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Some results on optimizing network flows.

Many real-world problems can be formulated as network flow optimization problems. One classic example is the transportation problem. We can visualize this problem as a graph with edge weights and a flow of products from supply nodes to demand nodes, where we seek to minimize the transportation costs. We discuss results about a variant of the transportation problem, where we seek to minimize the sum of the transportation cost and the cost of building the edges themselves. (Received September 26, 2017)