

## **Introduction**

A meeting was held on March 9, 2010 between the Transportation Technical Advisory Committee for the Morgantown area MPO, members of the MPO Policy Board and West Virginia Division of Highways personnel to discuss the proposed highway improvement project for the University Avenue Corridor between Fayette Street and Foundry Street in Morgantown, Monongalia County. Division of Highways personnel presented traffic models utilizing projected 2030 traffic volumes for the existing lane configuration as well as two proposed reconfigurations. Each model included average delays and Levels of Service for all the intersections contained in the aforementioned corridor. A brief description of each proposed reconfiguration as well as a table summarizing average delays and Levels of Service are contained below.

### **ALTERNATIVE #1**

Currently at the intersection of University Avenue with Fayette Street, the northbound approach consists of two left-turn lanes onto Beechurst Avenue and a single right-turn lane onto Fayette Street. The southbound approach consists of a single right-turn lane from Beechurst Avenue to University Avenue and a single left-turn lane onto Fayette Street. However, DOH personnel observed in the field that the dual left-turn lane in the northbound approach is not being utilized evenly due to the merge situation along Beechurst Avenue approximately 300 feet north of the intersection. This alternative proposes to reconfigure the northbound approach to a single left-turn lane onto Beechurst Avenue and a single right-turn lane onto Fayette Street and to remove the merge situation along Beechurst Avenue. The southbound approach would be reconfigured to a dual right-turn onto University Avenue and a single left-turn lane onto Fayette Street. An additional lane would then be carried southbound along University Avenue to the Westover Bridge.

Currently at the intersection of University Avenue with Pleasant Street, the southbound approach consists of a right-turn lane onto the Westover Bridge, a through lane to continue along University Avenue, and a left-turn lane onto Pleasant Street. This alternative proposes to prohibit the left turn onto Pleasant Street from University Avenue and reconfigure the southbound approach to a right-turn lane onto the bridge and two through lanes to continue along University Avenue. The prohibited left-turn movement would then be relocated to the existing signalized intersection of University Avenue with Foundry Street. The existing traffic signal at Foundry Street would be modified to provide a protected left-turn phase for this turning movement.

### **ALTERNATIVE #2**

Currently at the intersection of University Avenue with Pleasant Street, the northbound approach consists of a left-turn lane onto the Westover Bridge, a through lane, and a combination through-right lane to either continue north along University Avenue or turn onto Pleasant Street. The southbound approach consists of a right-turn lane onto the Westover Bridge, a through lane, and a left-turn lane onto Pleasant Street. This alternative proposes to reconfigure the northbound approach to a left-turn lane onto the bridge, a single through lane to continue along University Avenue, and a dedicated right-turn lane onto Pleasant Street. One accepting lane would then be provided on the north side of the intersection. The southbound approach would be reconfigured to a right-turn lane onto the bridge, two through lanes to continue along University Avenue, and a left-turn lane onto Pleasant Street. Once past the storage bay for the southbound

left-turn lane, northbound University Avenue would then widen back to two lanes.

This alternative also proposes the reconfiguration at the intersection of University Avenue with Fayette Street as described under Alternative #1.

### Capacity analyses

Below is a table comparing the average delays in seconds and Levels of Service for all intersections contained in the subject corridor in both the AM and PM peak hours for both alternatives.

Intersection	Existing		Alternative #1		Alternative # 2	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
University Ave @ Fayette St	27.3 (C)	82.1 (F)	46.3 (D)	50.6 (D)	46.5 (D)	50.9 (D)
University Ave @ Walnut St	16.2 (B)	96.6 (F)	17.6 (B)	59.5 (E)	17.3 (B)	58.0 (E)
University Ave @ Pleasant St	36.6 (D)	115.0 (F)	31.4 (C)	59.5 (E)	61.7 (E)	45.8 (D)
University Ave @ Foundry St	8.5 (A)	8.6 (A)	14.0 (B)	16.2 (B)	8.6 (A)	12.5 (B)
<b>Total Delay Combined Total Delay</b>	<b>88.6</b>	<b>302.3</b>	<b>109.3</b>	<b>185.8</b>	<b>134.1</b>	<b>167.2</b>
		<b>390.9</b>		<b>295.1</b>		<b>301.3</b>
<b>Percent Reduction In Total Delay Compared to Existing</b>				<b>25%</b>		<b>23%</b>

### (A) – Average Delay in seconds (Level of Service)