**2019 BIG DATA HACKATHON PROJECT SUBMISSION FORM**

Complete the following information and upload to your team number GitHub repository (github.com/BigDataForSanDiego) by 10:00 a.m. on Saturday, March 16th (along with your team’s final pitch presentation slides).

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| **Team Number:** | **227** |

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| **Team Name:** | **Open San Diego + Friends** |

**Team Members:**

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| *Name* | *Active SDSU student?* | *Female active SDSU student?* | *Active SDSU veteran?* | *14th grade (college 2nd year) or younger* |
| **Omar Awad** |  |  |  |  |
| **Nikolaj Baer** |  |  |  |  |
| **Brooks Newberry** |  |  |  |  |
| **Daniel Prescott** |  |  |  |  |
| **Aakriti Sinha** |  |  |  |  |
| **Marissa Westerfield** |  |  |  |  |
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| **Team Leader:** | **Nikolaj Baer** |

**A question your team is answering (check a box OR provide a question your group created)**

**Smart City**

How can San Diegans have better options for parking in high-traffic areas to void congestion?

How can we get an emergency vehicle to the scene in shortest possible time can save lives?

Your question:

**Smart Environment**

How can San Diegans have access to better air quality indoors and outdoors?

How can we clean San Diego beaches effectively?

Your question:

**Smart Education**

How can schools better utilize their physical resources?

How to provide better school bus routing plan for San Diego Unified School Districts?

Your question:

**Smart Transportation**

How can San Diegans make better transportation decisions of getting from point A to Z that leaves a smaller carbon footprint?

Your question: What transportation accessibility is available to the aging population of San Diego?

**Smart Health**

How can we share useful public health information and web analytical tools for improve public health in San Diego?

What chronic diseases affect San Diegans and how can these conditions be managed daily?

Your question:

**Your team’s hackathon idea in TWO sentences:**

Using data analysis to determine and characterize transit needs for the elderly and mobility impaired. Making it possible to communicate the availability of needs of transit to the affected population and policy makers.

**Dataset(s) your team are using for the project. Provide name and URL:**

‘tl\_2018\_06\_tract.shp’ – Shapefile containing Census Tract polygons (<https://www2.census.gov/geo/tiger/GENZ2017/shp/cb_2018_06_tract_500k.zip)>

‘tl\_2018\_06\_bg.shp’ - Shapefile containing geographic centroid location for Census Block Groups (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php)>

‘pop\_estimates\_2017\_bg.csv’ – CSV file containing population per Census Block Group (<https://factfinder2.census.gov/)>

‘tl\_2010\_06073\_tabblock10.shp’ – Shapefile containing geographic centroid location for Census Blocks (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php)>

‘tabblock2010\_06\_pophu.shp’ – Shapefile containing population per Census Block (<https://www.census.gov/geo/maps-data/data/tiger-data.html)>

Not a dataset, but an API – walkscore and transit score API (<https://www.walkscore.com/professional/api.php)>

**The impact of this project on your selected theme:**

By collecting data about where elderly residents actual utilizing private transit services (this information does not currently exist) and combining that with existing public transit information, we can 1) increase 2-1-1 San Diego’s capacity to serve the aging population, and 2) provide information to City and County planners about gaps in transit availability.

**The next steps needed to launch the project:**

1) Develop an app similar to the CyclePhilly bike app that would facilitate the collection of route data from private (volunteer and shuttle) transit services for the elderly. While the data will be anonymized, include information about type of trip (medical, errand, recreation, etc), day of week, and time of day

2) Partner with 2-1-1 San Diego to deploy this app among private services (start with volunteer services)

3) Start the work to develop a more specialized transit score that combines public and private transit service availability and focuses on elder needs (i.e. wheelchair access, amount of time needed to access the service, etc)