### R Training Agenda

### December 9-10, 2019

### Springbok/Bulls

## Day 1 (December 9)

### IT Check – 9:00 – 9:30

### Welcome and Introductions – 9:30 – 9:35am

### Session 1

* A Data Scientist Approach – 9:35 – 10:00am
* Objectives & Introduction to RStudio – 10:00 – 10:15am

### Session 1 Lesson and Exercises—10:15 – 11am

* Importing Data
* R Packages
* Exploring Data

### Break – 11:00 – 11:15 am

### Session 1 Recap Exercise 11:15 – 11:30am

### Session 2 Objectives, Lesson and Exercises – 11:30 – 12:10pm

* Sorting Data
* Subsetting Data
* Cleaning Data
* Exporting Data

### Session 2 Recap Exercise 12:10 – 12:25pm

### Lunch – 12:30 – 1:30pm

### Session 3 Objectives, Lesson and Exercises – 1:30 – 3:00pm

* Reading data in R
* Calculations in R
* Transformation in R
* Manipulation in R
* Exporting data in R

### Session 3 Recap Exercise 3:00 – 3:15pm

### Break – 3:15 – 3:30pm

### Session 4 Objectives, Lesson and Exercises – 3:30pm – 4:30pm

* Closing RStudio/Opening New Files
* Creating Variables
* If\_else/case\_when conditional
* Renaming Variables
* Deleting Variables
* Piping
* Summarizing Data
* Stacking Datasets

### Day 1 Recap Exercise – 4:30 – 5:00pm

## Day 2 (December 10)

### Day 1 Recap – 9:00 – 9:30

### Session 5 Objectives, Lesson and Exercises – 9:30 – 11am

* Visualizations in R
  + Basic Plotting in R
  + Advanced Plotting in R
  + Developing maps

### Session 5 Recap Exercise 11:00 – 11:15am

### Break – 11:15am – 11:30am

### Session 5 Objectives, Lesson and Exercises – 11:30 – 12:30pm

* Creating Shiny App

### Session 5 Recap Exercise 12:30 – 12:45pm

### Lunch – 12:45 – 1:30pm

### Session 6 Objectives, Lesson and Exercises – 1:30pm – 3:00pm

* + BYOD – BRING YOUR OWN DATA
  + Overview of the SI developed scripts
    - WrangleGenie
    - DATIM Data Import Validation
    - Direct Linkage
    - AGYW\_PREV

### Session 6 Recap Exercise 3:30 – 3:45pm

### Break – 3:45pm – 4pm

### Training Recap – 4pm – 4:45pm

### Evaluation – 4:45pm – 5pm