Class Activity 1a (Predictive Policing Technology): *Science magazine*¹ – Riding high in their squad car, officers Jamie Pascucci and Joe Kania are cruising the neighborhood of Homewood, scanning the streets for trouble. Pittsburgh, Pennsylvania, has one of the highest murder rates among large U.S. cities, and violent crime is particularly severe in Homewood, a 98% black pocket of aging, pock-marked Victorians on the east side. Young, white officers from outside the neighborhood, Pascucci and Kania patrol using a mixture of police radio, calls to their department's communications center, and instinct. They get occasional help from ShotSpotter, a network of sensors that detects gunshots and relays the information to a laptop mounted between the front seats.

But starting next month, Pascucci and Kania may get a new type of guidance. Homewood is set to become the initial pilot zone for Pittsburgh's "predictive policing" program. Police car laptops will display maps showing locations where crime is likely to occur, based on data-crunching algorithms developed by scientists at Carnegie Mellon University here. In theory, the maps could help cops do a better job of preventing crime.

Class Activity 1b (Predictive Policing Technology): The US Department of Homeland Security is developing the Biometric Optical Surveillance System (BOSS). The purpose of the system which consists of video cameras, computers, and a database of photographs, is to scan crowds and identify persons of interest with an accuracy of 80-90%. The BOSS research began as a way of helping American soldiers in Afghanistan and Iraq identify potential suicide bombers, but in 2010 the project was taken over by the Department of Homeland Security, which plans to make the system available to police departments once it is reliable. In 2013, the system was tested at a sports area in Kennewick, WA, and found not yet ready for use, Research and development continues.

Do you support the development and implementation of the above two types of surveillance tools for police departments? What are the benefits? What are the risks?