

1163-90-709

**Karla L. Hoffman\*** ([khoffman@gmu.edu](mailto:khoffman@gmu.edu)), George Mason University, Systems Eng. and Oper. Res. Dept., Mail Stop 4A6, 4400 University Blvd., Fairfax, VA 20124, and **Brian B. Smith** ([brianbsmith@gmail.com](mailto:brianbsmith@gmail.com)), ICF International, Inc., 9300 Lee Highway, Fairfax, VA 22031.  
*Operations Research consulting for the U.S. government: A telecommunications success story.*

In this presentation, we present how the optimization team at the Federal Communications Commission (FCC) has been using mathematical optimization to:

1. Assist in the design and running of the highly-successful Incentive Auction that resulted in revenues of close to \$20 Billion.
2. Schedule the reassignment of over 1000 broadcast TV stations to new channels for over-the-air broadcasting in the United States and Canada in order to free up spectrum for mobile use and 5G and
3. Describe our continued work for the FCC for both auctions and spectrum availability mapping.

We will present "lessons learned" and suggest how optimization can be used within government settings to assist in policy decisions. (Received September 11, 2020)