

Metropolitan Traffic & Parking Commission

New Business No. 1: 5th Ave One Way to Two Way Conversion, Lafayette to James Robertson Parkway

5th Avenue One-Way to Two-Way Conversion

Over the last several decades, there has been an ongoing debate concerning the advantages and disadvantages between one-way and two-way streets. While one-way roadways have their place, in this instance, two-way operation will have several inherent advantages over one-way. Specifically, 5th Avenue as a two-way street will allow more direct routes for motorists as they can approach their destination from either direction, reducing the amount of vehicle miles travelled by not taking unnecessary paths of travel. One-way streets can often be confusing for motorists and delivery drivers, especially for those unfamiliar with the downtown street network. Two-way streets are more common and driver expected, resulting in a more user friendly network, particularly to customers and tourists.

The majority of 5th Avenue from James Robertson Parkway to Lafayette Street includes three travel lanes in one direction. Following conversion, the street will primarily consist of a single travel lane in each direction with an auxiliary lane that will allow for loading zones, on-street parking, and a left turn lane at most intersections. Several advantages and disadvantages resulting from the conversion are listed here:

Advantages of Two-Way

- Motorists are more accustomed to two-way streets
- Improved access for businesses and properties
- Likely to reduce vehicle speed, resulting in a safer environment for pedestrians
- Ability for the Metro Police Department and the Department of Public Works to modify the roadway for high directional demand related to special events

Disadvantages of Two-Way

- More potential conflict points (i.e. traffic coming from two directions as opposed to one)
- Left turn demand could increase delay and travel times
- Coordination of traffic signals could be more challenging

5th Avenue North (Broadway to James Robertson Parkway)

5th Avenue North from Broadway to James Robertson Parkway is currently a one-way street traveling in the northbound direction. With the opening of the Music City Center (MCC) and other facilities such as the Omni Hotel, there will be a strong need to improve access along 5th Avenue, north of Broadway. This need will be addressed through the conversion of 5th Avenue into a two-way street. For this reason, it is being recommended that the segment of 5th Avenue from Broadway to James Robertson Parkway, be converted to two-way traffic.

The segment of 5th Avenue from Broadway to James Robertson Parkway includes seven signalized intersections and one unsignalized intersection. Traveling from south to north, these include: Broadway, Commerce Street, Church Street, Union Street, Deaderick Street, Charlotte Avenue, Gay Street, and James Robertson Parkway. Each intersecting roadway currently includes two-way travel with the exception of Union Street.

A detailed inventory of parking and loading conditions indicates that most parking spaces and loading zones will be retained following the conversion. In order to retain the parking spaces and loading zones and better facilitate traffic flow, left turns will be prohibited in the southbound direction at Broadway and Church Street. Table 1 and Table 2 detail the existing and proposed conditions for on-street parking and loading zones.

5th Avenue South (Lafayette Street to Broadway)

5th Avenue South from Lafayette Street to Broadway has been operating as a two-way street throughout the construction of the MCC. Prior to construction, this segment of 5th Avenue operated as a one-way street traveling in the northbound direction. According to the Traffic Impact Study conducted by Barge, Waggoner, Sumner, & Cannon, Inc., “It is desirable from an accessibility standpoint to convert 5th and 6th Avenues South to two-way streets. This improves access to drop-off areas as well as to parking areas by eliminating the need for some motorists to drive around the block.” Therefore, it is recommended that the segment of 5th Avenue from Lafayette Street to Broadway be converted to two-way traffic.

The segment of 5th Avenue from Lafayette Street to Broadway includes four signalized intersections and three unsignalized intersections. Traveling from south to north, these include: Lafayette Street, Elm Street, Lea Avenue, Peabody Street, Korean Veterans Boulevard, Demonbreun Street, and Broadway. Each intersecting roadway currently includes two-way travel.

The existing parking and loading conditions will be retained following the conversion. The proposed cross-section of 5th Avenue South consists of one lane each in the northbound and southbound direction with a two-way left turn lane. This cross-section allows for lane use flexibility related to high demand ingress and egress periods, and staging for large trucks related to event preparation.

Summary

The conversion of 5th Avenue North and 5th Avenue South from a one-way to a two-way street will result in improved accessibility and a consistent cross-section. Although, this improvement comes with changes in the parking conditions (see Table 1), the gains generated outweigh the loss of the on-street parking spaces. Metro Public Works Traffic Engineering staff supports the Barge, Waggoner, Sumner, & Cannon, Inc. Traffic Impact Study. Therefore, it is recommended to convert 5th Avenue from Lafayette Street to James Robertson Parkway to a two-way street.

**TABLE 1. 5TH AVENUE TWO-WAY CONVERSION
ON-STREET PARKING INVENTORY**

Roadway Segment		On-Street Parking (spaces)					
From	To	Existing		Proposed		Difference	Cause
Broadway	Commerce St.	8	metered (unrestricted)	0		-8	maintain loading zones, additional loading zone
Commerce St.	Church St.	10	metered (unrestricted)	6	metered (unrestricted)	-4	northbound left turn lane
Church St.	Union St.	11	2-hour limit pay parking*	11	2-hour limit pay parking*		
Union St.	Deaderick St.	3	unmetered (parking allowed 5:30 pm – 7 am)	3	unmetered (parking allowed 5:30 pm – 7 am)		
Deaderick St.	Charlotte Ave.	4	unmetered (parking allowed 5:30 pm – 7 am)	0		-4	northbound left turn lane onto Charlotte Ave., retain loading zone
Charlotte Ave.	Gay Street	5	State Trooper Only	5	State Trooper Only		
		9	metered (unrestricted)	4	metered (unrestricted)	-5	southbound left turn lane at Charlotte Ave.
		22	metered (restricted 7-9 AM)	22	metered (restricted 7-9 AM)		
		3	unmetered (restricted 7AM-6PM)	3	unmetered (restricted 7AM-6PM)		
Gay Street	James Robertson Pkwy.	2	metered (unrestricted)	2	metered (unrestricted)		
		4	metered (restricted 7-9 AM)	4	metered (restricted 7-9 AM)		
		1	metered (Off-Peak, 2- hour limit)			-1	northbound right turn lane onto James Robertson Pkwy.
TOTAL		82		60		-22	

* Based on Civic Design Plans

**TABLE 2. 5TH AVENUE TWO-WAY CONVERSION
LOADING AREA INVENTORY**

Roadway Segment		Loading Areas (l.f.)					
From	To	Existing		Proposed		Difference	Cause
Broadway	Commerce St.	115	permanent loading zone (west side)				
				115	15min. passenger loading (east side)		
		50	Tour Bus Loading, 12 min. limit, 9AM to 4PM, 6 PM to 9 AM	50	Tour Bus Loading, 12 min. limit, 9AM to 4PM, 6 PM to 9 AM		
Commerce St.	Church St.	0		0			
Church St.	Union St.	100	TOD limited loading and valet*	100	TOD limited loading and valet*		
Union St.	Deaderick St.	70	8:00 AM to 4:30 PM	70	8:00 AM to 4:30 PM		
Deaderick St.	Charlotte Ave.	80	8:00 AM to 4:30 PM	40	8:00 AM to 4:30 PM	-40	left turn lanes
Charlotte Ave.	Gay Street	35	9 AM to 6 PM	35	9 AM to 6 PM		
		30	permanent dumpster access	30	permanent dumpster access		
		40	9 AM to 6 PM	40	9 AM to 6 PM		
Gay Street	James Robertson Pkwy.	0		0			
TOTAL		520		465		-40	

* Based on Civic Design Plans