Road Diets – Ashland Oregon Case Study

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City of Bend Transportation Safety Advisory Committee

Outline

- Background
- North Main Street, Ashland, Oregon - Case Study
- Overcoming Challenges in Implementing a Road Diet
- Questions

What is a Road Diet?

Road diets are a tool used to reallocate existing roadway right-of-way to better serve pedestrians, bicycles and transit while continuing to adequately accommodate automobile traffic.

Benefits of Road Diets

Road Diets Can Provide Space for Physical Improvements such as:

- Bike Lanes
- Wider Sidewalks
- Street Furniture
- Landscape Buffers
- On-Street Parking
- Transit Stops
- Transit Shelters
- Street Patios

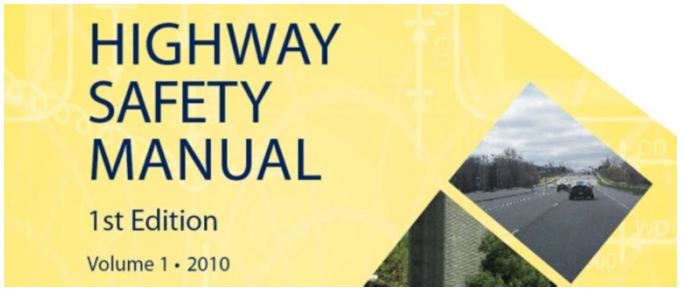
Benefits of Road Diets

Road Diets have also been shown to:

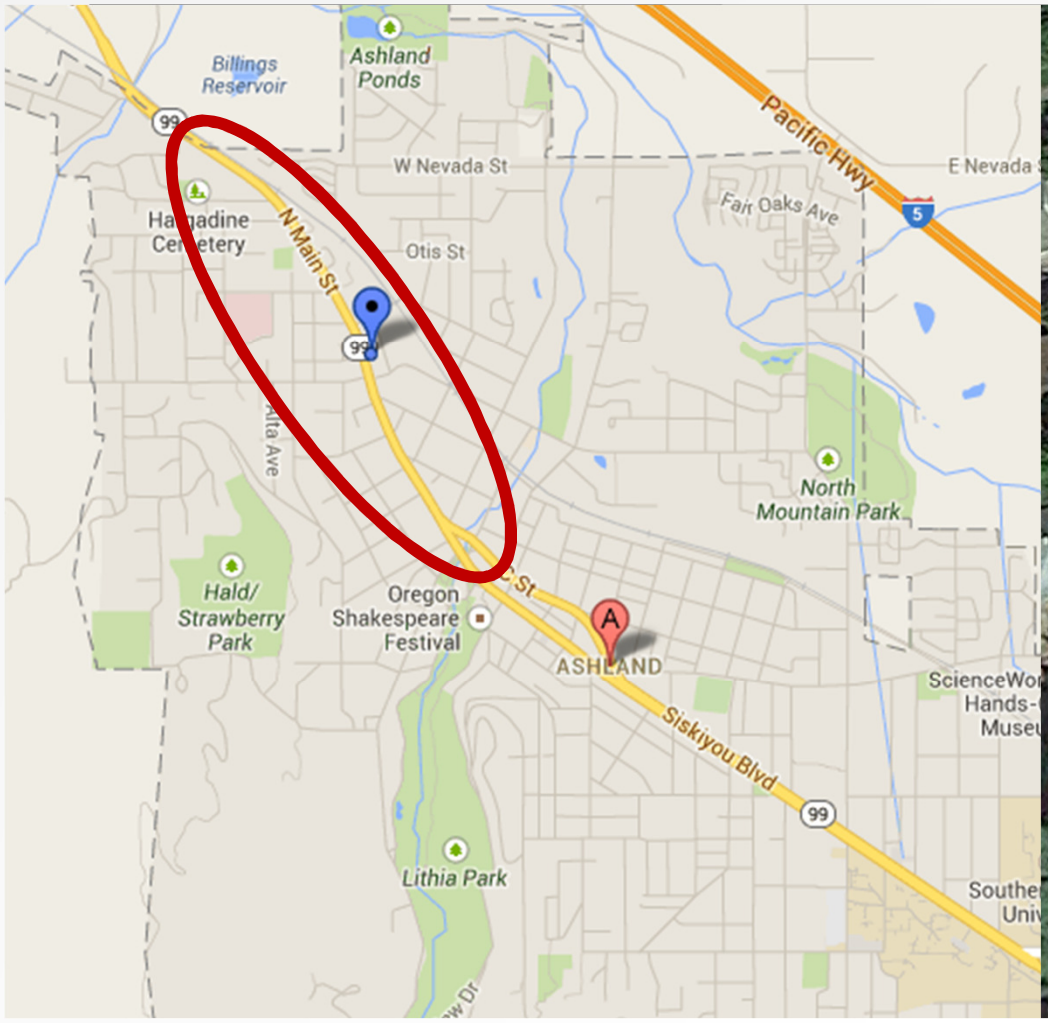
- **Improve traffic flow** by eliminating lane changes and weaving.
- **Reduce vehicle speeds** closer to desired operating speed by creating a "tunnel effect" that naturally slows motorists' speeds.
- **Reduce number of crashes** by removing conflicts, slowing operating speeds and increasing driver awareness.
- **Create a more attractive environment** for pedestrians and bicyclists by designating exclusive spaces for each roadway user in a comfortable setting.

Tools and Approaches for Road Diets

- Complete Streets Polices
  - Consider **all users** includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
- Multimodal Level of Service
  - **Modes**: Auto, Bike, Ped, Freight, Transit
  - **Measures**: Safety, Operations, Reliability, Accessibility, System Completeness.
- Highway Safety Manual
  - Provides **quantitative estimations** of crash frequency or severity.
  - Crash Modification Factors can be used to **compare different treatments**.



North Main Street Road Diet



North Main Street Road Diet

Project Goals

- Improve Safety
- Reduce Vehicle Speeds
- Increase Bicycle and Pedestrian Volumes
- Maintain Acceptable Vehicle Travel Time
- Gain Community Support

North Main Street Road Diet

Project Details

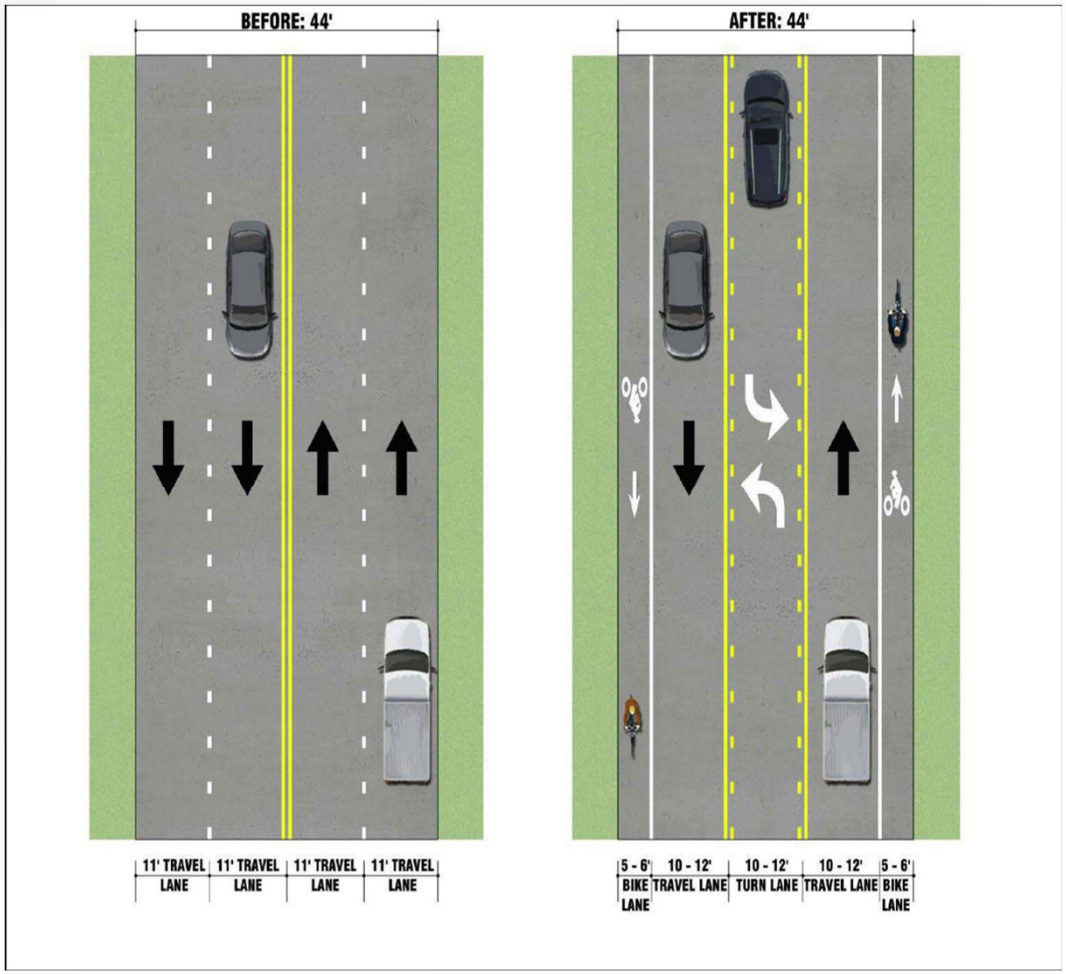
- State Highway
- Posted Speed 25 mph
- Commercial with Residential
- 17,500 ADT

Road Diet Elements

- 4 lanes restriped to 2 lanes with two-way center turn lane
- Bike Lanes and Sharrows
- Signal Improvements

North Main Street Road Diet

Before



After

North Main Street Road Diet

Process Followed:

- White Paper
- Committee Meetings
- Public Meetings
- Technical Analysis
- Final City Approval

North Main Street – Ashland, Oregon

Through lanes removed and bike lane added

Before

After

North Main Street – Ashland, Oregon

Through lanes removed, bike lane and turn pocket added

North Main Street – Ashland, Oregon

Through lane converted into bike lane and turn pocket

North Main Street – Ashland, Oregon

4 though lanes converted to 2 lanes + TWLTL + bike lanes

North Main Street – Ashland, Oregon

4 though lanes converted to 2 lanes + TWLTL + bike lanes

North Main Street – Ashland, Oregon

4 lanes Intersection converted to 2 lanes + turn bay+ bike Lanes

Before

After

North Main Street – Ashland, Oregon

Sharrow Added

North Main Street – Ashland, Oregon

Transition from 2 lanes to 1 lane with bike lane

North Main Street – Ashland, Oregon

Lane converted to turn lane and bike lanes

Source: Google Street View

Before

After

North Main Street – Ashland, Oregon

Lane reduction and turn restriction

Source: Google Street View

Before

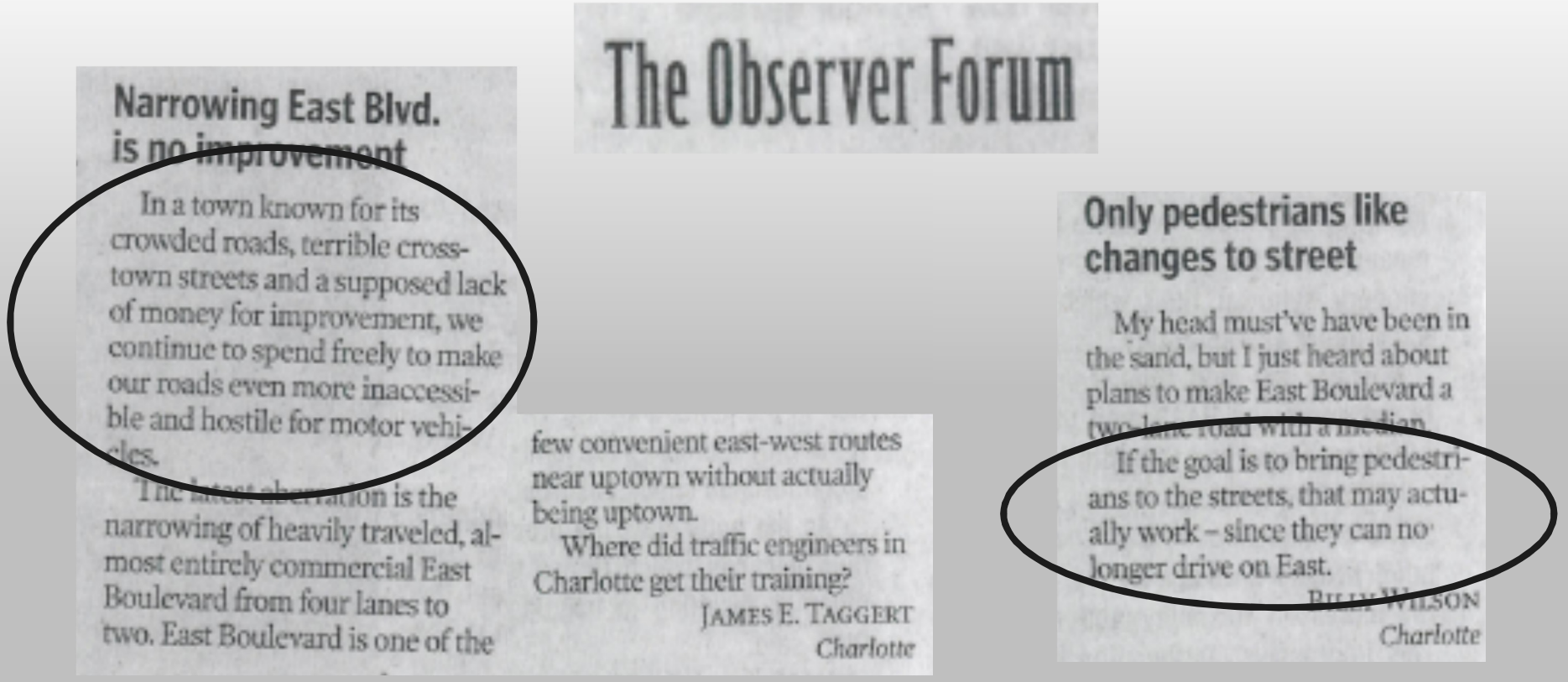
After

Results of the North Main Street Road Diet

- Improve Safety
  - 2 crashes in year 1, down from 12/year average
- Reduce Vehicle Speeds
  - 85th percentile speeds reduced from 32 mph to 30 mph
- Increase Bicycle and Pedestrian Volumes
  - Bicyclists increases are modest but include a larger diversity of the population
- Maintain Acceptable Vehicle Travel Time
  - No increase in travel time (and some improvement), this is likely due to removal of left-turns from through lanes
- Gain Community Support
  - The City Council voted to keep the road diet after the trial period.

The Challenge of Implementation a Road Diet

Some members of the public may initially have a negative "Gut Reaction"



The Observer Forum

Narrowing East Blvd. is no improvement

In a town known for its crowded roads, terrible cross-town streets and a supposed lack of money for improvement, we continue to spend freely to make our roads even more inaccessible and hostile for motor vehicles.

The latest aberration is the narrowing of heavily traveled, almost entirely commercial East Boulevard from four lanes to two. East Boulevard is one of the few convenient east-west routes near uptown without actually being uptown.

Where did traffic engineers in Charlotte get their training?

JAMES E. TAGGERT
Charlotte

Only pedestrians like changes to street

My head must've have been in the sand, but I just heard about plans to make East Boulevard a two-lane road with a median.

If the goal is to bring pedestrians to the streets, that may actually work – since they can no longer drive on East.

BILLY WILSON
Charlotte

The Challenge of Implementation a Road Diet

…but negative perceptions can be overcome

From: Jim Hock [mailto:jim@origindevelopment.net]
Sent: Thursday, July 13, 2006 4:51 PM
To: Szymanski, Doreen
Cc: pat.mumford@wachovia.com
Subject: East Blvd. Kudos

Just wanted to let you know how well I think the East Blvd. conversion is going. I travel that road probably 6 times per day at various hours, and it seems the pedestrian islands and lane reduction has helped things tremendously on the street. Today I saw 2 ladies, in skirts and high heels, crossing the street while they talked, arriving at the middle island, and then continuing to cross. There is NO way that they would've been able to cross in high heels before. If they'd tried, it would've been a mad dash, not a leisurely walk while conversing.

The traffic has slowed considerably, but it still flows fine. I've gotten stuck behind a bus a couple of times and grumbled I couldn't pass, but the 15 seconds it took for the bus to stop really wasn't so bad after all.

If the goal was to slow down traffic, improve pedestrian safety and quality of life, while allowing traffic to flow smoothly, you've succeeded!

Thanks again.

Jim

Tools to Overcome Negative Perceptions

- Engage stakeholders early
- Provide successful examples
- Provide technical data to interested parties
- Propose a temporary road diet (i.e. Pilot Project)

Successful Road Diets
Fourth Plain Boulevard – Vancouver, WA – $1.2 M

Project Facts	Road Diet Elements	Results
▪ Principal Arterial ▪ 12,000 ADT ▪ Posted Speed 30 mph ▪ Residential with Commercial ▪ 1.0 mile in length	▪ Two-lanes with two-way center turn lane ▪ Bike lanes ▪ ADA ramps ▪ Underground utility work	▪ Decreased crashes by 52% ▪ Decreased vehicle speeds by 18% ▪ No queues blocking access to driveways or streets ▪ Improved bicycle conditions ▪ No traffic diversion impacts ▪ Economic growth in adjacent and nearby businesses ▪ Easier to cross street ▪ Street feels safer to residents

Successful Road Diets
Baxter Street – Athens, GA Boulevard – 190K

Project Facts	Road Diet Elements	Results
▪ State Highway ▪ 12,000 ADT ▪ Posted Speed 45 mph ▪ Commercial with Residential ▪ 1.1 miles in length	▪ Two-lanes w/two-way center turn lane ▪ Bike lanes ▪ Signal modifications	▪ Decreased total crashes by 53% ▪ Decreased crashes at unsignalized intersections 60% ▪ Decreased rear-end crashes by 45% ▪ No significant changes to traffic volumes ▪ Easier to cross street ▪ Slower vehicle speeds ▪ Perceived street number of lanes and width "just right"

Source: Google Street View

Successful Road Diets
U.S. 18 - Clear Lake, IA – 105K

Project Facts	Road Diet Elements	Results
▪ State Highway ▪ 12,000 ADT ▪ Posted Speed 45 mph ▪ Commercial w/Residential ▪ 1.1 miles in length	▪ Interim project restriped to two lanes with two-way center turn lane ▪ Shoulders ▪ Temporary Signal	▪ Decreased total crashes by 65% ▪ Decreased aggressive speeding by 52% ▪ Decreased vehicles over speed limit by 32% ▪ Adequate traffic operations and mobility ▪ More uniform traffic speeds closer to speed limit

Temporary Road Diets (Pilot Project)

Use of temporary road diets can let a municipality try a road diet before they commit to the full cost.

Proposed Road Diet in Erie, PA

Implemented Temporary Road Diet in Erie, PA

Acknowledgments

Special Thanks to
Mike Faught
Public Works Director
City of Ashland

White Paper on North Main Street Road Diet
http://www.ashland.or.us/Files/Road%20Diets%20White%20Paper.pdf

Questions/Comments?