Recent sociophonetic research by Wiener and Shih (2011) has shown that among modern Mandarin speakers, the voiced labial-velar approximant /w/ is produced as both [w] and [v] by young, northern females in China. This corroborates previous findings by Shen (1987), suggesting that two decades later this spoken variation continues to grow in usage. This variation has been noted both in daily speech as well as among female newscasters, such as those on Chinese CCTV (Chan, 1998). Although these findings point to a robust variation in production, it remains unclear whether or not all native Mandarin speakers perceive this sociophonetic variation. The present study tests native Mandarin speakers’ perception of /w/ as [v] through online AXB discrimination tasks. Using natural speech stimuli recorded from different speakers, native Mandarin speakers from throughout mainland China listened to 32 randomized and counterbalanced trials. All of the targets contained /w/ in the onset position of the first syllable of a monosyllabic or disyllabic Mandarin word, half of which were produced as [v]. Participants were asked to listen to each AXB trial and judge whether the second production was more like the first or third production. Initial results from 30 participants reveal that much like the production tasks, primarily young females perceive the two variations as distinct approximants. Unlike the production tasks, however, the perception tasks also suggest that females beyond northern China perceive the difference and recognize its status and usage in modern Mandarin – ostensibly due to experience with female newscasters’ perceived “standard” production. This growing exposure to /w/ as [v] is discussed in terms of the approximant’s acoustic features, as well as the use of the approximant by females attempting to emulate speakers of “standard” Mandarin. Further data from an additional 30 participants is currently being gathered in order to test other predictors (such as age, exposure to other dialects, and geographic region) within a logistic regression model.