Next Steps for SF Food Truck Application

This is a very simple command-line application that can be expanded extensively. If I were to expand this into a fully featured web application I would do a couple things. First and foremost, I'd migrate this backend piece to a microservice architecture. I'd add a Rest Controller, and expose an endpoint (a GET) so that other applications could call use this capability easily. If I were personally doing this I would turn it into a Spring Boot app (as that's I'm familiar with), but there are many frameworks you can use. I would then choose a more robust library to use to make the REST call to the Socrata API. I am using very basic HTTP libraries, but using something like RestTemplate or Spring WebFlux would give you a more robust set of capabilities.

Next, I'd look at the overall picture a little closer. If we wanted a fully featured web application we would most likely have some sort of web front end and probably a mobile app as well. This web front end and the mobile app would make REST calls into the endpoint we exposed above. Finally, I'd start taking considerations for performance and resilience. Depending on how many times this service is called we may want to stand up a small system-of-engagement style database where we cache relevant data so that our app is more performant. Last, but not least, I'd look at the resiliency of our system. I'd consider things like "what happens if the Socrata API is down?", "what happens if we suddenly get a flood of requests?". Libraries like resilience4j (with circuit breakers, fallbacks, and retry logic) and systems like Kubernetes (for autoscaling) can help us solve those issues.