In the last decade, the emergence of ride-sourcing services has transformed personal trip behavior. In the context of Indonesia, ride-sourcing services have evolved into two modes of transport: motorcycle-based and car-based. The presence of such services has strongly impacted consumers’ choices of travel mode. However, the main question is whether the ride-sourcing service is a complement or a substitute for the existing public transport and conventional taxis. Using 438 motorcycle-based, ride-sourcing consumers, we applied a structural equation model to investigate the relationships between motorcycle-based ride-sourcing, motorcycle taxis, and public transport in the Jakarta Metropolitan Area. The result shows that motorcycle-based ride-sourcing works as a complementary mode for the TransJakarta bus and Jakarta commuter train, but as a competitor with the motorcycle taxis. Contrarily, motorcycle taxis supported the existence of motorcycle-based ride-sourcing. The study also found that individuals use motorcycle taxis as feeders to transit stops. Individuals commonly use motorcycle taxis and motorcycle-based ride-sourcing for short travel distances. The demographic features and technology use experience also drive individuals’ choice of the three transportation modes. Integrating public transport with motorcycle-based ride-source services, and legalizing motorcycle taxis and motorcycle-based ride sourcing as forms of public transport are two main proposed policies that seek to increase public transport demand, ensure service quality, safety, and fares, and reduce the potential conflict between all three.