A growing body of research has examined early adult substance use outcomes of juvenile offender trajectories (for a review, see Day & Wiesner, 2019). However, few prospective studies have extended this line of research to examinations of mid-adult alcohol, tobacco, and marijuana (ATM) use outcomes. Moreover, longitudinal datasets do not always provide for ATM use involvement indicators that capture the full spectrum from ATM use to clinically relevant ATM abuse/dependence and ATM treatment history. It is therefore not clear whether the differential ATM use outcomes expected by dual taxonomies of antisocial behavior (e.g., Moffitt, 2006; Wiesner et al., 2003) are observable across the full spectrum of ATM use involvement indicators. Using data from 206 at-risk men enrolled in the Oregon Youth Study, the purpose of this longitudinal study was to examine the associations of young men’s crime trajectories to a broad range of tobacco product, marijuana, and alcohol use indicators at age 37/38, after controlling for childhood antisocial propensity and childhood and adolescent ATM use. Annual counts of official arrests from ages 10-11 to 26-27 years were obtained from juvenile and adult court records. Semi-parametric group-based modeling (Nagin, 2005) identified three crime trajectories: rare offenders (68.5%), low-level chronic offenders (22.3%), and high-level chronic offenders (9.2%). ATM use involvement indicators up to age 37/38 years included self-reported ATM use, consequences of ATM use, ATM use treatment history, and DSM-IV diagnoses of ATM abuse/dependence obtained from the Composite International Diagnostic Interview. Results of logistic and linear regression analyses provided mixed support for the posited differential mid-adult ATM use outcomes of distinctive crime trajectories. For example, significant differences were found for mid-adult prevalence of marijuana use (OR=2.23, p<.001) but almost none for DSM-IV diagnoses of ATM abuse/dependence. The theoretical and policy-making implications of study findings will be discussed.