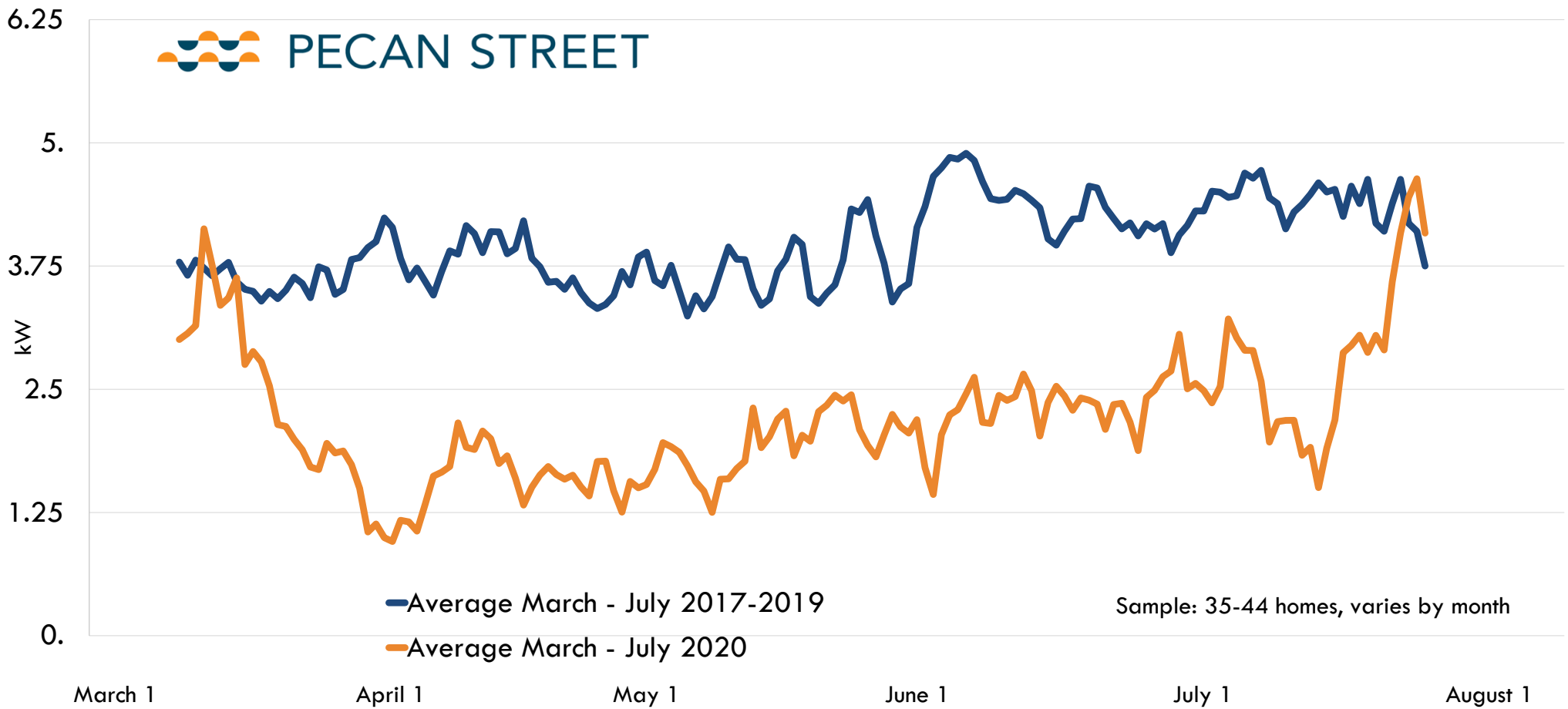
## Sheltering in Place - A New Duck Curve



## EV Charging – 5 Day Rolling Average

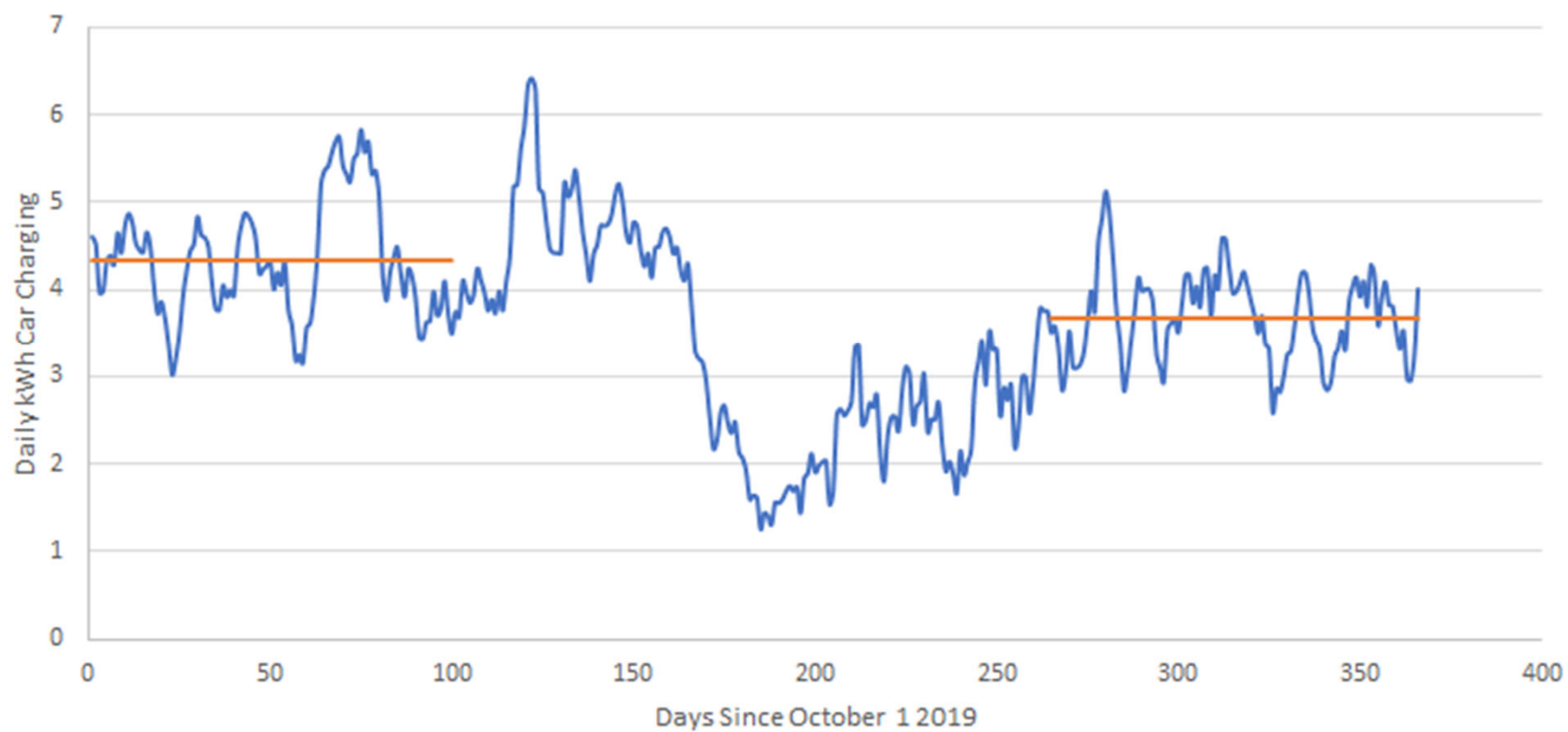


PECAN STREET





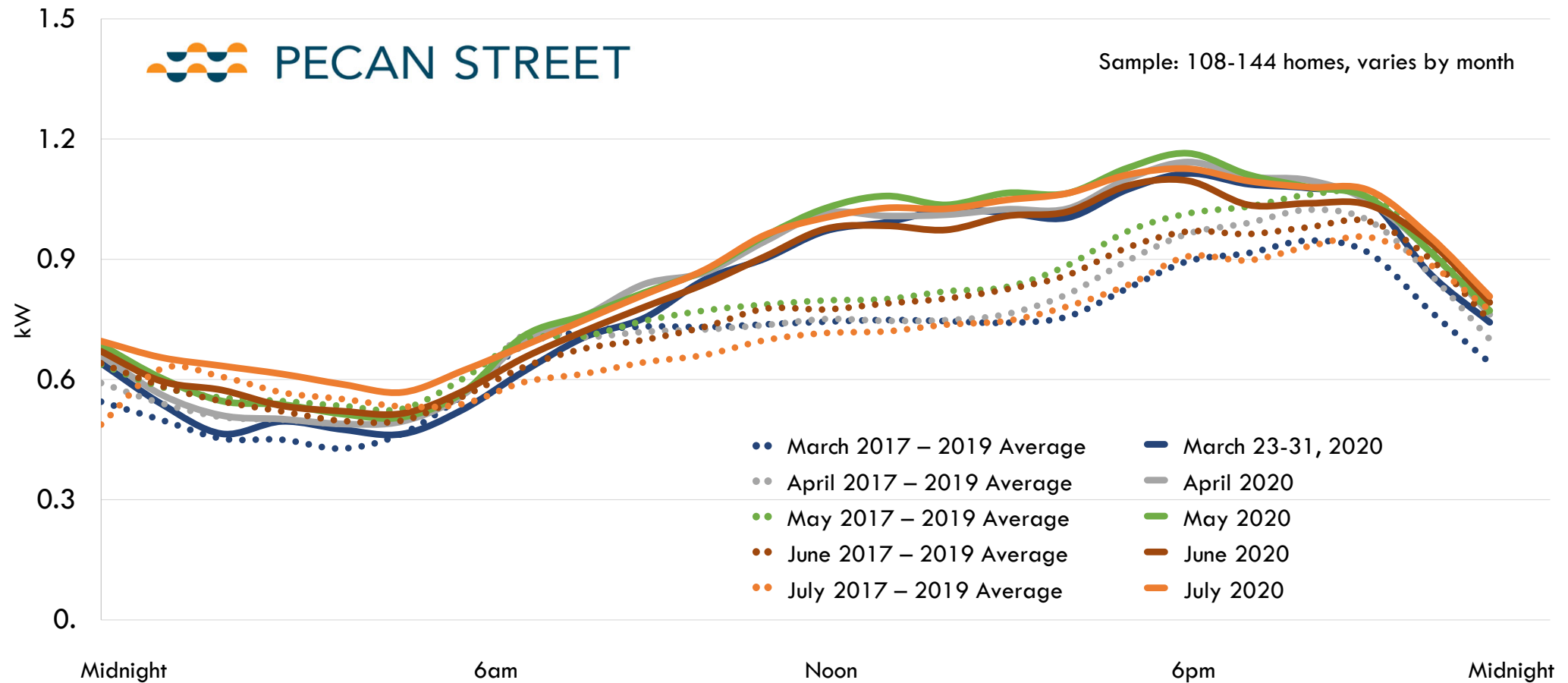
NY Test Bed Daily Car Charging: Spot the Pandemic



# Daily Average Load – Accessories, Lighting and Appliances (Excludes HVAC and EV Charging)



Sample: 108-144 homes, varies by month



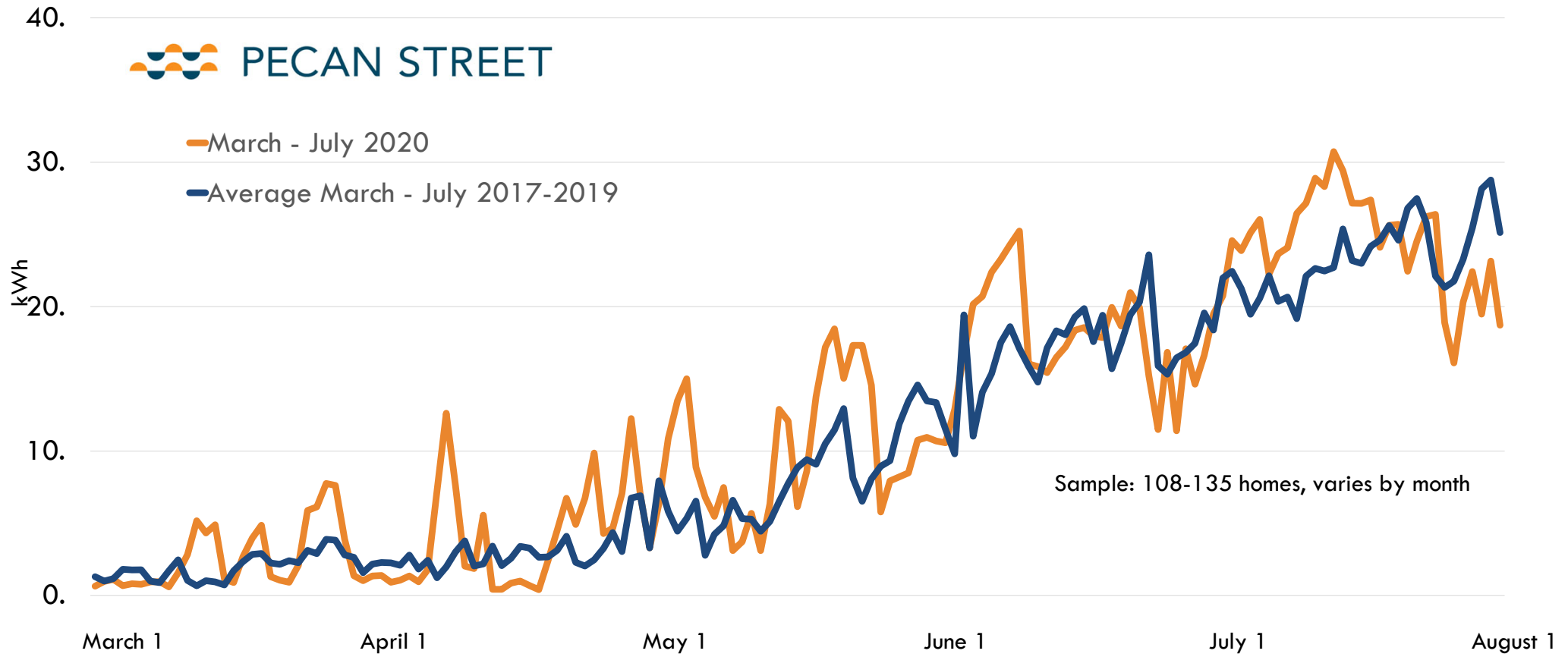


## HVAC - Average Daily Demand, March - July

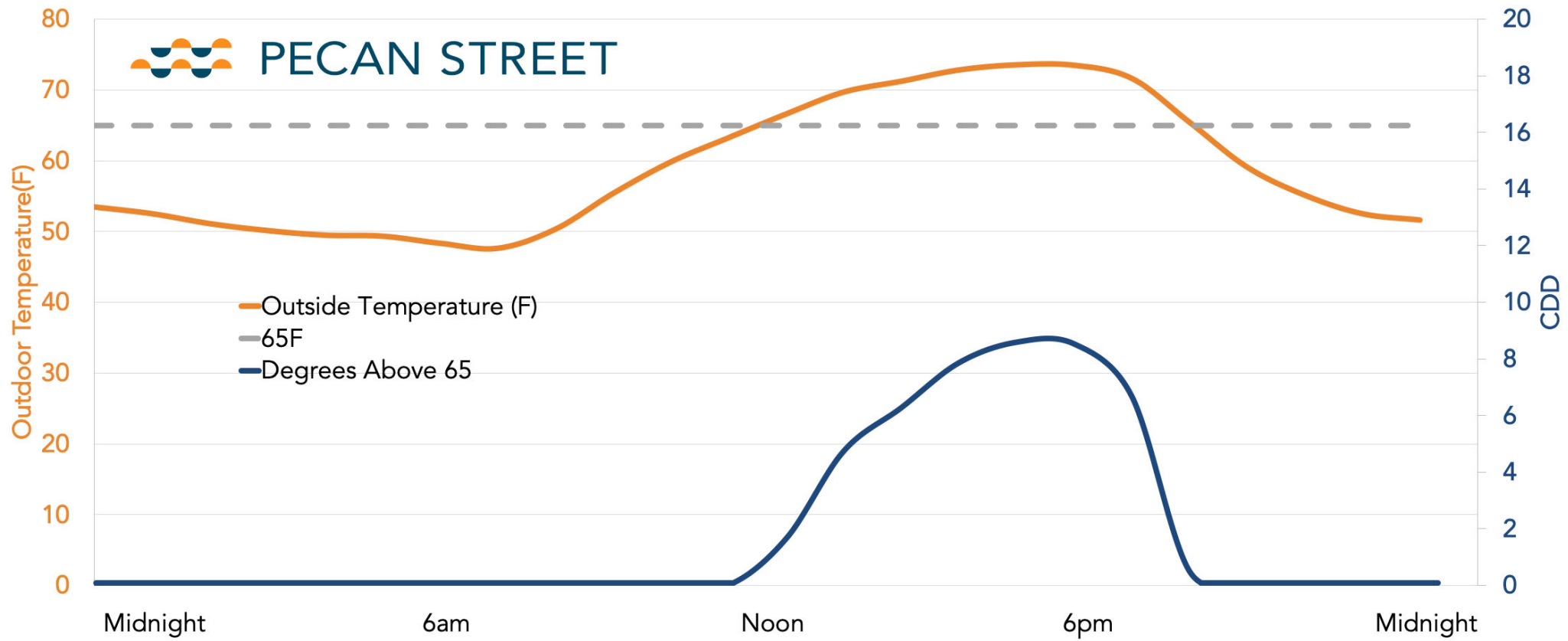


— March - July 2020

— Average March - July 2017-2019



## Cooling Degree Day – March 2020





## HVAC Demand Per Cooling Degree Day (CDD)

