1011-90-335 **Corby Harwood*** (rharwood02@whitworth.edu). *A Genetic Algorithm For the Minimum Tollbooth Problem.* Preliminary report.

This talk considers the minimum tollbooth problem (MINTB) for determining a tolling strategy in a transportation network that requires the least number of toll locations, and simultaneously causes the most efficient use of the network. Since current nonlinear program solvers require unreasonable amounts of time for large networks, a more efficient heuristic method has been investigated. The talk presents a genetic algorithm to solve MINTB, and reports numerical results on small networks. (This research was carried out in the Valparaiso University REU program.) (Received August 30, 2005)