

## **ABSTRACT**

Since the mid-nineteenth century, excavations in southern and central Turkey have provided a bounty of archaeological records. One such excavation at the ancient site of Kultepe features preserved, clay tablets that document economic transactions that took place in the mid-to-late Bronze Age. Additional records further allude to the means and routes of transporting goods from the Amuq Valley in the south, across the Amanus Mountains to the Cilician Plain. The research objectives of this study were to utilize a Least Cost Analysis across the Amanus Mountains to map potential routes of these merchants. The study generated individual Least Cost Paths for seven sets of points using the ArcGIS Pro Path Distance tool. Five of these points pairs were used for mapping potential backways whereas two sets were used to model existing passes. The five paths identified three significant passageways across the mountains. Despite shared corridors among these routes, the modeled paths illuminated several passes across the mountains that were possibly utilized in Bronze Age merchant travel. The modeled routes were tested against the existing routes as an indicator of validity for the results. The least cost path geographies and travel time estimates demonstrated stable results.