



**Date:** June 9, 2015

**To:** Thomas J. Bonfield, City Manager  
**Through:** Keith Chadwell, Deputy City Manager  
**From:** Mark Ahrendsen, Director of Transportation  
**Subject:** Response Memo - Impacts of Road Diets on Businesses

**Summary**

Several council members requested additional information that might be relevant to the impact of roadway reconfigurations (i.e., road diets) on businesses located along streets that have experienced a roadway reconfiguration.

In this regard Transportation staff has conducted a literature review of research pertaining to economic impacts of Road Diets on corridors similar to Durham-Chapel Hill Blvd (US 15-501 Business). The studies referenced below are provided in this regard. In addition to analyzing the impact the road diets have had on business, the studies also address other impacts the road diets have had on such factors as vehicular speed and accidents.

A [University of Washington study](#) of two Road Diet corridors in Seattle demonstrates that restriping and reducing auto travel lanes does not harm business. In the case of the Greenwood Avenue Corridor, there was little variation in sales index from neighborhood comparisons. In the case of the NE 65<sup>th</sup> Street corridor, *the sales index increased by 400% after completion of the Road Diet.*

A [study by the City of Los Angeles, California](#) points out that it is common for business owners to oppose Road Diets for fear of negative economic impacts. However, an extensive analysis of York Boulevard in Los Angeles, determined that such fears were unfounded. Sales tax revenues on the section of the boulevard subjected to a Road Diet *increased*, and overall no impact was felt in terms of business creation, turnover, or sales.

In Vancouver, Washington, Transportation Services found no detrimental business impact in their [post-project evaluation](#) of a road diet project in this community. The City Manager of Danville, Kentucky led [a study of two Kentucky communities](#) and found no detrimental business impacts after Road Diet implementation.

A road diet on East Boulevard in Charlotte, NC – a road with higher daily traffic volumes than Durham-Chapel Hill Boulevard – resulted in a reduction of travel speeds and crashes with little change in traffic volumes (see attached). Perhaps of particular relevance to businesses along Durham-Chapel Hill Boulevard, a study by [the Project for Public Spaces](#) concluded that *“outdoor dining significantly increased along the [East Boulevard] corridor after project implementation.”*

A [study conducted in Atlanta](#) shows positive correlation between bike lanes and property value. An [extensive analysis of bike paths](#) throughout the nation by the Delaware Department of Transportation overwhelmingly indicates a positive impact on property value. [Smart Growth America](#) and [Marin County, California](#) conducted similar studies with the same results.

In summary Road Diets have been shown to be a successful strategy for reducing vehicular speeds and improving safety on a variety of streets, including streets with higher traffic volumes than the 14,000 vehicles per day on Durham-Chapel Hill Boulevard. Research pertaining to economic impacts on corridors appropriately selected for Road Diet treatment shows either no measurable economic impact or an improvement/increase in economic activity.

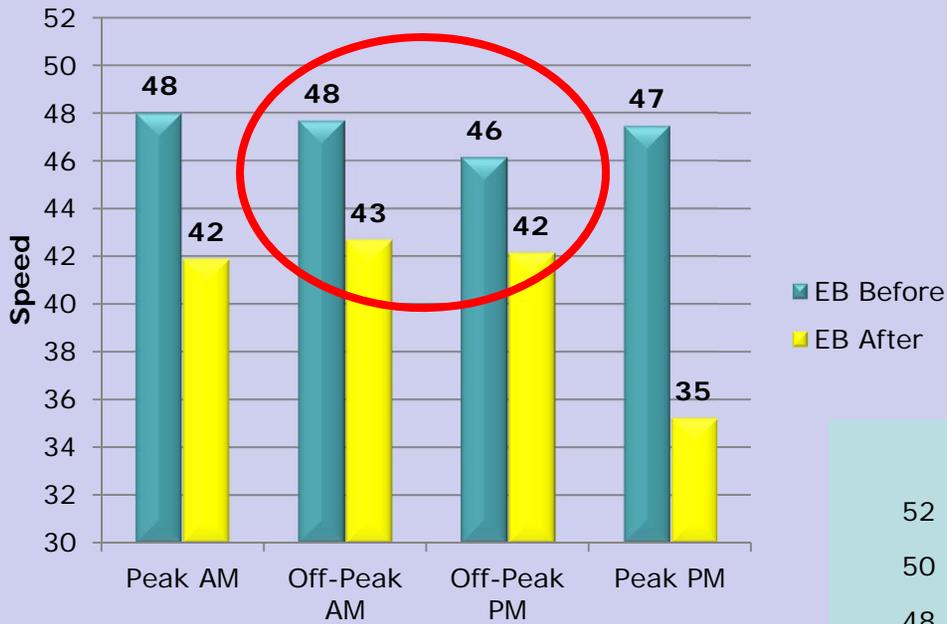
Should you have any questions regarding the aforementioned studies/reports or desire additional information regarding this matter, please advise.

Attachments – Slides on the East Boulevard Road Diet in Charlotte (Source: City of Charlotte)

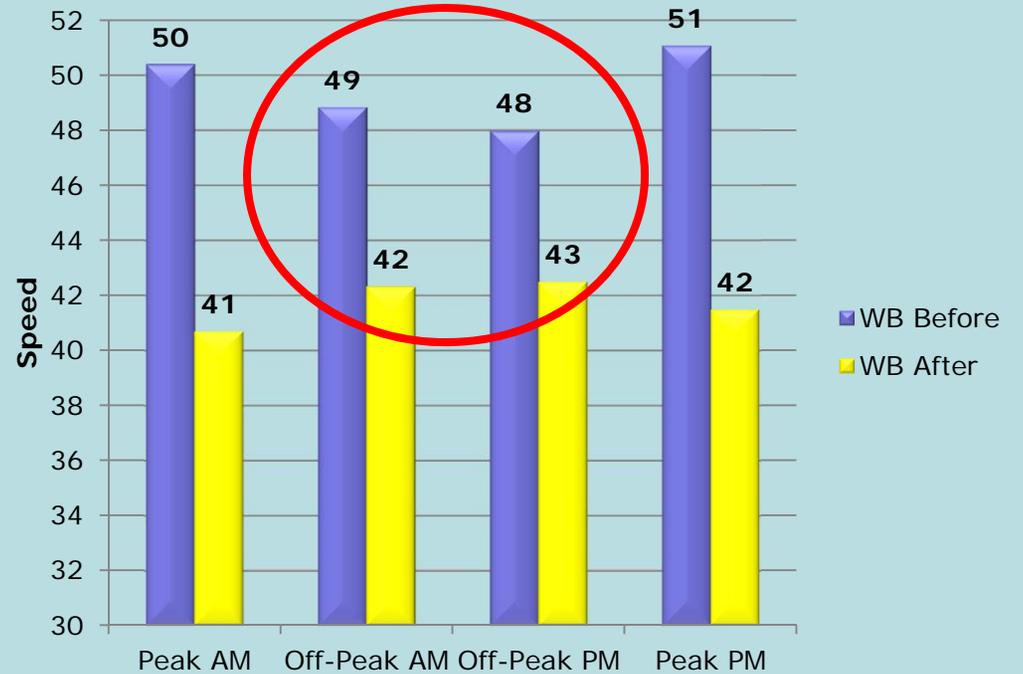


# Phase II Speed Results

### Eastbound 85th Percentile



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Note: Speeds recorded and calculated using Nu-Metrics HiStar.



Overall crashes decreased from 2.64 to 1.67 crashes/month

|         |             |             | Results |               |
|---------|-------------|-------------|---------|---------------|
|         | Crash Type  | Expected To | %       | Crashes/Month |
| Related | Rear End    | Increase    | - 22 %  | - 0.1         |
|         | Angle Types | Decrease    | - 68 %  | - 0.7         |
|         | Sideswipe   | Decrease    | - 58 %  | - 0.1         |
|         | Head-on     | Decrease    | - 100 % | - 0.03        |
|         | Parked      | Decrease    | + 26 %  | + 0.01        |
|         | Unrelated   | ???         | - 22 %  | - 0.1         |

| Crash Type | Expected To | Before | After |
|------------|-------------|--------|-------|
| Bike       | ???         | 1      | 12    |
| Pedestrian | ???         | 1      | 2     |

Before data: 36 months  
After data: 57 months



# East Blvd. Phase II Crashes

Overall crashes decreased from 1.97 to 1.86 crashes/month

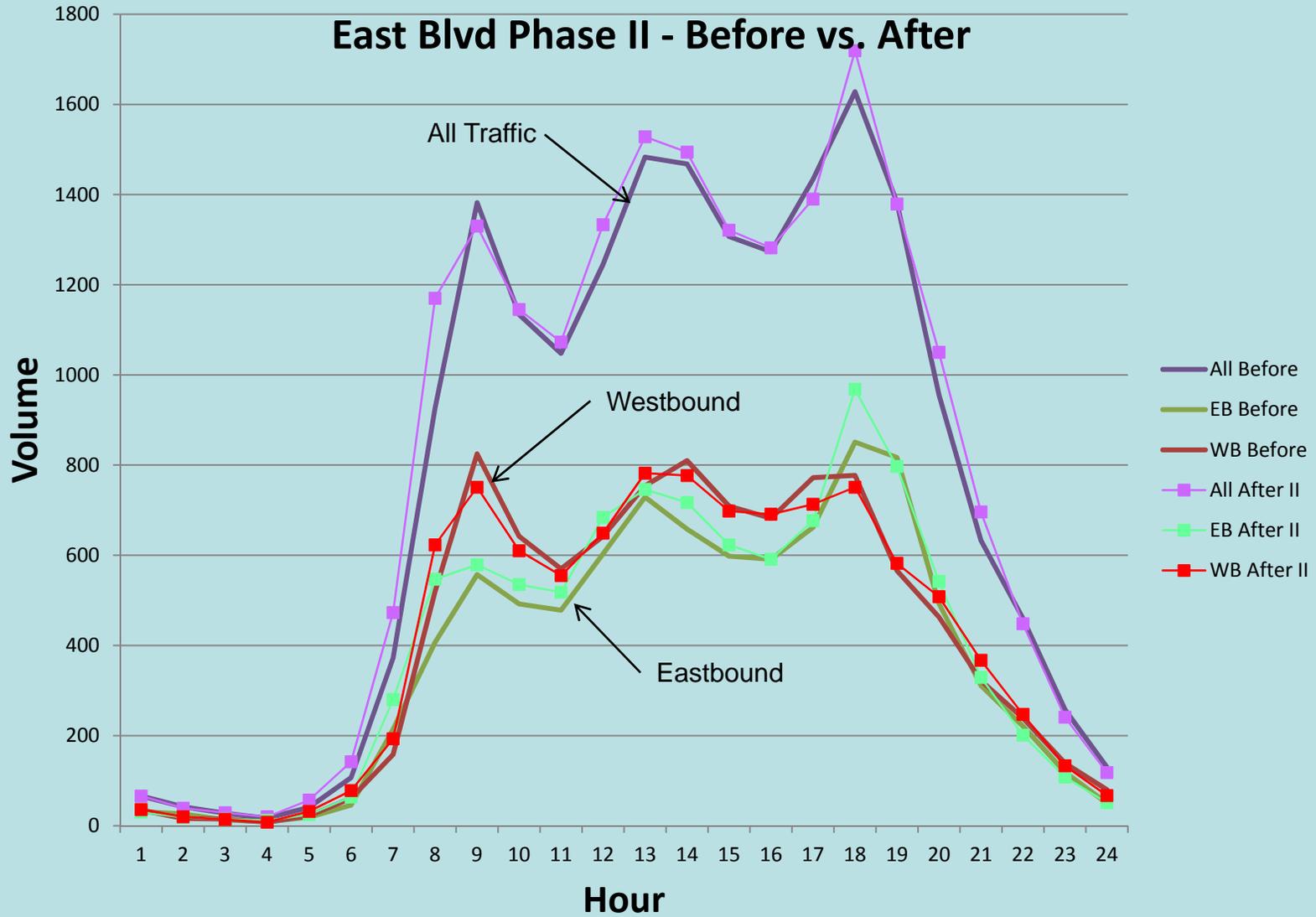
|         |             |             | Results |               |
|---------|-------------|-------------|---------|---------------|
|         | Crash Type  | Expected To | %       | Crashes/Month |
| Related | Rear End    | Increase    | + 132 % | + 0.6         |
|         | Angle Types | Decrease    | - 27 %  | - 0.2         |
|         | Sideswipe   | Decrease    | - 43 %  | - 0.1         |
|         | Head-on     | Decrease    | - 100 % | -0.03         |
|         | Parked      | Decrease    | - 71 %  | - 0.01        |
|         | Unrelated   | ???         | - 74 %  | - 0.3         |

| Crash Type | Expected To | Before | After |
|------------|-------------|--------|-------|
| Bike       | ???         | 0      | 0     |
| Pedestrian | ???         | 2      | 0     |

Before data: 36 months  
After data: 21 months



# East Phase II Volumes





*Aerial View of East Boulevard in Charlotte – After Implementation of Road Diet*