**JACKSON HEART STUDY PARKS DATA DOCUMENTATION**

**GIS-BASED MEASURES AND METHODS**

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# I. DATA COLLECTION

## I.A. 2001 PARKS FILES

Data on parks was collected in 2001 by Kelly Evenson’s group at the University of North Carolina as part of the Atherosclerosis Risk in Communities (ARIC) study. Since this data does not have any data agreements, we were able to use the data she collected. This data is from the municipality files for the city of Jackson only. See Appendix A Table A.1 for a list of these files.

When using this data for papers, the following grant must be acknowledged: American Heart Association grant #0130229N.

This parks data was sent to Kari Moore at UM as shapefiles from Molly Wen at UNC via email. See Appendix A Table A.1 for a list of shapefile names and locations where they are saved at UM. A data dictionary of the variables in the shapefiles is under “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Documentation\ AHA\_DATA DICTIONARY.xls” and “AHAcoding.doc.”

## I.B. 2013 PARKS FILES

Data on parks for 2013 was collected from:

1. City Parks from the City of Jackson, MS. This data was obtained from the City of Jackson GIS Department (10/14/2013) via CD/DVD. Contact is Maurice Maberry ([mmaberry@city.jackson.ms.us](mailto:mmaberry@city.jackson.ms.us)). Cost $25.00 per shapefile (city level park polygons). A data licensing agreement was not required. This was purchased/received with data for public bus line, public bus routes, and building footprints.
2. Mississippi State Parks. This data was obtained from TeamWork Mississippi (<http://www.mississippisiteselection.com/gis-data-download.aspx>). Under “Cultural” then “State Parks.” Data is free and publically available.
3. U.S. National Parks and Forests. This data was obtained from the Mississippi Geospatial Clearinghouse (<http://www.gis.ms.gov/portal/detail.aspx?aspect=Governmental%20Boundaries&realm=All&dom=>). The file listed under “Parks, Reserves, and Public Lands” was downloaded. Data is free and publically available.

The shapefiles from all of these sources were merged together in ArcGIS to create the total parks extent. The data was then clipped to only the city of Jackson boundary where the greatest extent of parks that is available (ie: this is the only city-level parks file available). See Appendix A Table A.1 for a list of shapefile names and locations where they are saved at UM.

# II. BUFFER SIZES

For the MESA study, it was decided that parks measures/densities will be created for ¼, ½, 1, 3, and 5 mile buffers per literature review performed by Kelly Evenson as detailed below. This will also match what is created for the recreational facilities using the National Establishment Time Series (NETS) data. It was decided to replicate these methods from MESA in JHS as well.

Parks measures (described in following sections) will be created for all addresses where any part of the buffer falls within the city of Jackson, referred to the parks study area, since this is the extent to which full parks data was collected. A variable specifying the percent of the buffer that falls within the area was calculated and can be used to subset analyses to contain those that have all or most of the buffer within the area. Any addresses that are entirely outside the study area (ie: the percent within the study area will be 0) will have missing data for all other parks measures. For area level analyses using census tracts or block groups, a percent of the census tract/block group was also calculated and available for census tract 2000 boundaries and block group 2000 boundaries.

This measure was calculated in ArcGIS by clipping the buffer, census tract, or block group to the study area provided. This then calculated the amount of area that was within the city of Jackson. This area was then divided by the total area of the buffer, census tract, or block group. These were then exported from ArcGIS into DBF files and saved in the deliverable folders as follows:

Buffer Level: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Buffer\_Study\_Area

Census Tract 2000: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_Study\_Area

Block Group 2000: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_Study\_Area

The DBF files were then imported into SAS, merged with the other parks variables, and saved to the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles.” Detailed methods for how the percent of buffers within parks study areas was calculated are found in Appendix B. See Appendix A Table A.5 for details on dataset names and locations and Table A.6 for details on variables in the datasets for the buffer level data and Table A.7 for details on dataset names and locations and Table A.8 for details on variables in datasets for the area level data. See Appendix I for SAS code used to create this measure.

Studies that have empirically tested different buffer sizes:

Example of adults studies – what was used for buffer size:

400 m radius from home (1)

800 m radius from home (2)

1000 m radius from home (3)

400m and 800m from park entrance (4)

¼ mile (5)

Example of youth studies:

(6)

210 Boy Scouts 10-14 years living in TX

Buffer sizes tested: 400 m and 1-mile from home to parks, trails, gyms, bus stops, grocery stores, and restaurants

“Access to parks was associated with the physical activity levels of male adolescents, but the relationships differed by type of park and coding approach. For example, the presence of a community park within a 400 m radius of a subject’s home address was negatively associated with sedentary behavior and positively associated with light intensity physical activity, but neither variable predicted physical activity when a 1-mile buffer was used.”

(7)

209 adolescents living in Melbourne, Australia

Buffer size tested: 400 m, 800 m, 2000 m

No association was found with objectively measured access to parks and MVPA

(8)

SC 12th graders

Buffer sizes: 0.75 mile and 2.0 miles

Studied mediation pathways

TAAG study: (9) (Pediatrics); (10) JPAH

1556 girls in the 6th grade.

- Girls who lived near more parks engaged in more objectively measured non-school MET-Weighted MVPA compared to girls who lived near fewer parks.

- Proximity (within ½ mile), type of park (neighborhood or community park), park offerings (playgrounds, basketball courts, multipurpose rooms (i.e., gym), walking paths, swimming areas, and tracks), and amenities of the park (streetlights or floodlights) were associated with non-school MW-MVPA.

(11)

9-10 years old, longitudinal study

500 m used; 250 meters unstable for model performance and the 750/1000 m had less predictive power

Other

(12)

Related to sampling for audit protocol – not relevant here

Buffer size tested: 400 m and 800 m

# III. RECREATIONAL DENSITIES - UNWEIGHTED

Densities were created for the parks to match the recreational facilities categories we already have in place using the NETS data. We want to be able to combine the data with the NETS recreational facilities densities to use for the total physical activity environment. Amenities information to create the physical activities densities is only available in the 2001 data collected by Kelly Evenson.

It was decided that we would create the densities not weighted for the number of activities within the parks since we do not have the number of activities for the NETS-based recreational densities. The coding of the types of activities within the parks is detailed in Table 1 below. These were coded to match the coding of the NETS data that was already in place and to mimic the coding created for the MESA study as closely as possible.

**Table 1: Coding of Parks activities to match the NETS coding**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Presence/Number Variable** | **Availability (Free/Fee) Variable** | **Description** | **Category** | **Indoor** | **Outdoor** |
| WALK | WALKAP | Walking trails | R |  | X |
| GOLF | GOLFAP | Golf Course | R |  | X |
| GRANGE | GRANAP | Golf Range | R |  | X |
| RINK | RINKAP | Skating or hockey rink (assumed to be outdoors) | R |  | X |
| FIEL | FIELAP | General purpose fields | R |  | X |
| HORSESHOE | HORSAP | Horseshoes | R |  | X |
| DISC | DISCAP | Disc golf course | R |  | X |
| TENN | TENNAP | Tennis courts (assumed to all be outdoors) | RS |  | X |
| BASE | BASEAP | Baseball or softball fields | TS |  | X |
| BATTING | BATTAP | Batting range | TS |  | X |
| OUBBYES | OUBBAP | Outdoor basketball hoops | TS |  | X |
| OUVB | OUVBAP | Outdoor volleyball courts | TS |  | X |
| FOOT | FOOTAP | Football fields | TS |  | X |
| SOCC | SOCCAP | Soccer fields | TS |  | X |
| BOATRAMP | BOATAP | Boat rentals | WA |  | X |
| CANOE | CANOAP | Canoe or kayak launch | WA |  | X |
| INSW | INSWAP | Indoor swimming pools | WA-C | X |  |
| OUSW | OUSWAP | Outdoor swimming pools | WA-C |  | X |
| OUTR | OUTRAP | Outdoor tracks | O |  | X |
| BIKEPATH | BIKEPAP | Mountain biking trails | O |  | X |
| XSKI | XSKIAP | Cross country skiing trails | O |  | X |

CODING SYSTEM:

R = Recreational

RS = Racquet sports

TS = Team sports

WA = Water activities

WA-C = Water activities – Conditioning

O = Outdoor Conditioning (This category was added for parks and was not present in the NETS data)

The MESA study also had a category called “indoor conditioning” which is not included for JHS. There were no amenities collected that were used in this category.

Densities for instructional facilities were created for the NETS data but they are not created for the parks data since we do not have this information for the parks.

For each of the activities, there is an indicator specifying if the activity is available for free or for a fee. Densities were created for fee and free for each of the categories listed above. When using the fee/free combined with the NETS data, it will be assumed that all NETS facilities will be for a fee since we do not have that level of detail on that data.

Since the densities of the amenities within the parks will most often be used with the categories assigned in Table 1 combined together, various groupings of the categories were created to match what we plan to use in NETS. All possible groupings were created in ArcGIS since the categories are not mutually exclusive (ie: if creating total physical activities, for NETS we can add together the buffers for indoor conditioning, recreational, team/racquet sports, and water activities conditioning but for the parks, one park could have more than one of these measures. If we just add them together, then that park would be counted more than once and we’d be unintentionally weighting the park. This is not accurate since we don’t have any weighting for other parks on the number of activities). For the purposes of densities creation, team sports (TS) and racquet sports (RS) are combined together. See Table 2 for the densities that are created and how categories are combined. For each category, as necessary, separate densities are created for indoor and outdoor and also for fee or free. Indoor is defined if at least 1 amenity in that category is coded as indoor. Outdoor is defined if at least 1 amenity in that category is coded as outdoor. Fee is defined if at least 1 amenity in that category is coded as fee. Free is defined if at least 1 amenity in that category is coded as free.

**Table 2: Final groupings of categories of parks amenities for densities creation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Description** | **Categories combined (from Table 2)** | **Also have indoor?** | **Also have outdoor?** | **Also have free?** | **Also have fee?** |
| RE | Recreational | R | NO (all available recreational amenities are outdoor) | YES | YES | YES |
| TR | Team/racquet sports | RS, TS | NO (all available team/racquet sports amenities are outdoor) | YES | YES | YES |
| WA | Water activities | WA | NO (all are outdoor by definition) | YES | YES | YES |
| WC | Water activities conditioning | WA-C | YES | YES | YES | YES |
| OC | Outdoor conditioning | O | NO (all are outdoor by definition) | YES | YES | YES |
| PA | Total PA | R, RS, TS, WA-C, O | YES | YES | YES | YES |
| PW | Total PA+Water activities | R, RS, TS, WA-C, O, WA | YES | YES | YES | YES |
| NR | Total PA no recreational | RS, TS, WA-C, O | NO (Same as indoor PA so not repeated) | YES | YES | YES |

Coding of these categories for densities (from Table 2 above) was created in SAS9.3. The DBF file related to the 2001 parks shapefile was imported into SAS and coding was performed. A SAS file was saved to the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParksLevel” which contains the original variables from the DBF file along with the variables with the created coding. See Appendix A Table A.2 for list of dataset names and Table A.4 for details on variables in the datasets. See Appendix I for a list of SAS code used to create the data. Table 3 gives frequencies/percent for each of the densities categories described above.

**Table 3 Frequency (percent) of Densities Categories by site**

|  | **N (%)** |
| --- | --- |
| Recreational | 17 (37.78%) |
| Recreational Free | 16 (35.56%) |
| Recreational Fee | 3 (6.67%) |
| Team/Racquet Sports | 30 (66.67%) |
| Team/Racquet Sports Free | 29 (64.44%) |
| Team/Racquet Sports Fee | 2 (4.44%) |
| Water Activities | 1 (2.22%) |
| Water Activities Free | 0 (0.00%) |
| Water Activities Fee | 1 (2.22%) |
| Water Activities Conditioning | 10 (22.22%) |
| Water Activities Conditioning Free | 0 (0.00%) |
| Water Activities Conditioning Fee | 10 (22.22%) |
| Outdoor Water Activities Conditioning | 10 (22.22%) |
| Outdoor Water Activities Conditioning Free | 0 (0.00%) |
| Outdoor Water Activities Conditioning Fee | 10 (22.22%) |
| Indoor Water Activities Conditioning | 1 (2.22%) |
| Indoor Water Activities Conditioning Free | 0 (0.00%) |
| Indoor Water Activities Conditioning Fee | 1 (2.22%) |
| Outdoor Conditioning | 0 (0.00%) |
| Outdoor Conditioning Free | 0 (0.00%) |
| Outdoor Conditioning Fee | 0 (0.00%) |
| Total Physical Activities | 36 (80.00%) |
| Total Physical Activities Free | 34 (75.56%) |
| Total Physical Activities Fee | 12 (26.67%) |
| Outdoor Total Physical Activities | 36 (80.00%) |
| Outdoor Total Physical Activities Free | 34 (75.56%) |
| Outdoor Total Physical Activities Fee | 12 (26.67%) |
| Indoor Total Physical Activities | 1 (2.22%) |
| Indoor Total Physical Activities Free | 0 (0.00%) |
| Indoor Total Physical Activities Fee | 1 (2.22%) |
| Total Physical Activities excluding Recreational | 33 (73.33%) |
| Total Physical Activities excluding Recreational Free | 29 (64.44%) |
| Total Physical Activities excluding Recreational Fee | 11 (24.44%) |
| Outdoor Total Physical Activities excluding Recreational | 33 (73.33%) |
| Outdoor Total Physical Activities excluding Recreational Free | 29 (64.44%) |
| Outdoor Total Physical Activities excluding Recreational Fee | 11 (24.44%) |
| Total Physical Activities plus Water Activities | 36 (80.00%) |
| Total Physical Activities plus Water Activities Free | 34 (75.56%) |
| Total Physical Activities plus Water Activities Fee | 12 (26.67%) |
| Outdoor Total Physical Activities plus Water Activities | 36 (80.00%) |
| Outdoor Total Physical Activities plus Water Activities Free | 34 (75.56%) |
| Outdoor Total Physical Activities plus Water Activities Fee | 12 (26.67%) |

For creation of the densities in GIS, the variables needed with the categories for the densities, along with the park ID number were exported to a DBF file which was then linked to the shapefile by the ID number. See Appendix A Table A.3 for a list of the dataset names and locations and Table A.4 for details on the variables in the datasets.

The recreational densities were calculated all buffer sizes (1/4, 1/2, 1, 3, and 5 miles) for both raw (simple) densities and kernel (weighted) densities. The parks polygons were converted to a point lattice and the amenity value was a weighted and assigned to all the points of the point lattice polygon and then the standard density calculations were performed using ArcGIS. The densities were output from ArcGIS into DBF files and imported and saved in SAS datasets located in “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel\jhs\_parks.sas7bdat.” See Appendix C for detailed methods on how these were created. See Appendix A Table A.5 for details on dataset names and locations and Table A.6 for details on variables in the datasets.

# IV. OTHER PARKS FACILITIES MEASURES

From a literature review described, Weiss et al (5) created measures for the number of parks and number of unique amenity types within a buffer from census tracts. We applied the same measures to the person-level buffers and within census tracts and block groups which are described in the following subsections.

## IV.A. PARK ID WITHIN PERSON-LEVEL BUFFERS, CENSUS TRACTS, AND BLOCK GROUPS

To be able to calculate the facility measures, the ID of all parks that fall within the buffer was created. This allows for further manipulation of the parks data to be linked with the individuals as needed for the calculated measures in the sections below. This was created for buffer sizes of ¼, ½, 1, 3, and 5 miles using ArcGIS. The park ID within census tract 2000 boundaries and block group 2000 boundaries was also created. This is only available for year 2001 parks. Any park where any part of the park intersects with the buffer is included even if the whole park is not within the buffer.

In ArcGIS, spatial joins were created to link the parks with the buffer or area. This selects the parks that fall within a buffer, census tract, or block group. These files were exported from ArcGIS into DBF files and saved to the locations:

**Buffer level:** U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Buffer\_ParkIDs

**Census Tract 2000:** U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_ParkIDs

**Block Group 2000:** U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_ParkIDs

These were then imported into SAS and saved to the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles.” This data is set up so there are multiple rows per participant ID; 1 row for each park that intersects the buffer. This data can then be merged with the park level data by park ID to create the remaining measures in Section IV. See Appendix D for detailed methods on how the park ids within buffers were created. See Appendix A Table A.9 for details on file names and locations and Table B.10 for description of variables. See Appendix I for SAS code used to create the SAS data.

## IV.B. NUMBER OF PARKS WITHIN BUFFERS, CENSUS TRACTS, AND BLOCK GROUPS

For 2001 and 2013 parks data, the count of the number of parks within each buffer size of ¼, ½, 1, 3, and 5 miles, census tract 2000 and block group 2000 were calculated in ArcGIS using a spatial join to count the number of parks. This method creates a link between the buffer and the area of the parks. A count tool is then used to count the number of parks that were joined to the buffer.

This final calculated variable is the count of the number of parks within the buffer/area. The datasets with the calculated variables are saved to “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles.” See Appendix A Table A.5 for details on file names and locations and Table A.6 for description of variables for participant level data and Table A.7 for details on file names and locations and Table A.8 for description of variables for area level data. See Appendix I for SAS code used to create this measure.

## IV.C. NUMBER OF UNIQUE AMENITY TYPES WITHIN BUFFERS, CENSUS TRACTS, AND BLOCK GROUPS

The count of the number of unique amenity types within each buffer size of ¼, ½, 1, 3, and 5 miles, census tract 2000 and block group 2000 was calculated in SAS based on the ID of parks within the buffer described in Section IV.A. This measure is only available for 2001 parks where amenity information was collected.

This was calculated using the following steps:

1. Using the files created in Section IV.A, merge the parks data with the parks IDs within each buffer/area by unique park ID.
2. Since the data is set up with multiple rows per participant/area, count the number of each amenity within the buffer/area using a RETAIN statement to count the number by the participant/census tract/block group ID. This was done separately for each type of amenity. This gives a new variable where the last observation by ID is the total count of that type of amenity. For example: if a participant has 3 parks with a baseball field in their buffer, then that participant will have 3 rows of data. When using the last row by ID, this measure will be ‘3’.
3. Keep only the last row by ID from the dataset so there are not multiple rows per ID in the final dataset.
4. If there are no parks within the buffer for that amenity type (or no parks at all within the buffer), any participants/areas that fall within the study area (as described in Section II) were assigned a value of ‘0’ for the number of amenities.
5. For amenities that are greater than 1 (ie: more than 1 park within the buffer has that type of amenity), these were changed to ‘1’ since we are not actually interested in the number of a specific type of amenity. For example: if a participant has 2 parks within the buffer and they both have a baseball field, baseball field will have a value of ‘2’ from the RETAIN statement but this was then changed to an indicator of ‘1’ for that participant.
6. Sum together all of the indicators created above (Step 5) for the total number of unique amenity types. Anyone falling outside the study area will have missing data.

This calculated sum will be the count of the number of amenity types within the buffer/area with a maximum of 21. The datasets with the calculated variables are saved to “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles.” See Appendix A Table A.5 for details on file names and locations and Table A.6 for description of variables for participant level data and Table A.7 for details on file names and locations and Table A.8 for description of variables for area level data. See Appendix I for SAS code used to create this measure.

# V. BUILT ENVIRONMENT PARKS MEASURES

Additional measures for parks were created as part of the built environment study which includes the percent of the buffer devoted to parks and Euclidean distance to closest park. These are described in the following subsections. All of these measures are available for both 2001 and 2013 parks.

**NOTE:** These should not be used in longitudinal analyses to assess changes in parks. The data collection for the parks for the two years is different and we could not be certain that any changes seen are a result of actual changes in the parks and not just differences in how the parks were collected.

## V.A. PERCENT OF BUFFER DEVOTED TO PARKS

The total area of a buffer devoted to parks was created for ¼, ½, 1, 3, and 5 mile buffers. This is available for 2001 and 2013 parks. This area was calculated in square meters using ArcGIS for the amount of area of parks that overlaps with the buffer. These files were exported from ArcGIS into DBF files and saved to folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Buffer\_Park\_Area.” Detailed methods for how this was created are found in Appendix F. The DBF files were then imported into SAS, merged with the other parks variables, and saved to the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel.”

Since only IDs with at least 1 park will be in the DBF file output by ArcGIS, any participants that fall within the study area (as described in Section II) were assigned a value of ‘0’ for the parks area if they are not in the DBF file. The percent of buffer devoted to parks was created by the formula:

Percent Park = Area Park/Total Area of buffer

Where the Total Area of buffer is the total area of the buffer radius in square meters. See Appendix A Table A.5 for details on file names and locations and Table A.6 for description of variables. See Appendix I for SAS code used to create this percent measure.

## V.B. PERCENT OF CENSUS TRACT/BLOCK GROUP DEVOTED TO PARKS

In addition to the percent of parks within the buffer, this was also calculated for the census tract 2000 boundaries and block group 2000 boundaries. This is available for 2001 and 2013 parks. This area was calculated in square meters using ArcGIS for the amount of area of parks that overlaps with the census tract/block group. These files were exported from ArcGIS into DBF files and saved to folders:

**Census tract 2000:** U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_Park\_Area

**Block group 2000:** U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_Park\_Area

Detailed methods for how this was created are found in Appendix G. The DBF files were then imported into SAS, merged with the other parks variables, and saved to the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\AreaLevel.”

Since only IDs with at least 1 park will be in the DBF file output by ArcGIS, any census tracts/block groups that fall within the study area (as described in Section II) were assigned a value of ‘0’ for the parks area if they are not in the DBF file. The percent of area devoted to parks was created by the formula:

Percent Park = Area Park/Total Area of census boundary

Where the Total Area of census boundary is the total area of the census tract or block group in square meters. See Appendix A Table A.7 for details on file names and locations and Table A.8 for description of variables. See Appendix I for SAS code used to create this percent measure.

## V.C. EUCLIDEAN DISTANCE TO NEAREST PARK

The Euclidean (straight-line) distance to the nearest park was calculated in ArcGIS using Near Tool for both 2001 and 2013 parks. This measure does not take into account any aspect of the road network. This is only available for participants where at least part of their 5 mile buffer overlaps with the city of Jackson (parks study area). For those that are entirely outside the parks study areas, these measures will be missing. Detailed methods for how this was created are found in Appendix H. See Appendix A Table A.5 for details on file names and locations and Table A.6 for description of variables.

# 

# VI. TIMING FOR LINKING WITH ADDRESSES

JHS Exam 1 was taken from 09/26/2000 to 03/31/2004 and JHS Exam 2 was taken from 10/10/2005 to 12/24/2008. The addresses of the JHS participants were obtained for these two exams. We assigned park measures calculated both from 2001 park data and 2013 park data to each participant based on their address of each JHS clinic exam. Therefore, for most park measures (except density measures), each participant would have 2 variables (one based on 2001 park data and the other based on 2013 park data) at each exam. Since the park data at 2001 and 2013 were collected from different sources and not comparable across time, data users need to decide which version/year of park measures are most appropriate for their analysis. It is not recommended to use these measures as time-varying for longitudinal analyses.

**TIMELINE**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2000** | | **2001** | **2002** | **2003** | **2004** | | **2005** | | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **Exam1** |  |  | | | | |  |  | |  |  |  |  |  |  |  |
| **Exam2** |  | |  |  |  |  | |  |  | | | |  |  |  |  |
| **PARKS** | **Two version of park measures calculated based on 2001 PARKS and 2013 PARKS** | | | | | | | | | | | | | | | |

# APPENDIX A: Details of Shapefiles and Datasets

## Table A.1: Shapefiles parks data names and locations on UM servers

| **Description** | **Folder for original shapefile** | **Parks Shapefile Names (original)** | **Geodatabase location for renamed parks files** | **Feature Class Name (renamed file)** | **Geodatabase with recreational coding** | **Feature Class Name (coded file)** |
| --- | --- | --- | --- | --- | --- | --- |
| 2001 Parks file | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_OriginalFinal\_Shapefiles\JHS\Parks2001 | MS\_PARKS.shp | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb | CityOfJackson\_parks\_2001\_UTMz15N | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS\_coded.gdb | CityOfJackson\_parks\_2001\_UTMz15N\_clip |
| 2013 Parks for City of Jackson | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_OriginalFinal\_Shapefiles\JHS\Parks2013 | City\_Parks.shp | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb | CityOfJackson\_parks\_2013\_UTMx15N\* | NA | NA |
| 2013 Mississippi state parks | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_OriginalFinal\_Shapefiles\JHS\Parks2013 | Sparks.shp | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb | CityOfJackson\_parks\_2013\_UTMx15N\* | NA | NA |
| 2013 National Parks for state of Mississippi | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_OriginalFinal\_Shapefiles\JHS\Parks2013 | ParksReserves\_PublicLands.shp | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb | CityOfJackson\_parks\_2013\_UTMx15N\* | NA | NA |

\*This is the feature class with city, state, and national parks combined.

## Table A.2: Park Level SAS files with coding for densities

All files are located in the folder: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParksLevel

| **Year** | **File Name** | **N Observations** |
| --- | --- | --- |
| 2001 | ms2001.sas7bdat | 45 |

## Table A.3: DBF files with coding for densities that were linked to shapefiles

| **Year** | **Folder** | **Coded DBF File Names** |
| --- | --- | --- |
| 2001 | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\MS | MS2001\_created\_vars.dbf |

## Table A.4: Variables descriptions for datasets in Table A.2 (SAS files with coding for densities) and Table A.3 (DBF files linked to shapefiles)

| **Variable** | **Type** | **Coding** | **Description** | **Origin** | **In DBF File?** |
| --- | --- | --- | --- | --- | --- |
| ID | Num |  | Park ID | UNC | YES |
| NAME | Char |  | Name of primary facility | UNC | NO |
| ADDRESS | Char |  | Street address of facility | UNC | NO |
| CITY | Char |  | City of facility. | UNC | NO |
| STATE | Char |  | State of facility. | UNC | NO |
| OWNER | Char |  | Who owns the park? | UNC | NO |
| ACERAGE | Num |  | Number of acres park covers. | UNC | NO |
| PAY | Char |  | Need to pay to enter the park? | UNC | NO |
| PICNIC | Char | YES  NO | Are there picnic shelter/tables in the park? | UNC | NO |
| BATHROOM | Char | YES  NO | Are there bathrooms in the park? | UNC | NO |
| RECCTR | Char | YES  NO | Is there a recreation center in the park? | UNC | NO |
| OUTR | Num |  | Number of outdoor tracks | UNC | NO |
| OUTRAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of outdoor tracks | UNC | NO |
| OUTRAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of outdoor tracks – cleaned | UM | NO |
| OUTRMI | Char | NA = NA | Mileage of outdoor tracks | UNC | NO |
| OUTRSURF | Char | 1 = Paved  2 = Gravel  3 = Grass  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | What type of surface do the outdoor tracks have? | UNC | NO |
| OUTRLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the outdoor tracks lighted? | UNC | NO |
| WALK | Char | YES  NO | Presence of walking trails | UNC | NO |
| WALKAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of walking trails – cleaned | UM | NO |
| WALKMI | Char | NA = NA | Mileage of walking trail | UNC | NO |
| WALKSURF | Char | 1 = Paved  2 = Gravel  3 = Grass  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Attributes of walking trail | UNC | NO |
| WALKLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the walking trails lighted? | UNC | NO |
| INSW | Num |  | Number of indoor swimming pools | UNC | NO |
| INSWAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of indoor swimming pools | UNC | NO |
| INSWAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of indoor swimming pools – cleaned | UM | NO |
| OUSW | Num |  | Total number of outdoor swimming pools within park | UNC | NO |
| OUSWAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of outdoor swimming pools | UNC | NO |
| OUSWAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of outdoor swimming pools – cleaned | UM | NO |
| OUSWLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the outdoor swimming pools lighted? | UNC | NO |
| FIEL | Num |  | Total number of general purpose fields within park | UNC | NO |
| FIELAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of general purpose fields | UNC | NO |
| FIELAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of general purpose fields – cleaned | UM | NO |
| FIELLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the general purpose fields lighted? | UNC | NO |
| PLAYYES | Char | YES  NO | Are there playgrounds in the park? | UNC | NO |
| PLAY | Num |  | Number of playgrounds in the park | UNC | NO |
| PLAYAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of playgrounds | UNC | NO |
| PLAYLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the playgrounds lighted? | UNC | NO |
| SOCC | Num |  | Total number of soccer fields within the park | UNC | NO |
| SOCCAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of soccer fields | UNC | NO |
| SOCCAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of soccer fields – cleaned | UM | NO |
| SOCCLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the soccer fields lighted? | UNC | NO |
| BASE | Num |  | Total number of baseball or softball fields within park | UNC | NO |
| BASEAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of baseball or softball fields | UNC | NO |
| BASEAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of baseball or softball fields – cleaned | UM | NO |
| BASELITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the baseball or softball fields lighted? | UNC | NO |
| FOOT | Num |  | Total number of football fields within the park | UNC | NO |
| FOOTATP | Char | 1 = Free  2 = Fee  NA = NA | Availability of football fields | UNC | NO |
| FOOTAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of football fields – cleaned | UM | NO |
| FOOTLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the football fields lighted? | UNC | NO |
| OUBBYES | Char | YES  NO | Are there outdoor basketball hoops? | UNC | NO |
| OUBB | Num |  | Number of outdoor basketball hoops | UNC | NO |
| OUBBAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of outdoor basketball hoops | UNC | NO |
| OUBBAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of outdoor basketball hoops – cleaned | UM | NO |
| OUBBLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the outdoor basketball hoops lighted? | UNC | NO |
| OUVB | Num |  | Number of outdoor volleyball courts | UNC | NO |
| OUVBAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of outdoor volleyball courts | UNC | NO |
| OUVBAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of outdoor volleyball courts – cleaned | UM | NO |
| OUVBLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the outdoor volleyball courts lighted? | UNC | NO |
| TENN | Num |  | Total number of tennis courts within park | UNC | NO |
| TENNAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of tennis courts | UNC | NO |
| TENNAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of tennis courts – cleaned | UM | NO |
| TENNLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the tennis courts lighted? | UNC | NO |
| HORSESHOE | Char | YES  NO | Presence of horseshoes | UNC | NO |
| HORSENUM | Char |  | Number of horseshoes | UNC | NO |
| HORSAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of horsehoes | UNC | NO |
| HORSAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of horsehoes | UM | NO |
| BOATRAMP | Char | YES  NO | Are there boat ramp at this park? | UNC | NO |
| BOATAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of boat ramp | UNC | NO |
| BOATAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of boat ramp – cleaned | UM | NO |
| FISHING | Char | YES  NO | Are there fishing at this park? | UNC | NO |
| FISHAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of fishing | UNC | NO |
| BIKEPATH | Char | YES  NO | Presence of bike path that are generally not intended for walking | UNC | NO |
| BIKEPAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of bike path | UNC | NO |
| BIKEPAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of bike path – cleaned | UM | NO |
| CANOE | Char | YES  NO | Is there a canoe or kayak launch within this park? | UNC | NO |
| CANOAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of canoe or kayak launch | UNC | NO |
| CANOAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of canoe or kayak launch – cleaned | UM | NO |
| PARKING | Char | YES  NO | Is there parking in the park | UNC | NO |
| GOLF | Char | YES  NO | Is there a golf course? | UNC | NO |
| GOLFAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of golf course | UNC | NO |
| GOLFAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of golf course – cleaned | UM | NO |
| RINK | Char | YES  NO | Is there skating or hockey rink in the park? | UNC | NO |
| RINKAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of skating or hockey rink | UNC | NO |
| RINKAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of skating or hockey rink – cleaned | UM | NO |
| RINKLITE | Char | NO  YES  .A = Not obtained  .D = Don’t know  .R = Refused to answer  NA = NA | Are the skating or hockey rink lighted? | UNC | NO |
| WARM | Char | YES  NO | Is there a warming house in the park? | UNC | NO |
| HILL | Char | YES  NO | Is there a sliding hill in the park? | UNC | NO |
| XSKI | Char | YES  NO | Presence of cross country skiing trails | UNC | NO |
| XSKIAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of cross country skiing trails | UNC | NO |
| XSKIAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of cross country skiing trails – cleaned | UM | NO |
| GRANGE | Char | YES  NO | Is there a golfing range? | UNC | NO |
| GRANAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of golfing range | UNC | NO |
| GRANAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of golfing range- cleaned | UM | NO |
| BATTING | Char | YES  NO | Is there a batting range? | UNC | NO |
| BATTAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of batting range | UNC | NO |
| BATTAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of batting range – cleaned | UM | NO |
| DISC | Char | YES  NO | Presence of disc (or Frisbee) golf course(s) | UNC | NO |
| DISCAP | Char | 1 = Free  2 = Fee  NA = NA | Availability of disc golf course | UNC | NO |
| DISCAP1 | Num | 1 = Free  2 = Fee  0 = NA | Availability of disc golf course - cleaned | UNC | NO |
| COMMENTS | Char |  | Comments about the park. | UNC | NO |
| OUTR\_1 | Num | 0 = No  1 = Yes | Outdoor tracks 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| WALK\_1 | Num | 0 = No  1 = Yes | Walking trails 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| INSW\_1 | Num | 0 = No  1 = Yes | Indoor swimming pools 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| OUSW\_1 | Num | 0 = No  1 = Yes | Outdoor swimming pools 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| FIEL\_1 | Num | 0 = No  1 = Yes | General purpose fields 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| SOCC\_1 | Num | 0 = No  1 = Yes | Soccer fields 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| BASE\_1 | Num | 0 = No  1 = Yes | Baseball or softball fields 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| FOOT\_1 | Num | 0 = No  1 = Yes | Football fields 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| OUBBYES\_1 | Num | 0 = No  1 = Yes | Outdoor basketball hoops 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| OUVB\_1 | Num | 0 = No  1 = Yes | Outdoor volleyball courts 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| TENN\_1 | Num | 0 = No  1 = Yes | Tennis courts 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| HORSESHOE\_1 | Num | 0 = No  1 = Yes | Horseshoes 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| BOAT\_1 | Num | 0 = No  1 = Yes | Boat rentals 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| BIKEPATH\_1 | Num | 0 = No  1 = Yes | Bike paths 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| CANOE\_1 | Num | 0 = No  1 = Yes | Canoe or kayak launch 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| GOLF\_1 | Num | 0 = No  1 = Yes | Golf course 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| RINK\_1 | Num | 0 = No  1 = Yes | Skating/Hockey rinks 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| XSKI\_1 | Num | 0 = No  1 = Yes | Cross country skiing trails 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| GRANGE\_1 | Num | 0 = No  1 = Yes | Golfing range 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| BATTING\_1 | Num | 0 = No  1 = Yes | Batting range 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| DISC\_1 | Num | 0 = No  1 = Yes | Disc (or Frisbee) golf course 0/1 indicator. This was created to use in creation of densities categories. | Created at UM | NO |
| RE | Num | 0 = No  1 = Yes | Recreational densities category indicator. All are outdoor. | Created at UM | YES |
| REFR | Num | 0 = No  1 = Yes | Recreational free densities category indicator. All are outdoor. | Created at UM | YES |
| REFE | Num | 0 = No  1 = Yes | Recreational fee densities category indicator. All are outdoor. | Created at UM | YES |
| TR | Num | 0 = No  1 = Yes | Team/Racquet Sports densities category indicator. All are outdoor. | Created at UM | YES |
| TRFR | Num | 0 = No  1 = Yes | Team/Racquet Sports free densities category indicator. All are outdoor. | Created at UM | YES |
| TRFE | Num | 0 = No  1 = Yes | Team/Racquet Sports fee densities category indicator. All are outdoor. | Created at UM | YES |
| WA | Num | 0 = No  1 = Yes | Water Activities densities category indicator. All are outdoor. | Created at UM | YES |
| WAFR | Num | 0 = No  1 = Yes | Water Activities free densities category indicator. All are outdoor. | Created at UM | YES |
| WAFE | Num | 0 = No  1 = Yes | Water Activities fee densities category indicator. All are outdoor. | Created at UM | YES |
| WC | Num | 0 = No  1 = Yes | Water Activities conditioning densities category indicator. | Created at UM | YES |
| WCFR | Num | 0 = No  1 = Yes | Water Activities conditioning free densities category indicator. | Created at UM | YES |
| WCFE | Num | 0 = No  1 = Yes | Water Activities conditioning fee densities category indicator. | Created at UM | YES |
| OWC | Num | 0 = No  1 = Yes | Outdoor Water Activities conditioning densities category indicator. | Created at UM | YES |
| OWCFR | Num | 0 = No  1 = Yes | Outdoor Water Activities conditioning free densities category indicator. | Created at UM | YES |
| OWCFE | Num | 0 = No  1 = Yes | Outdoor Water Activities conditioning fee densities category indicator. | Created at UM | YES |
| IWC | Num | 0 = No  1 = Yes | Indoor Water Activities conditioning densities category indicator. | Created at UM | YES |
| IWCFR | Num | 0 = No  1 = Yes | Indoor Water Activities conditioning free densities category indicator. | Created at UM | YES |
| IWCFE | Num | 0 = No  1 = Yes | Indoor Water Activities conditioning fee densities category indicator. | Created at UM | YES |
| OC | Num | 0 = No  1 = Yes | Outdoor conditioning densities category indicator. | Created at UM | YES |
| OCFR | Num | 0 = No  1 = Yes | Outdoor conditioning free densities category indicator. | Created at UM | YES |
| OCFE | Num | 0 = No  1 = Yes | Outdoor conditioning fee densities category indicator. | Created at UM | YES |
| PA | Num | 0 = No  1 = Yes | Total Physical Activities densities category indicator. | Created at UM | YES |
| PAFR | Num | 0 = No  1 = Yes | Total Physical Activities free densities category indicator. | Created at UM | YES |
| PAFE | Num | 0 = No  1 = Yes | Total Physical Activities fee densities category indicator. | Created at UM | YES |
| OPA | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities densities category indicator. | Created at UM | YES |
| OPAFR | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities free densities category indicator. | Created at UM | YES |
| OPAFE | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities fee densities category indicator. | Created at UM | YES |
| IPA | Num | 0 = No  1 = Yes | Indoor Total Physical Activities densities category indicator. | Created at UM | YES |
| IPAFR | Num | 0 = No  1 = Yes | Indoor Total Physical Activities free densities category indicator. | Created at UM | YES |
| IPAFE | Num | 0 = No  1 = Yes | Indoor Total Physical Activities fee densities category indicator. | Created at UM | YES |
| NR | Num | 0 = No  1 = Yes | Total Physical Activities excluding Recreational densities category indicator. | Created at UM | YES |
| NRFR | Num | 0 = No  1 = Yes | Total Physical Activities excluding Recreational free densities category indicator. | Created at UM | YES |
| NRFE | Num | 0 = No  1 = Yes | Total Physical Activities excluding Recreational fee densities category indicator. | Created at UM | YES |
| ONR | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities excluding Recreational densities category indicator. | Created at UM | YES |
| ONRFR | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities excluding Recreational free densities category indicator. | Created at UM | YES |
| ONRFE | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities excluding Recreational fee densities category indicator. | Created at UM | YES |
| PW | Num | 0 = No  1 = Yes | Total Physical Activities plus Water Activities densities category indicator. | Created at UM | YES |
| PWFR | Num | 0 = No  1 = Yes | Total Physical Activities plus Water Activities free densities category indicator. | Created at UM | YES |
| PWFE | Num | 0 = No  1 = Yes | Total Physical Activities plus Water Activities fee densities category indicator. | Created at UM | YES |
| OPW | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities plus Water Activities densities category indicator. | Created at UM | YES |
| OPWFR | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities plus Water Activities free densities category indicator. | Created at UM | YES |
| OPWFE | Num | 0 = No  1 = Yes | Outdoor Total Physical Activities plus Water Activities fee densities category indicator. | Created at UM | YES |

## Table A.5: SAS files with final calculated parks measures – individual buffer level

| **Year** | **Folder** | **SAS files** |
| --- | --- | --- |
| 2001 and 2013 | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel | jhs\_parks.sas7bdat |

## Table A.6: Variables descriptions for datasets in Table A.5 (SAS files with final calculated parks measures – individual buffer level)

This is for the dataset: jhs\_parks.sas7bdat

| **Variable** | **Type** | **Coding** | **Description** | **Origin** |
| --- | --- | --- | --- | --- |
| fakeid | Num |  | Fake JHS address id |  |
| add\_number | Num |  | JHS address number |  |
| unique\_ID | Num |  | Fakeid and add\_number combined into 1 variable |  |
| PCTJACKSON14 | Num | Continuous (Range: 0-1) | Percent of ¼ mile buffer in parks study area (city of Jackson) | ArcGIS |
| PCTJACKSON0 | Num | Continuous (Range: 0-1) | Percent of 1/2 mile buffer in parks study area (city of Jackson) | ArcGIS |
| PCTJACKSON1 | Num | Continuous (Range: 0-1) | Percent of 1 mile buffer in parks study area (city of Jackson) | ArcGIS |
| PCTJACKSON3 | Num | Continuous (Range: 0-1) | Percent of 3 mile buffer in parks study area (city of Jackson) | ArcGIS |
| PCTJACKSON5 | Num | Continuous (Range: 0-1) | Percent of 5 mile buffer in parks study area (city of Jackson) | ArcGIS |
| PARKAREA14\_01 | Num | Continuous | Total area of parks within ¼ mile buffer in 2001 parks (meters square) | ArcGIS |
| PARKAREA0\_01 | Num | Continuous | Total area of parks within 1/2 mile buffer in 2001 parks (meters square) | ArcGIS |
| PARKAREA1\_01 | Num | Continuous | Total area of parks within 1 mile buffer in 2001 parks (meters square) | ArcGIS |
| PARKAREA3\_01 | Num | Continuous | Total area of parks within 3 mile buffer in 2001 parks (meters square) | ArcGIS |
| PARKAREA5\_01 | Num | Continuous | Total area of parks within 5 mile buffer in 2001 parks (meters square) | ArcGIS |
| PARKAREA14\_13 | Num | Continuous | Total area of parks within ¼ mile buffer in 2013 parks (meters square) | ArcGIS |
| PARKAREA0\_13 | Num | Continuous | Total area of parks within 1/2 mile buffer in 2013 parks (meters square) | ArcGIS |
| PARKAREA1\_13 | Num | Continuous | Total area of parks within 1 mile buffer in 2013 parks (meters square) | ArcGIS |
| PARKAREA3\_13 | Num | Continuous | Total area of parks within 3 mile buffer in 2013 parks (meters square) | ArcGIS |
| PARKAREA5\_13 | Num | Continuous | Total area of parks within 5 mile buffer in 2013 parks (meters square) | ArcGIS |
| PPARK14\_01 | Num | Continuous (Range: 0-1) | Percent of ¼ mile buffer that is parks in 2001 | PARKAREA14\_01/TOTAREA14 |
| PPARK0\_01 | Num | Continuous (Range: 0-1) | Percent of 1/2 mile buffer that is parks in 2001 | PARKAREA0\_01/TOTAREA0 |
| PPARK1\_01 | Num | Continuous (Range: 0-1) | Percent of 1 mile buffer that is parks in 2001 | PARKAREA1\_01/TOTAREA1 |
| PPARK3\_01 | Num | Continuous (Range: 0-1) | Percent of 3 mile buffer that is parks in 2001 | PARKAREA3\_01/TOTAREA3 |
| PPARK5\_01 | Num | Continuous (Range: 0-1) | Percent of 5 mile buffer that is parks in 2001 | PARKAREA5\_01/TOTAREA5 |
| PPARK14\_13 | Num | Continuous (Range: 0-1) | Percent of ¼ mile buffer that is parks in 2013 | PARKAREA14\_13/TOTAREA14 |
| PPARK0\_13 | Num | Continuous (Range: 0-1) | Percent of 1/2 mile buffer that is parks in 2013 | PARKAREA0\_13/TOTAREA0 |
| PPARK1\_13 | Num | Continuous (Range: 0-1) | Percent of 1 mile buffer that is parks in 2013 | PARKAREA1\_13/TOTAREA1 |
| PPARK3\_13 | Num | Continuous (Range: 0-1) | Percent of 3 mile buffer that is parks in 2013 | PARKAREA3\_13/TOTAREA3 |
| PPARK5\_13 | Num | Continuous (Range: 0-1) | Percent of 5 mile buffer that is parks in 2013 | PARKAREA5\_13/TOTAREA5 |
| NPARK14\_01 | Num | Continuous | Number of parks in ¼ mile buffer in 2001 | ArcGIS |
| NPARK0\_01 | Num | Continuous | Number of parks in 1/2 mile buffer in 2001 | ArcGIS |
| NPARK1\_01 | Num | Continuous | Number of parks in 1 mile buffer in 2001 | ArcGIS |
| NPARK3\_01 | Num | Continuous | Number of parks in 3 mile buffer in 2001 | ArcGIS |
| NPARK5\_01 | Num | Continuous | Number of parks in 5 mile buffer in 2001 | ArcGIS |
| NPARK14\_13 | Num | Continuous | Number of parks in ¼ mile buffer in 2013 | ArcGIS |
| NPARK0\_13 | Num | Continuous | Number of parks in 1/2 mile buffer in 2013 | ArcGIS |
| NPARK1\_13 | Num | Continuous | Number of parks in 1 mile buffer in 2013 | ArcGIS |
| NPARK3\_13 | Num | Continuous | Number of parks in 3 mile buffer in 2013 | ArcGIS |
| NPARK5\_13 | Num | Continuous | Number of parks in 5 mile buffer in 2013 | ArcGIS |
| SDPARK\_01 | Num | Continuous | Straight-line (Euclidean) distance to nearest park in 2001 data | ArcGIS |
| SDPARK\_13 | Num | Continuous | Straight-line (Euclidean) distance to nearest park in 2013 data | ArcGIS |
| UNIQFAC14\_01 | Num | Continuous (Range: 0-21) | Number of unique facility types within ¼ mile buffer in 2001 data | SAS |
| UNIQFAC0\_01 | Num | Continuous (Range: 0-21) | Number of unique facility types within 1/2 mile buffer in 2001 data | SAS |
| UNIQFAC1\_01 | Num | Continuous (Range: 0-21) | Number of unique facility types within 1 mile buffer in 2001 data | SAS |
| UNIQFAC3\_01 | Num | Continuous (Range: 0-21) | Number of unique facility types within 3 mile buffer in 2001 data | SAS |
| UNIQFAC5\_01 | Num | Continuous (Range: 0-21) | Number of unique facility types within 5 mile buffer in 2001 data | SAS |
| K14RE | Num | Continuous | ¼ mile buffer Kernel density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| K14REFR | Num | Continuous | ¼ mile buffer Kernel density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| K14REFE | Num | Continuous | ¼ mile buffer Kernel density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| K14TR | Num | Continuous | ¼ mile buffer Kernel density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| K14TRFR | Num | Continuous | ¼ mile buffer Kernel density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| K14TRFE | Num | Continuous | ¼ mile buffer Kernel density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| K14WA | Num | Continuous | ¼ mile buffer Kernel density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| K14WAFR | Num | Continuous | ¼ mile buffer Kernel density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| K14WAFE | Num | Continuous | ¼ mile buffer Kernel density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| K14WC | Num | Continuous | ¼ mile buffer Kernel density Water Activities conditioning. (2001 data only) | ArcGIS |
| K14WCFR | Num | Continuous | ¼ mile buffer Kernel density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K14WCFE | Num | Continuous | ¼ mile buffer Kernel density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K14OWC | Num | Continuous | ¼ mile buffer Kernel density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K14OWCFR | Num | Continuous | ¼ mile buffer Kernel density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K14OWCFE | Num | Continuous | ¼ mile buffer Kernel density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K14IWC | Num | Continuous | ¼ mile buffer Kernel density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K14IWCFR | Num | Continuous | ¼ mile buffer Kernel density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K14IWCFE | Num | Continuous | ¼ mile buffer Kernel density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K14OC | Num | Continuous | ¼ mile buffer Kernel density Outdoor conditioning. (2001 data only) | ArcGIS |
| K14OCFR | Num | Continuous | ¼ mile buffer Kernel density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| K14OCFE | Num | Continuous | ¼ mile buffer Kernel density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| K14PA | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities. (2001 data only) | ArcGIS |
| K14PAFR | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities - free. (2001 data only) | ArcGIS |
| K14PAFE | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K14OPA | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| K14OPAFR | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K14OPAFE | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K14IPA | Num | Continuous | ¼ mile buffer Kernel density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| K14IPAFR | Num | Continuous | ¼ mile buffer Kernel density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K14IPAFE | Num | Continuous | ¼ mile buffer Kernel density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K14NR | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K14NRFR | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K14NRFE | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K14ONR | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K14ONRFR | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K14ONRFE | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K14PW | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K14PWFR | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K14PWFE | Num | Continuous | ¼ mile buffer Kernel density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K14OPW | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K14OPWFR | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K14OPWFE | Num | Continuous | ¼ mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S14RE | Num | Continuous | ¼ mile buffer Simple density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| S14REFR | Num | Continuous | ¼ mile buffer Simple density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| S14REFE | Num | Continuous | ¼ mile buffer Simple density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| S14TR | Num | Continuous | ¼ mile buffer Simple density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| S14TRFR | Num | Continuous | ¼ mile buffer Simple density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| S14TRFE | Num | Continuous | ¼ mile buffer Simple density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| S14WA | Num | Continuous | ¼ mile buffer Simple density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| S14WAFR | Num | Continuous | ¼ mile buffer Simple density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| S14WAFE | Num | Continuous | ¼ mile buffer Simple density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| S14WC | Num | Continuous | ¼ mile buffer Simple density Water Activities conditioning. (2001 data only) | ArcGIS |
| S14WCFR | Num | Continuous | ¼ mile buffer Simple density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S14WCFE | Num | Continuous | ¼ mile buffer Simple density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S14OWC | Num | Continuous | ¼ mile buffer Simple density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S14OWCFR | Num | Continuous | ¼ mile buffer Simple density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S14OWCFE | Num | Continuous | ¼ mile buffer Simple density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S14IWC | Num | Continuous | ¼ mile buffer Simple density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S14IWCFR | Num | Continuous | ¼ mile buffer Simple density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S14IWCFE | Num | Continuous | ¼ mile buffer Simple density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S14OC | Num | Continuous | ¼ mile buffer Simple density Outdoor conditioning. (2001 data only) | ArcGIS |
| S14OCFR | Num | Continuous | ¼ mile buffer Simple density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| S14OCFE | Num | Continuous | ¼ mile buffer Simple density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| S14PA | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities. (2001 data only) | ArcGIS |
| S14PAFR | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities - free. (2001 data only) | ArcGIS |
| S14PAFE | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S14OPA | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| S14OPAFR | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S14OPAFE | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S14IPA | Num | Continuous | ¼ mile buffer Simple density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| S14IPAFR | Num | Continuous | ¼ mile buffer Simple density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S14IPAFE | Num | Continuous | ¼ mile buffer Simple density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S14NR | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S14NRFR | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S14NRFE | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S14ONR | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S14ONRFR | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S14ONRFE | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S14PW | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S14PWFR | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S14PWFE | Num | Continuous | ¼ mile buffer Simple density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S14OPW | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S14OPWFR | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S14OPWFE | Num | Continuous | ¼ mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K0RE | Num | Continuous | 1/2 mile buffer Kernel density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| K0REFR | Num | Continuous | 1/2 mile buffer Kernel density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| K0REFE | Num | Continuous | 1/2 mile buffer Kernel density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| K0TR | Num | Continuous | 1/2 mile buffer Kernel density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| K0TRFR | Num | Continuous | 1/2 mile buffer Kernel density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| K0TRFE | Num | Continuous | 1/2 mile buffer Kernel density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| K0WA | Num | Continuous | 1/2 mile buffer Kernel density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| K0WAFR | Num | Continuous | 1/2 mile buffer Kernel density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| K0WAFE | Num | Continuous | 1/2 mile buffer Kernel density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| K0WC | Num | Continuous | 1/2 mile buffer Kernel density Water Activities conditioning. (2001 data only) | ArcGIS |
| K0WCFR | Num | Continuous | 1/2 mile buffer Kernel density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K0WCFE | Num | Continuous | 1/2 mile buffer Kernel density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K0OWC | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K0OWCFR | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K0OWCFE | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K0IWC | Num | Continuous | 1/2 mile buffer Kernel density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K0IWCFR | Num | Continuous | 1/2 mile buffer Kernel density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K0IWCFE | Num | Continuous | 1/2 mile buffer Kernel density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K0OC | Num | Continuous | 1/2 mile buffer Kernel density Outdoor conditioning. (2001 data only) | ArcGIS |
| K0OCFR | Num | Continuous | 1/2 mile buffer Kernel density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| K0OCFE | Num | Continuous | 1/2 mile buffer Kernel density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| K0PA | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities. (2001 data only) | ArcGIS |
| K0PAFR | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities - free. (2001 data only) | ArcGIS |
| K0PAFE | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K0OPA | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| K0OPAFR | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K0OPAFE | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K0IPA | Num | Continuous | 1/2 mile buffer Kernel density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| K0IPAFR | Num | Continuous | 1/2 mile buffer Kernel density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K0IPAFE | Num | Continuous | 1/2 mile buffer Kernel density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K0NR | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K0NRFR | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K0NRFE | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K0ONR | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K0ONRFR | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K0ONRFE | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K0PW | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K0PWFR | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K0PWFE | Num | Continuous | 1/2 mile buffer Kernel density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K0OPW | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K0OPWFR | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K0OPWFE | Num | Continuous | 1/2 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S0RE | Num | Continuous | 1/2 mile buffer Simple density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| S0REFR | Num | Continuous | 1/2 mile buffer Simple density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| S0REFE | Num | Continuous | 1/2 mile buffer Simple density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| S0TR | Num | Continuous | 1/2 mile buffer Simple density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| S0TRFR | Num | Continuous | 1/2 mile buffer Simple density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| S0TRFE | Num | Continuous | 1/2 mile buffer Simple density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| S0WA | Num | Continuous | 1/2 mile buffer Simple density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| S0WAFR | Num | Continuous | 1/2 mile buffer Simple density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| S0WAFE | Num | Continuous | 1/2 mile buffer Simple density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| S0WC | Num | Continuous | 1/2 mile buffer Simple density Water Activities conditioning. (2001 data only) | ArcGIS |
| S0WCFR | Num | Continuous | 1/2 mile buffer Simple density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S0WCFE | Num | Continuous | 1/2 mile buffer Simple density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S0OWC | Num | Continuous | 1/2 mile buffer Simple density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S0OWCFR | Num | Continuous | 1/2 mile buffer Simple density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S0OWCFE | Num | Continuous | 1/2 mile buffer Simple density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S0IWC | Num | Continuous | 1/2 mile buffer Simple density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S0IWCFR | Num | Continuous | 1/2 mile buffer Simple density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S0IWCFE | Num | Continuous | 1/2 mile buffer Simple density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S0OC | Num | Continuous | 1/2 mile buffer Simple density Outdoor conditioning. (2001 data only) | ArcGIS |
| S0OCFR | Num | Continuous | 1/2 mile buffer Simple density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| S0OCFE | Num | Continuous | 1/2 mile buffer Simple density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| S0PA | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities. (2001 data only) | ArcGIS |
| S0PAFR | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities - free. (2001 data only) | ArcGIS |
| S0PAFE | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S0OPA | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| S0OPAFR | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S0OPAFE | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S0IPA | Num | Continuous | 1/2 mile buffer Simple density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| S0IPAFR | Num | Continuous | 1/2 mile buffer Simple density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S0IPAFE | Num | Continuous | 1/2 mile buffer Simple density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S0NR | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S0NRFR | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S0NRFE | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S0ONR | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S0ONRFR | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S0ONRFE | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S0PW | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S0PWFR | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S0PWFE | Num | Continuous | 1/2 mile buffer Simple density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S0OPW | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S0OPWFR | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S0OPWFE | Num | Continuous | 1/2 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K1RE | Num | Continuous | 1 mile buffer Kernel density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| K1REFR | Num | Continuous | 1 mile buffer Kernel density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| K1REFE | Num | Continuous | 1 mile buffer Kernel density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| K1TR | Num | Continuous | 1 mile buffer Kernel density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| K1TRFR | Num | Continuous | 1 mile buffer Kernel density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| K1TRFE | Num | Continuous | 1 mile buffer Kernel density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| K1WA | Num | Continuous | 1 mile buffer Kernel density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| K1WAFR | Num | Continuous | 1 mile buffer Kernel density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| K1WAFE | Num | Continuous | 1 mile buffer Kernel density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| K1WC | Num | Continuous | 1 mile buffer Kernel density Water Activities conditioning. (2001 data only) | ArcGIS |
| K1WCFR | Num | Continuous | 1 mile buffer Kernel density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K1WCFE | Num | Continuous | 1 mile buffer Kernel density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K1OWC | Num | Continuous | 1 mile buffer Kernel density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K1OWCFR | Num | Continuous | 1 mile buffer Kernel density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K1OWCFE | Num | Continuous | 1 mile buffer Kernel density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K1IWC | Num | Continuous | 1 mile buffer Kernel density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K1IWCFR | Num | Continuous | 1 mile buffer Kernel density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K1IWCFE | Num | Continuous | 1 mile buffer Kernel density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K1OC | Num | Continuous | 1 mile buffer Kernel density Outdoor conditioning. (2001 data only) | ArcGIS |
| K1OCFR | Num | Continuous | 1 mile buffer Kernel density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| K1OCFE | Num | Continuous | 1 mile buffer Kernel density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| K1PA | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities. (2001 data only) | ArcGIS |
| K1PAFR | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities - free. (2001 data only) | ArcGIS |
| K1PAFE | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K1OPA | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| K1OPAFR | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K1OPAFE | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K1IPA | Num | Continuous | 1 mile buffer Kernel density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| K1IPAFR | Num | Continuous | 1 mile buffer Kernel density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K1IPAFE | Num | Continuous | 1 mile buffer Kernel density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K1NR | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K1NRFR | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K1NRFE | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K1ONR | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K1ONRFR | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K1ONRFE | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K1PW | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K1PWFR | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K1PWFE | Num | Continuous | 1 mile buffer Kernel density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K1OPW | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K1OPWFR | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K1OPWFE | Num | Continuous | 1 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S1RE | Num | Continuous | 1 mile buffer Simple density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| S1REFR | Num | Continuous | 1 mile buffer Simple density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| S1REFE | Num | Continuous | 1 mile buffer Simple density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| S1TR | Num | Continuous | 1 mile buffer Simple density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| S1TRFR | Num | Continuous | 1 mile buffer Simple density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| S1TRFE | Num | Continuous | 1 mile buffer Simple density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| S1WA | Num | Continuous | 1 mile buffer Simple density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| S1WAFR | Num | Continuous | 1 mile buffer Simple density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| S1WAFE | Num | Continuous | 1 mile buffer Simple density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| S1WC | Num | Continuous | 1 mile buffer Simple density Water Activities conditioning. (2001 data only) | ArcGIS |
| S1WCFR | Num | Continuous | 1 mile buffer Simple density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S1WCFE | Num | Continuous | 1 mile buffer Simple density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S1OWC | Num | Continuous | 1 mile buffer Simple density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S1OWCFR | Num | Continuous | 1 mile buffer Simple density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S1OWCFE | Num | Continuous | 1 mile buffer Simple density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S1IWC | Num | Continuous | 1 mile buffer Simple density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S1IWCFR | Num | Continuous | 1 mile buffer Simple density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S1IWCFE | Num | Continuous | 1 mile buffer Simple density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S1OC | Num | Continuous | 1 mile buffer Simple density Outdoor conditioning. (2001 data only) | ArcGIS |
| S1OCFR | Num | Continuous | 1 mile buffer Simple density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| S1OCFE | Num | Continuous | 1 mile buffer Simple density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| S1PA | Num | Continuous | 1 mile buffer Simple density Total Physical Activities. (2001 data only) | ArcGIS |
| S1PAFR | Num | Continuous | 1 mile buffer Simple density Total Physical Activities - free. (2001 data only) | ArcGIS |
| S1PAFE | Num | Continuous | 1 mile buffer Simple density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S1OPA | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| S1OPAFR | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S1OPAFE | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S1IPA | Num | Continuous | 1 mile buffer Simple density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| S1IPAFR | Num | Continuous | 1 mile buffer Simple density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S1IPAFE | Num | Continuous | 1 mile buffer Simple density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S1NR | Num | Continuous | 1 mile buffer Simple density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S1NRFR | Num | Continuous | 1 mile buffer Simple density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S1NRFE | Num | Continuous | 1 mile buffer Simple density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S1ONR | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S1ONRFR | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S1ONRFE | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S1PW | Num | Continuous | 1 mile buffer Simple density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S1PWFR | Num | Continuous | 1 mile buffer Simple density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S1PWFE | Num | Continuous | 1 mile buffer Simple density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S1OPW | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S1OPWFR | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S1OPWFE | Num | Continuous | 1 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K3RE | Num | Continuous | 3 mile buffer Kernel density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| K3REFR | Num | Continuous | 3 mile buffer Kernel density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| K3REFE | Num | Continuous | 3 mile buffer Kernel density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| K3TR | Num | Continuous | 3 mile buffer Kernel density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| K3TRFR | Num | Continuous | 3 mile buffer Kernel density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| K3TRFE | Num | Continuous | 3 mile buffer Kernel density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| K3WA | Num | Continuous | 3 mile buffer Kernel density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| K3WAFR | Num | Continuous | 3 mile buffer Kernel density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| K3WAFE | Num | Continuous | 3 mile buffer Kernel density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| K3WC | Num | Continuous | 3 mile buffer Kernel density Water Activities conditioning. (2001 data only) | ArcGIS |
| K3WCFR | Num | Continuous | 3 mile buffer Kernel density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K3WCFE | Num | Continuous | 3 mile buffer Kernel density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K3OWC | Num | Continuous | 3 mile buffer Kernel density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K3OWCFR | Num | Continuous | 3 mile buffer Kernel density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K3OWCFE | Num | Continuous | 3 mile buffer Kernel density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K3IWC | Num | Continuous | 3 mile buffer Kernel density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K3IWCFR | Num | Continuous | 3 mile buffer Kernel density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K3IWCFE | Num | Continuous | 3 mile buffer Kernel density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K3OC | Num | Continuous | 3 mile buffer Kernel density Outdoor conditioning. (2001 data only) | ArcGIS |
| K3OCFR | Num | Continuous | 3 mile buffer Kernel density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| K3OCFE | Num | Continuous | 3 mile buffer Kernel density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| K3PA | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities. (2001 data only) | ArcGIS |
| K3PAFR | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities - free. (2001 data only) | ArcGIS |
| K3PAFE | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K3OPA | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| K3OPAFR | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K3OPAFE | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K3IPA | Num | Continuous | 3 mile buffer Kernel density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| K3IPAFR | Num | Continuous | 3 mile buffer Kernel density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K3IPAFE | Num | Continuous | 3 mile buffer Kernel density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K3NR | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K3NRFR | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K3NRFE | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K3ONR | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K3ONRFR | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K3ONRFE | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K3PW | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K3PWFR | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K3PWFE | Num | Continuous | 3 mile buffer Kernel density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K3OPW | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K3OPWFR | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K3OPWFE | Num | Continuous | 3 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S3RE | Num | Continuous | 3 mile buffer Simple density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| S3REFR | Num | Continuous | 3 mile buffer Simple density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| S3REFE | Num | Continuous | 3 mile buffer Simple density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| S3TR | Num | Continuous | 3 mile buffer Simple density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| S3TRFR | Num | Continuous | 3 mile buffer Simple density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| S3TRFE | Num | Continuous | 3 mile buffer Simple density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| S3WA | Num | Continuous | 3 mile buffer Simple density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| S3WAFR | Num | Continuous | 3 mile buffer Simple density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| S3WAFE | Num | Continuous | 3 mile buffer Simple density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| S3WC | Num | Continuous | 3 mile buffer Simple density Water Activities conditioning. (2001 data only) | ArcGIS |
| S3WCFR | Num | Continuous | 3 mile buffer Simple density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S3WCFE | Num | Continuous | 3 mile buffer Simple density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S3OWC | Num | Continuous | 3 mile buffer Simple density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S3OWCFR | Num | Continuous | 3 mile buffer Simple density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S3OWCFE | Num | Continuous | 3 mile buffer Simple density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S3IWC | Num | Continuous | 3 mile buffer Simple density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S3IWCFR | Num | Continuous | 3 mile buffer Simple density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S3IWCFE | Num | Continuous | 3 mile buffer Simple density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S3OC | Num | Continuous | 3 mile buffer Simple density Outdoor conditioning. (2001 data only) | ArcGIS |
| S3OCFR | Num | Continuous | 3 mile buffer Simple density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| S3OCFE | Num | Continuous | 3 mile buffer Simple density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| S3PA | Num | Continuous | 3 mile buffer Simple density Total Physical Activities. (2001 data only) | ArcGIS |
| S3PAFR | Num | Continuous | 3 mile buffer Simple density Total Physical Activities - free. (2001 data only) | ArcGIS |
| S3PAFE | Num | Continuous | 3 mile buffer Simple density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S3OPA | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| S3OPAFR | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S3OPAFE | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S3IPA | Num | Continuous | 3 mile buffer Simple density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| S3IPAFR | Num | Continuous | 3 mile buffer Simple density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S3IPAFE | Num | Continuous | 3 mile buffer Simple density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S3NR | Num | Continuous | 3 mile buffer Simple density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S3NRFR | Num | Continuous | 3 mile buffer Simple density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S3NRFE | Num | Continuous | 3 mile buffer Simple density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S3ONR | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S3ONRFR | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S3ONRFE | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S3PW | Num | Continuous | 3 mile buffer Simple density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S3PWFR | Num | Continuous | 3 mile buffer Simple density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S3PWFE | Num | Continuous | 3 mile buffer Simple density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S3OPW | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S3OPWFR | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S3OPWFE | Num | Continuous | 3 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K5RE | Num | Continuous | 5 mile buffer Kernel density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| K5REFR | Num | Continuous | 5 mile buffer Kernel density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| K5REFE | Num | Continuous | 5 mile buffer Kernel density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| K5TR | Num | Continuous | 5 mile buffer Kernel density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| K5TRFR | Num | Continuous | 5 mile buffer Kernel density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| K5TRFE | Num | Continuous | 5 mile buffer Kernel density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| K5WA | Num | Continuous | 5 mile buffer Kernel density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| K5WAFR | Num | Continuous | 5 mile buffer Kernel density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| K5WAFE | Num | Continuous | 5 mile buffer Kernel density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| K5WC | Num | Continuous | 5 mile buffer Kernel density Water Activities conditioning. (2001 data only) | ArcGIS |
| K5WCFR | Num | Continuous | 5 mile buffer Kernel density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K5WCFE | Num | Continuous | 5 mile buffer Kernel density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K5OWC | Num | Continuous | 5 mile buffer Kernel density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K5OWCFR | Num | Continuous | 5 mile buffer Kernel density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K5OWCFE | Num | Continuous | 5 mile buffer Kernel density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K5IWC | Num | Continuous | 5 mile buffer Kernel density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| K5IWCFR | Num | Continuous | 5 mile buffer Kernel density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| K5IWCFE | Num | Continuous | 5 mile buffer Kernel density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| K5OC | Num | Continuous | 5 mile buffer Kernel density Outdoor conditioning. (2001 data only) | ArcGIS |
| K5OCFR | Num | Continuous | 5 mile buffer Kernel density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| K5OCFE | Num | Continuous | 5 mile buffer Kernel density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| K5PA | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities. (2001 data only) | ArcGIS |
| K5PAFR | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities - free. (2001 data only) | ArcGIS |
| K5PAFE | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K5OPA | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| K5OPAFR | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K5OPAFE | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K5IPA | Num | Continuous | 5 mile buffer Kernel density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| K5IPAFR | Num | Continuous | 5 mile buffer Kernel density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| K5IPAFE | Num | Continuous | 5 mile buffer Kernel density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| K5NR | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K5NRFR | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K5NRFE | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K5ONR | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| K5ONRFR | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| K5ONRFE | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| K5PW | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K5PWFR | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K5PWFE | Num | Continuous | 5 mile buffer Kernel density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| K5OPW | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| K5OPWFR | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| K5OPWFE | Num | Continuous | 5 mile buffer Kernel density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S5RE | Num | Continuous | 5 mile buffer Simple density of Recreational. All are outdoor. (2001 data only) | ArcGIS |
| S5REFR | Num | Continuous | 5 mile buffer Simple density of Recreational - free. All are outdoor. (2001 data only) | ArcGIS |
| S5REFE | Num | Continuous | 5 mile buffer Simple density Recreational - fee. All are outdoor. (2001 data only) | ArcGIS |
| S5TR | Num | Continuous | 5 mile buffer Simple density Team/Racquet Sports. All are outdoor. (2001 data only) | ArcGIS |
| S5TRFR | Num | Continuous | 5 mile buffer Simple density Team/Racquet Sports - free. All are outdoor. (2001 data only) | ArcGIS |
| S5TRFE | Num | Continuous | 5 mile buffer Simple density Team/Racquet Sports - fee. All are outdoor. (2001 data only) | ArcGIS |
| S5WA | Num | Continuous | 5 mile buffer Simple density Water Activities. All are outdoor. (2001 data only) | ArcGIS |
| S5WAFR | Num | Continuous | 5 mile buffer Simple density Water Activities - free. All are outdoor. (2001 data only) | ArcGIS |
| S5WAFE | Num | Continuous | 5 mile buffer Simple density Water Activities - fee. All are outdoor. (2001 data only) | ArcGIS |
| S5WC | Num | Continuous | 5 mile buffer Simple density Water Activities conditioning. (2001 data only) | ArcGIS |
| S5WCFR | Num | Continuous | 5 mile buffer Simple density Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S5WCFE | Num | Continuous | 5 mile buffer Simple density Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S5OWC | Num | Continuous | 5 mile buffer Simple density Outdoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S5OWCFR | Num | Continuous | 5 mile buffer Simple density Outdoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S5OWCFE | Num | Continuous | 5 mile buffer Simple density Outdoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S5IWC | Num | Continuous | 5 mile buffer Simple density Indoor Water Activities conditioning. (2001 data only) | ArcGIS |
| S5IWCFR | Num | Continuous | 5 mile buffer Simple density Indoor Water Activities conditioning - free. (2001 data only) | ArcGIS |
| S5IWCFE | Num | Continuous | 5 mile buffer Simple density Indoor Water Activities conditioning - fee. (2001 data only) | ArcGIS |
| S5OC | Num | Continuous | 5 mile buffer Simple density Outdoor conditioning. (2001 data only) | ArcGIS |
| S5OCFR | Num | Continuous | 5 mile buffer Simple density Outdoor conditioning - free. (2001 data only) | ArcGIS |
| S5OCFE | Num | Continuous | 5 mile buffer Simple density Outdoor conditioning - fee. (2001 data only) | ArcGIS |
| S5PA | Num | Continuous | 5 mile buffer Simple density Total Physical Activities. (2001 data only) | ArcGIS |
| S5PAFR | Num | Continuous | 5 mile buffer Simple density Total Physical Activities - free. (2001 data only) | ArcGIS |
| S5PAFE | Num | Continuous | 5 mile buffer Simple density Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S5OPA | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities. (2001 data only) | ArcGIS |
| S5OPAFR | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S5OPAFE | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S5IPA | Num | Continuous | 5 mile buffer Simple density Indoor Total Physical Activities. (2001 data only) | ArcGIS |
| S5IPAFR | Num | Continuous | 5 mile buffer Simple density Indoor Total Physical Activities - free. (2001 data only) | ArcGIS |
| S5IPAFE | Num | Continuous | 5 mile buffer Simple density Indoor Total Physical Activities - fee. (2001 data only) | ArcGIS |
| S5NR | Num | Continuous | 5 mile buffer Simple density Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S5NRFR | Num | Continuous | 5 mile buffer Simple density Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S5NRFE | Num | Continuous | 5 mile buffer Simple density Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S5ONR | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational. (2001 data only) | ArcGIS |
| S5ONRFR | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - free. (2001 data only) | ArcGIS |
| S5ONRFE | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities excluding Recreational - fee. (2001 data only) | ArcGIS |
| S5PW | Num | Continuous | 5 mile buffer Simple density Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S5PWFR | Num | Continuous | 5 mile buffer Simple density Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S5PWFE | Num | Continuous | 5 mile buffer Simple density Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |
| S5OPW | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities. (2001 data only) | ArcGIS |
| S5OPWFR | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - free. (2001 data only) | ArcGIS |
| S5OPWFE | Num | Continuous | 5 mile buffer Simple density Outdoor Total Physical Activities plus Water Activities - fee. (2001 data only) | ArcGIS |

## Table A.7: SAS files with final calculated parks measures – census tract/block group level

| **Boundary Definition** | **Folder** | **SAS files** |
| --- | --- | --- |
| Census Tract 2000 | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\AreaLevel | jhs\_parks\_ct00.sas7bdat |
| Block groups 2000 | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\AreaLevel | jhs\_parks\_bg00.sas7bdat |

## Table A.8: Variables descriptions for datasets in Table A.7 (SAS files with final calculated parks measures – census tract/block group level)

Replace ‘xxxx’ on the end of the variable name with CT00 for census tract and BG00 for block group.

| **Variable** | **Type** | **Coding** | **Description** | **Origin/Formula** | **Datasets** |
| --- | --- | --- | --- | --- | --- |
| stcotrk | Char | ssccctttttt | Census 2000 tract ID |  | CT2000 |
| stcotrkbg | Char | sscccttttttb | Census 2000 block group ID |  | BG2000 |
| PCTJACKSON\_xxxx | Num | Continuous (Range: 0-1) | Percent of CT/BG that falls within parks study area (city of Jackson) | ArcGIS | CT2000/BG2000 |
| PARKAREA01\_xxxx | Num | Continuous | Area of CT/BG that is parks in 2001 in meters square | ArcGIS | CT2000/BG2000 |
| PARKAREA13\_xxxx | Num | Continuous | Area of CT/BG that is parks in 2013 in meters square | ArcGIS | CT2000/BG2000 |
| PPARK01\_xxxx | Num | Continuous (Range: 0-1) | Percent of CT/BG that is parks in 2001 | PARKAREA01\_xxxx/TOTAREA | CT2000/BG2000 |
| PPARK13\_xxxx | Num | Continuous (Range: 0-1) | Percent of CT/BG that is parks in 2013 | PARKAREA13\_xxxx/TOTAREA | CT2000/BG2000 |
| NPARK01\_xxxx | Num | Continuous | Number of parks in CT/BG in 2001 | ArcGIS | CT2000/BG2000 |
| NPARK13\_xxxx | Num | Continuous | Number of parks in CT/BG in 2013 | ArcGIS | CT2000/BG2000 |
| UNIQFAC01\_xxxx | Num | Continuous (Range: 0-21) | Number of unique facility types within CT/BG in 2001 data | SAS | CT2000/BG2000 |

## Table A.9: SAS files with park ID within buffers/Areas (year 2001 data)

| **Type** | **Folder** | **SAS files** |
| --- | --- | --- |
| Census Tract 2000 | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\AreaLevel | parkidct.sas7bdat |
| Block Group 2000 | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\AreaLevel | parkidbg.sas7bdat |
| ¼ mile buffers | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel | parkid14.sas7bdat |
| 1/2 mile buffers | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel | parkid0.sas7bdat |
| 1 mile buffers | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel | parkid1.sas7bdat |
| 3 mile buffers | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel | parkid3.sas7bdat |
| 5 mile buffers | U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel | parkid5.sas7bdat |

## Table A.10: Variables descriptions for datasets in Table A.9 (SAS files with park ID within buffers)

| **Variable** | **Type** | **Coding** | **Description** | **Origin** | **Datasets** |
| --- | --- | --- | --- | --- | --- |
| fakeid | Num |  | Fake JHS address id |  | Participant level |
| add\_number | Num |  | JHS address number |  | Participant level |
| unique\_ID | Num |  | Fakeid and add\_number combined into 1 variable |  | Participant level |
| stcotrk | Char | ssccctttttt | Census 2000 tract ID |  | CT2000 |
| stcotrkbg | Char | sscccttttttb | Census 2000 block group ID |  | BG2000 |
| ID | Num |  | ID of park from 2001 data | ArcGIS | All |

# APPENDIX B: METHODS FOR CREATING PERCENT BUFFER, CENSUS TRACT, BLOCK GROUP IN PARKS STUDY AREA

Created by Melissa Zagorski in Dec 2013

**Measure:** Percent study area of participant buffers (¼, ½, 1, 3, 5 miles), Block Group 2000, and Census Tract 2000 within the City of Jackson, MS.

**Input data:**

1. City of Jackson, MS boundary: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Base\_Data\Administrative\_Boundaries.gdb\MS\_Jackson\_city\_Boundary\_UTMz15N
2. Participant buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Participants\address\_buffers.gdb
3. Block Groups and Census Tracts from the year 2000: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Census

**Files in deliverables folders:**

1. Participant Buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Buffer\_Study\_Area
   1. Jackson\_MS\_Buffers\_14\_StudyArea\_2001\_2013.dbf (1/4 mile)
   2. Jackson\_MS\_Buffers\_0\_StudyArea\_2001\_2013.dbf (1/2 mile)
   3. Jackson\_MS\_Buffers\_1\_StudyArea\_2001\_2013.dbf (1 mile)
   4. Jackson\_MS\_Buffers\_3\_StudyArea\_2001\_2013.dbf (3 mile)
   5. Jackson\_MS\_Buffers\_5\_StudyArea\_2001\_2013.dbf (5 mile)
2. Census Tract: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_Study\_Area
   1. Jackson\_MS\_CT00\_CityArea\_2013.dbf
3. Block Group: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_Study\_Area
   1. Jackson\_MS\_BG00\_CityArea\_2013.dbf

**Methods:**

1. Projection used: UTM Zone 15 North.
2. Clip the participant buffers (input 2), Block Groups or Census Tracts (input 3) to the City of Jackson, MS boundary (input 1).
3. Calculate the new area of the clipped layers from step 2.
4. Divide the new area from step 3 by the original area of the participant buffers, Block Groups or Census Tracts and multiply by 100 to obtain the percent area of participant buffer, Block Group or Census Tract within the City of Jackson, MS. For the buffers, make sure that buffers completely within the city boundary are considered 100%.
5. Exported the results to .dbf table format in the deliverables folder.

# APPENDIX C: METHODS FOR CREATING RECREATIONAL DENSITIES MEASURES (SIMPLE AND KERNEL DENSITIES)

Created by Melissa Zagorski in Dec 2013

**Measure:** Simple and kernel densities of parks (2001) per participant buffer (¼, ½, 1, 3 and 5 miles).

**Input data:**

1. Coded parks feature class for City of Jackson, MS: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS\_coded.gdb\CityOfJackson\_parks\_2001\_UTMz15N\_clip
2. Participant address buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Participants\address\_buffers.gdb

**Files in deliverables folders:**

1. Kernel densities: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Densities\Kernel
   1. Jackson\_2001\_kd\_14\_allvar.dbf (1/4 mile)
   2. Jackson\_2001\_kd\_0\_allvar.dbf (1/2 mile)
   3. Jackson\_2001\_kd\_1\_allvar.dbf (1 mile)
   4. Jackson\_2001\_kd\_3\_allvar.dbf (3 mile)
   5. Jackson\_2001\_kd\_5\_allvar.dbf (5 mile)
2. Simple densities: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Densities\Simple
   1. Jackson\_2001\_kd\_14\_allvar.dbf (1/4 mile)
   2. Jackson\_2001\_kd\_0\_allvar.dbf (1/2 mile)
   3. Jackson\_2001\_kd\_1\_allvar.dbf (1 mile)
   4. Jackson\_2001\_kd\_3\_allvar.dbf (3 mile)
   5. Jackson\_2001\_kd\_5\_allvar.dbf (5 mile)

**Methods:**

1. Used the Multipart To Single Part tool to ensure that parks data (input 1) is single part polygons
2. Added a new field to parks data (input 1) and created a unique ID for each park polygon
3. Converted parks data (input 1) from polygon to raster
4. Converted the raster from step 3 to points
5. Joined the raster layer from step 3 to the point layer from step 4 based on the unique ID from step 2 to get a count of points per park polygon
6. Joined the single part layer from step 1 to the point layer to add in the variable fields that contain the Boolean coding (0 or 1) for each park type.
7. Added new fields for each variable and calculated the weight based on this formula: variable/count (i.e. [0 or 1]/number of points per park polygon).
8. Calculated the simple density for each weighted variable field using the Point Density tool [100 meter cell size, search radius for each buffer size (1/4 mile = 402.335 meters, ½ mile = 804.67 meters, 1 mile = 1609.34 meters, 3 miles = 4828.02 meters, 5 miles = 8046.7 meters), “MAP”, and square miles].
9. Calculated the kernel density for each weighted variable field using the Kernel Density tool [100 meter cell size, search radius for each buffer size (402.335, 804.67, 1609.34, 4828.02, 8046.7), and square miles].
10. Used the Sample tool to extract the density (simple or kernel) values from the raster output files from step 9 using participant buffers (input 2) for UTM Zone 15 North.
11. Linked the sample output files from step 10 to the participant buffer ID and exported final table to .dbf table format to the deliverables folder.

# APPENDIX D: METHODS FOR CREATING PARK IDS WITHIN BUFFERS, CENSUS TRACT, AND BLOCK GROUP

Created by Melissa Zagorski in Dec 2013

**Measure:** Park ID within Buffer (¼, ½, 1, 3 and 5 miles), Census tract, and Block group.

**Input data:**

1. Parks feature classes for city of Jackson, MS: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2001\_UTMz15N
2. Participant address buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Participants\address\_buffers.gdb
3. Block Groups and Census Tracts from the year 2000: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Census

**Files in deliverables folders:**

1. Participant Buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Buffer\_ParkIDs
   1. Jackson\_MS\_Buffers\_14\_ParkIDs\_2001.dbf (1/4 mile)
   2. Jackson\_MS\_Buffers\_0\_ParkIDs\_2001.dbf (1/2 mile)
   3. Jackson\_MS\_Buffers\_1\_ParkIDs\_2001.dbf (1 mile)
   4. Jackson\_MS\_Buffers\_3\_ParkIDs\_2001.dbf (3 mile)
   5. Jackson\_MS\_Buffers\_5\_ParkIDs\_2001.dbf (5 mile)
2. CT2000 Level U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_ParkIDs
   1. Jackson\_MS\_CT00\_parkIDs\_2001.dbf
3. BG2000 Level: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_ParkIDs
   1. Jackson\_MS\_BG00\_parkIDs\_2001.dbf

**Methods:**

1. Use the Spatial Join tool [Join feature: park layer (input data 1); Target feature: buffers, Census tracts, or block groups; join: one-to-many; intersect]
2. Export output feature class table to .dbf format to deliverables folder.

# APPENDIX E: METHODS FOR NUMBER OF PARKS PER BUFFER, CENSUS TRACT, AND BLOCK GROUP

Created by Melissa Zagorski in Dec 2013

**Measure:** The number of parks (2001 and 2013) per participant buffer (¼, ½, 1, 3 and 5 miles), Block Groups 2000, and Census Tracts 2000.

**Input data:**

1. Parks feature classes for city of Jackson, MS: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2013\_UTMz15N and U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2001\_UTMz15N
2. City of Jackson, MS boundary: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Base\_Data\Administrative\_Boundaries.gdb\MS\_Jackson\_city\_Boundary\_UTMz15N
3. Participant buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Participants\address\_buffers.gdb
4. Block Groups and Census Tracts from the year 2000: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Census

**Files in deliverables folders:**

1. Participant Buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Park\_Counts
   1. 2001 Parks
      1. Jackson\_MS\_2001\_Buffers\_14\_park\_count.dbf (1/4 mile)
      2. Jackson\_MS\_2001\_Buffers\_0\_park\_count.dbf (1/2 mile)
      3. Jackson\_MS\_2001\_Buffers\_1\_park\_count.dbf (1 mile)
      4. Jackson\_MS\_2001\_Buffers\_3\_park\_count.dbf (3 mile)
      5. Jackson\_MS\_2001\_Buffers\_5\_park\_count.dbf (5 mile)
   2. 2013 Parks
      1. Jackson\_MS\_2013\_Buffers\_14\_park\_count.dbf (1/4 mile)
      2. Jackson\_MS\_2013\_Buffers\_0\_park\_count.dbf (1/2 mile)
      3. Jackson\_MS\_2013\_Buffers\_1\_park\_count.dbf (1 mile)
      4. Jackson\_MS\_2013\_Buffers\_3\_park\_count.dbf (3 mile)
      5. Jackson\_MS\_2013\_Buffers\_5\_park\_count.dbf (5 mile)
2. Census Tract: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_Park\_Counts
   1. 2001 Parks
      1. Jackson\_MS\_2001\_CT00\_park\_count.dbf
   2. 2013 Parks
      1. Jackson\_MS\_2013\_CT00\_park\_count.dbf
3. Block Group: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_Park\_Counts
   1. 2001 Parks
      1. Jackson\_MS\_2001\_BG00\_park\_count.dbf
   2. 2013 Parks
      1. Jackson\_MS\_2013\_BG00\_park\_count.dbf

**Methods:**

1. Projection used: UTM Zone 15 North.
2. Do a spatial join (intersection) between the clipped parks layer (input 1) and the participant buffers (input 3), Block Groups 2000, or Census Tracts 2000 (input 4) to count the parks within each buffer size and Census type.
3. Exported the results to .dbf table format to deliverables folder.

# APPENDIX F: METHODS FOR CREATING PERCENT BUFFER DEVOTED TO PARKS

Created by Melissa Zagorski in Dec 2013

**Measure:** Percent of participant buffer (¼, ½, 1, 3 and 5 miles) devoted to parks (2001 and 2013 data).

**Input data:**

1. Parks feature classes for city of Jackson, MS: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2013\_UTMz15N and U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2001\_UTMz15N
2. City of Jackson, MS boundary: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Base\_Data\Administrative\_Boundaries.gdb\MS\_Jackson\_city\_Boundary\_UTMz15N
3. Participant buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Participants\address\_buffers.gdb

**Files in deliverables folders:**

1. Participant Buffers: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Buffer\_Park\_Area
   1. 2001 Parks
      1. Jackson\_MS\_Buffers\_14\_ParkArea\_2001.dbf (1/4 mile)
      2. Jackson\_MS\_Buffers\_0\_ParkArea\_2001.dbf (1/2 mile)
      3. Jackson\_MS\_Buffers\_1\_ParkArea\_2001.dbf (1 mile)
      4. Jackson\_MS\_Buffers\_3\_ParkArea\_2001.dbf (3 mile)
      5. Jackson\_MS\_Buffers\_5\_ParkArea\_2001.dbf (5 mile)
   2. 2013 Parks
      1. Jackson\_MS\_Buffers\_14\_ParkArea\_2013.dbf (1/4 mile)
      2. Jackson\_MS\_Buffers\_0\_ParkArea\_2013.dbf (1/2 mile)
      3. Jackson\_MS\_Buffers\_1\_ParkArea\_2013.dbf (1 mile)
      4. Jackson\_MS\_Buffers\_3\_ParkArea\_2013.dbf (3 mile)
      5. Jackson\_MS\_Buffers\_5\_ParkArea\_2013.dbf (5 mile)

**Methods:**

1. Projection used: UTM Zone 15 North (make sure to calculate the original area in square meters of the buffers while the data is projected).
2. Clipped the parks layer (input 1) to the boundary of the City of Jackson, MS (input 2), if needed.
3. Clipped the participant buffers (input 3) to the clipped parks layer from step 2 (or 1 if clipping not needed).
4. Calculated the area (square meters) of the clipped participant buffers from step 3.
5. Divided the new area from step 4 by the original participant buffer area in square meters and multiplied by 100 to obtain the percent area of park per participant buffer.
6. Exported the results to .dbf table format to deliverables folder.

# APPENDIX G: METHODS FOR CREATING PERCENT CENSUS TRACT AND BLOCK GROUP DEVOTED TO PARKS

Created by Melissa Zagorski in Dec 2013

**Measure:** Percent of census tract and block group (2000 boundaries) devoted to parks (2001 and 2013 data).

**Input data:**

1. Parks feature classes for city of Jackson, MS: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2013\_UTMz15N and U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2001\_UTMz15N
2. City of Jackson, MS boundary: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Base\_Data\Administrative\_Boundaries.gdb\MS\_Jackson\_city\_Boundary\_UTMz15N
3. Block Groups and Census Tracts from the year 2000: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Census

**Files in deliverables folders:**

1. Census Tract: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\CT\parks\CT00\_Park\_Area
   1. 2001 Parks
      1. Jackson\_MS\_CT00\_ParkArea\_2001.dbf
   2. 2013 Parks
      1. Jackson\_MS\_CT00\_ParkArea\_2001.dbf
2. Block Group: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Areas\2000\BG\parks\BG00\_Park\_Area
   1. 2001 Parks
      1. Jackson\_MS\_BG00\_ParkArea\_2001.dbf
   2. 2013 Parks
      1. Jackson\_MS\_BG00\_ParkArea\_2001.dbf

**Methods:**

1. Projection used: UTM Zone 15 North.
2. Clipped the parks layer (input 1) to the boundary of the City of Jackson, MS (input 2), if needed.
3. Clipped the local Block Groups and Census Tracts (input 3) to the clipped parks layer from step 2.
4. Calculated the area (square meters) of the clipped Block Groups and Census Tracts from step 3.
5. Divided the new area from step 4 by the original Block Group or Census Tract area in square meters and multiplied by 100 to obtain the percent area of park per Block Group or Census Tract.
6. Exported the results to .dbf table format to deliverables folder.

# APPENDIX H: METHODS FOR CREATING EUCLIDEAN DISTANCE TO NEAREST PARK

Created by Melissa Zagorski in Dec 2013

**Measure:** Euclidean distance of participant location to nearest park (2001 and 2013 data).

**Input data:**

1. Parks feature classes for city of Jackson, MS: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2013\_UTMz15N and U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Parks\Parks\_JHS.gdb\CityOfJackson\_parks\_2001\_UTMz15N
2. City of Jackson, MS boundary: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Base\_Data\Administrative\_Boundaries.gdb\MS\_Jackson\_city\_Boundary\_UTMz15N
3. Participant address locations: U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\GIS\_Data\Participants\address\_points.gdb

**Files in deliverables folders:**

1. U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\GIS\Deliverables\Individuals\parks\Nearest\_Park
   1. 2001 Parks
      1. Jackson\_MS\_2001\_Parks\_near.dbf
   2. 2013 Parks
      1. Jackson\_MS\_2013\_Parks\_near.dbf

**Methods:**

1. Projection used: UTM Zone 15 North.
2. Used the Near tool to calculate the Euclidean distance (meters) from the participant address (input 3) within a 10 mile buffer of the City of Jackson, MS (input 2) to the location of the nearest park polygon (input 1): used the standard search radius of 300 miles.
3. Exported the results to .dbf table format to deliverables folder. Note: a near distance of 0 indicates the participant address location is within a park polygon.

# APPENDIX I: LIST OF SAS CODE USED IN DATA CREATION

All SAS code files are saved to the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Code”

1. JHS coding for creating densities111913\_FINAL.sas
   1. Creates the coding for the recreational facilities densities categorization for 2001 parks.
   2. Outputs the SAS files in the folder “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParksLevel”
2. read in GIS data112113.sas
   1. Imports the DBF files that were output from ArcGIS for 2013 parks.
   2. Creates any calculated variables
   3. Outputs the SAS files in the folders “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\AreaLevel” and “U:\Secure\Diezroux\Projects\EAC\_MESA\_JHS\Parks\JACKSON\_HEART\_STUDY\Data\SASFiles\ParticipantLevel”

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