## Social Network Analysis for Crime Reduction Training

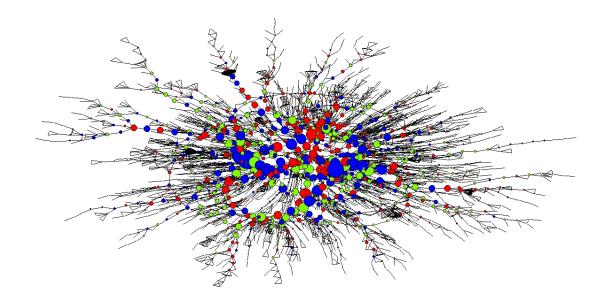
Location: California State University, Fresno (specifics will be provided to participants)

Date: June 4<sup>th</sup> and 5<sup>th</sup>, 2018; 9am – 4pm

Presenter: Dr. Andrew Fox, Department of Criminology, anfox@csufresno.edu

## **Course Summary:**

This course will cover the basics of social network analysis (SNA) for crime reduction strategies. SNA is the analysis and visualization of relationships, in this case, criminal relationships. SNA is not social networking or social media, it is not Twitter or Facebook, it is the process of investigating social structures. The emphasis will be on the use of SNA in the law enforcement environment. During the training we will cover the underlying concepts of SNA and work, hands on, with a free SNA software.



## Topics to be covered:

Introduction to concepts and research behind SNA, data cleaning, collecting and structuring network data, network visualization, network topography (density, average degree, centralization), measures of centrality (degree, closeness, betweenness), creating partitions and vectors, extracting components, exporting sociograms, presenting networks stakeholders, how SNA can inform crime reduction strategies.

## Proposed Agenda

Monday, June 4th		
9:00 AM	Introduction to Social Network Analysis (SNA)	
Summary: Defining social network analysis terms and concepts. Overview of the types of data we can use for		
SNA in law enforcement.		
10:30 AM	BREAK	
10:45 AM	Practical Applications of SNA	
Summary: Presentation of different ways SNA has been used in law enforcement, including prevention,		
intervention and enforcement.		
12:00 PM	LUNCH	
1:30 PM	Data Structure for SNA	
Summary: Discussion of the ways to structure data for SNA. Edge-lists and socio-grams.		
2:15 PM	BREAK	
2:30 PM	Challenges with Implementation	
Summary: Discuss the common challenges to implementing SNA in the Law enforcement environment, from		
data presentation to enforcement actions.		
3:15 PM	Introduction to SNA Software Programs	
Summary: Discuss the types of software and the advantages and disadvantages to the software packages that		
are available.		
4:00 PM	END	

Tuesday, June 5th	
9:00 AM	Introduction to Pajek
Summary: Understand types of Pajek files, how to import data, cleaning network data and visualization	
options.	
10:30 AM	BREAK
10:45 AM	Pajek Demonstration, Continued
Summary: Calculating network level measures and centrality scores. Creating partitions, extracting	
components and exporting data.	
12:00 PM	LUNCH
1:30 PM	Introduction to Projects
Summary: Each participant with have a unique project to examine (either practice data or real). Outline the	
steps of analysis and presentation of network data	
2:15 PM	BREAK
2:30 PM	Work on Projects
Summary: Time to work on projects and conduct network analysis in Pajek. Presentations at the end of the	
day.	
4:00 PM	END