Planning for Greater Akron

A Diet that Works
AMATS Road Diet Analysis

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October 2015

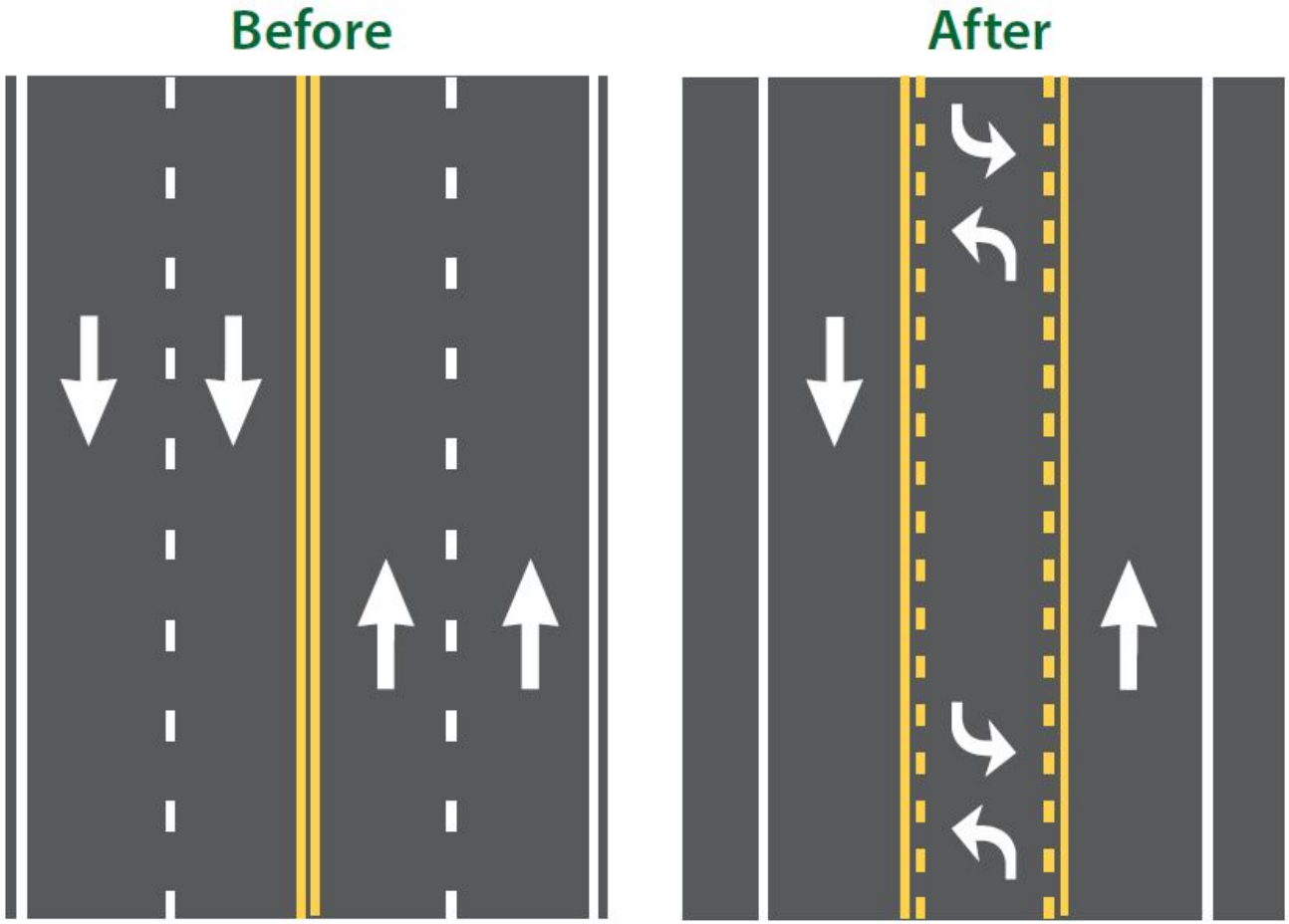
Overview

- What is a Road Diet?
- The Big Picture
  - Why does an MPO care about Road Diets?
- AMATS Road Diet Analysis/Examples

What is a Road Diet?

- Reduces the number lanes on a roadway
- Most common conversion is four lanes to three lanes
- One lane in each direction with a continuous turn lane
- Dropped lane width is allocated to other users
- Same pavement width, new lane configuration
- Very little additional infrastructure cost

Typical Configuration



Benefits of a Road Diet

- Safety
  - Overall crash reduction of 19 to 47 percent
  - Less rear-end and left turn crashes through use of a dedicated left turn lane
  - Calming effect on speed
- Fewer lanes for pedestrians to cross
- Extra width can accommodate other transportation modes such as bikes

Benefits of a Road Diet

- Smoother traffic flow, less slow and go flow
- Best use of pavement when the capacity of a roadway is greater than the demand
  - Highways designed in 50's and 60's based on the current growth patterns
  - Population projections never materialized

Why We Care About Road Diets

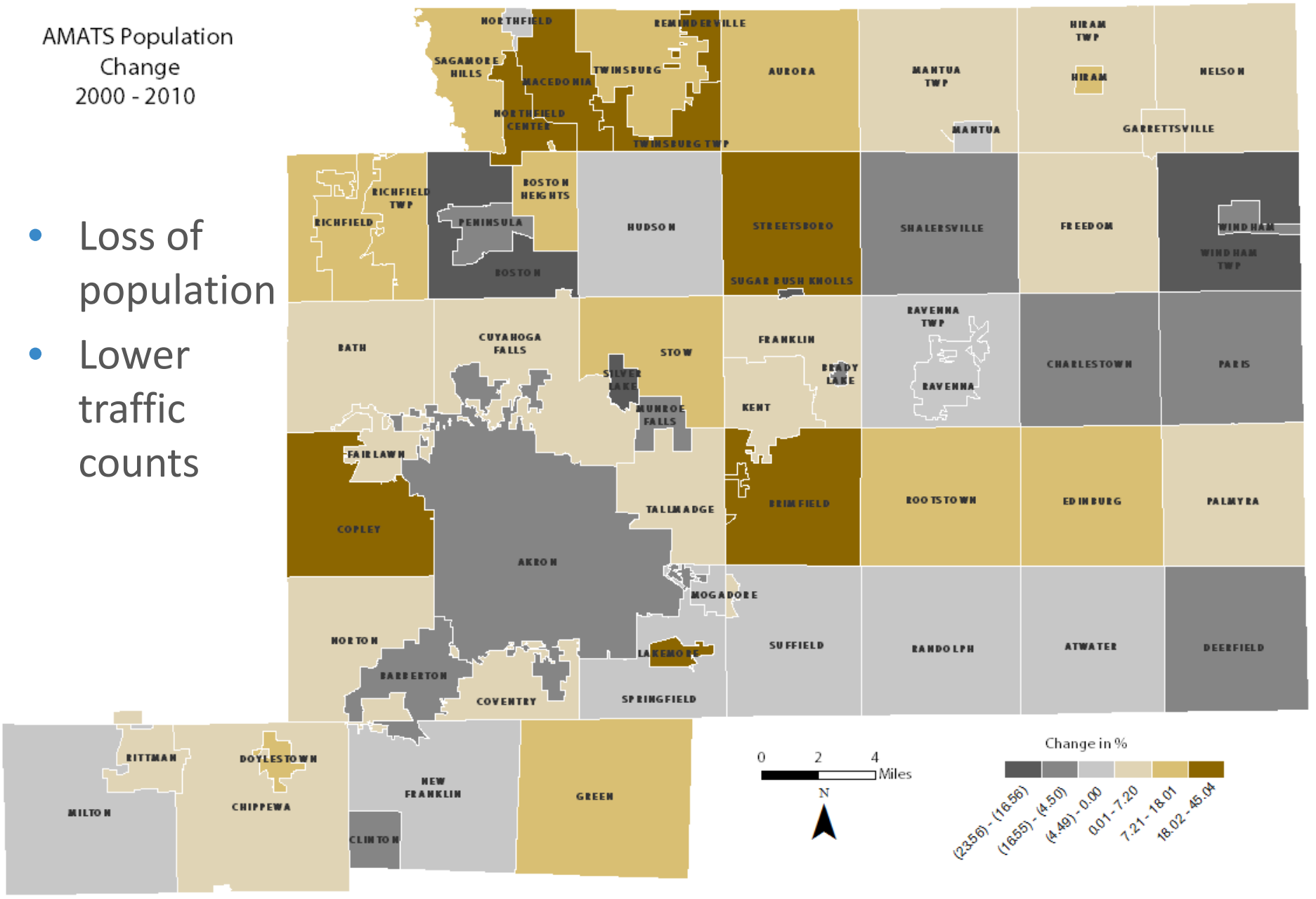
- Transportation Funding Difficulties
- Regional Demographics
- Connecting Communities/Complete Streets
- Re-imagining Spaces

Transportation Funding Difficulties

- Funding has remained unchanged while project costs continue to rise
- Bike and pedestrian connections often foiled by right-of-way/acquisition costs
- We can create important connections with minimal cost

AMATS Population Change 2000 - 2010

- Loss of population
- Lower traffic counts



Connecting Communities and the Importance of Complete Streets

Complete Streets

Re-imagining Our Community

N Main St Akron - Existing

Re-imagining Our Community

N Main St Akron – During Better Block

Photo: Tim Fitzwater

Re-imagining Our Community

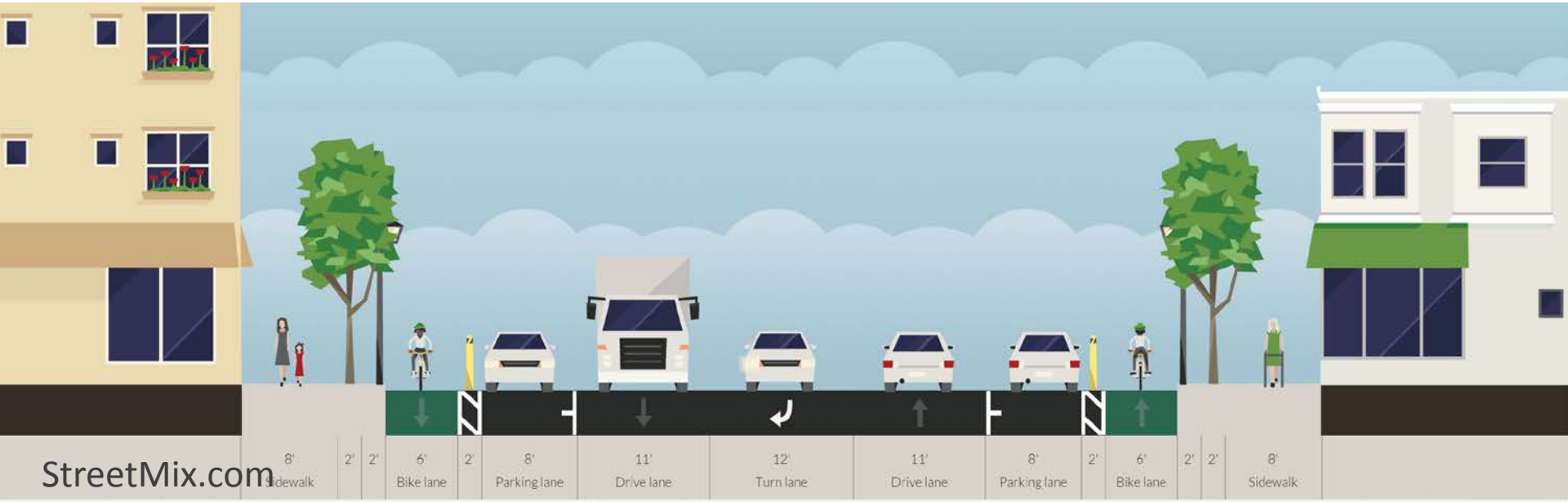
N Main St Akron - Existing

N Main St Akron – During Better Block

Tools

Baton Rouge


Tempera Paint & Duct Tape



StreetMix.com

The AMATS Road Diet Analysis

- Goal was to compile a list of streets where a road diet could be applied

- **Start with an accurate inventory of roadways**
  - GIS Database
  - ODOT Office of Technical Services
  - Highway Maintenance

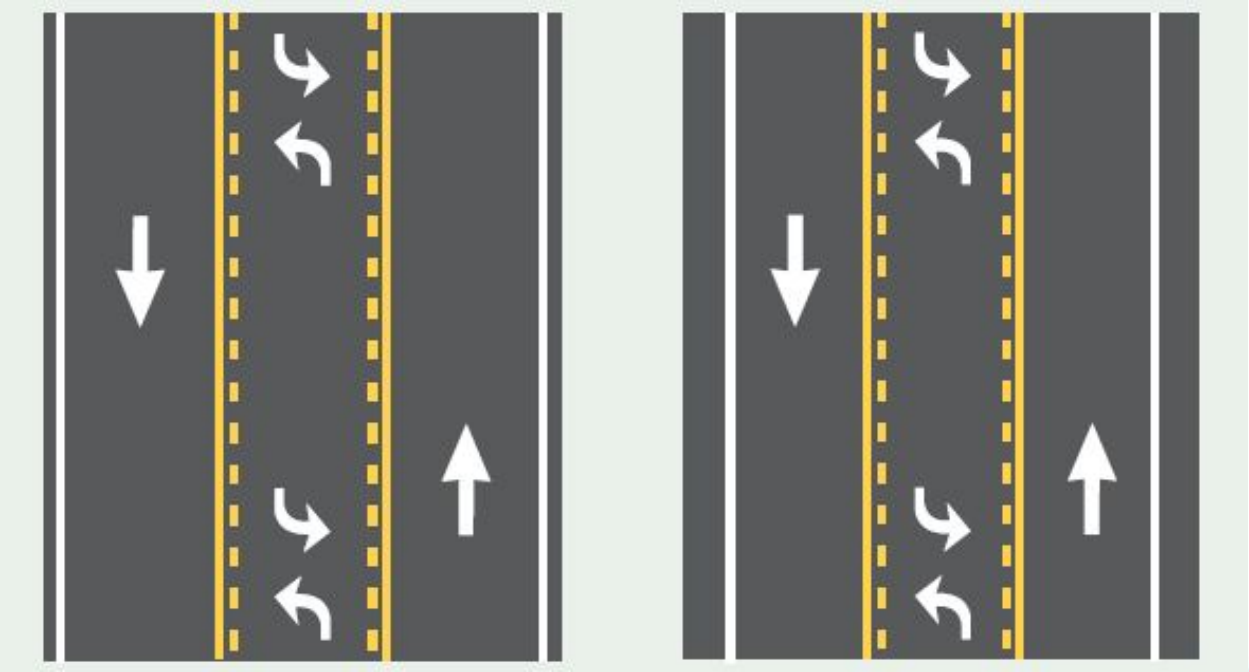
The AMATS Road Diet Analysis

- Reduce the inventory by eliminating
  - Interstates and freeways
  - Divided roadways (freeway look-alikes)
  - Roadways with only two lanes

- In rare cases three lane roads and five lane roads can receive a road diet

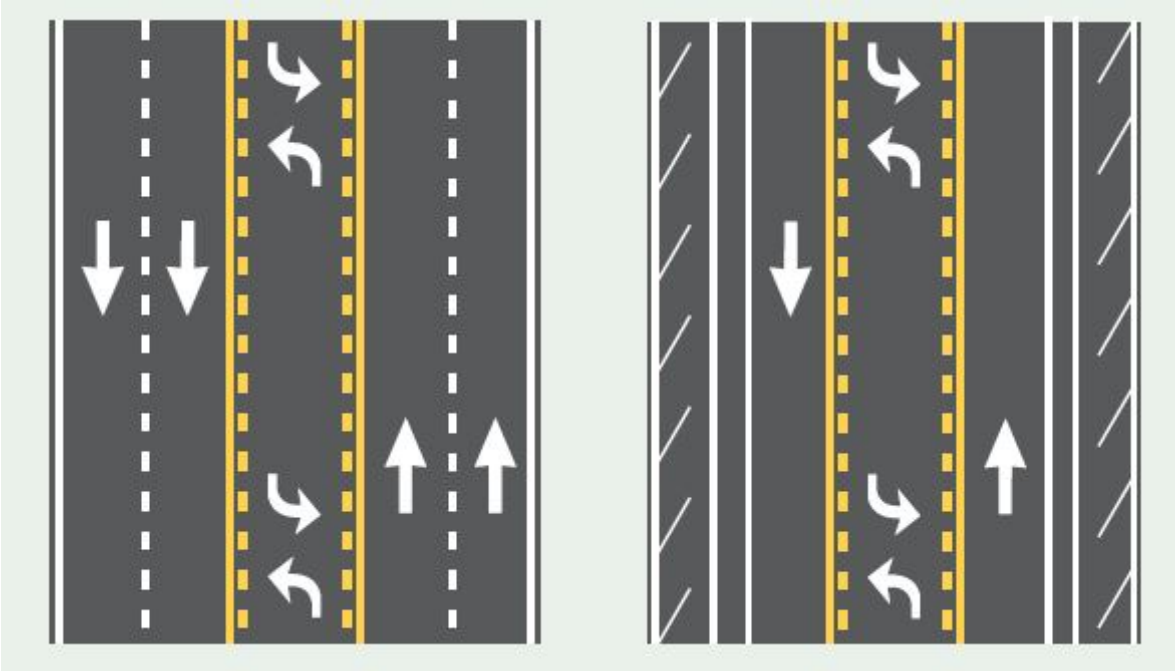
The AMATS Road Diet Analysis

- Three lane roads must have unusually wide lanes
  - Reduce width of each lane
  - Allocate space for bike lane



The AMATS Road Diet Analysis

- Road diet applied to five lane roads has to have extra space well defined



The AMATS Road Diet Analysis

- Find average daily traffic (ADT)
  - Tier One: less than **10,000**
  - Tier Two: **10,000 to 15,000**
  - Tier Three: **15,000 to 20,000**

  - Over 20,000 is probably not a good choice

The AMATS Road Diet Analysis

- Determine peak hour volume
  - If this is not provided it is usually 8-12% of the ADT
- Determine directional peak hour volume
  - If this is not provided use “engineering judgment”
  - Peak hour directional volume less than 800-900

The AMATS Road Diet Analysis

- **Additional Analysis Recommended**
  - Tier 2 roadways (ADT 10,000-15,000) key intersections should to be analyzed, intersection spacing and length of queues considered
  - Tier 3 roadways (ADT 15,000-20,000) key intersections should to be analyzed and corridor analysis for overall level of service

The AMATS Road Diet Analysis

- **Additional Considerations**
  - Roadway function and it's environment
  - Continuity
  - Railroad tracks - queues twice as long with less lanes
  - Grades and slow moving vehicles
  - Frequently stopping vehicles, especially buses
  - Population and traffic volume trends

The AMATS Road Diet Analysis

- **Successful Implementation**
  - All stakeholders are part of the planning process
  - Coordinate with resurfacing projects/schedules
  - Community support

Road Diet Examples

Copley Rd (SR 162) in Akron, ADT = 13,300

Road Diet Examples

South St in Akron, ADT = 1,920

Road Diet Examples

South Main St in Summit Co., ADT ≈ 12,000

Road Diet Projects Planned

- E. Tallmadge Ave in Akron, ADT = 16,610

Road Diet Projects Planned

- Cedar St/Exchange St in Akron, four one-way lanes, ADT = 10,390

High Ranking Candidates

Maple St in Akron, ADT = 5,760

High Ranking Candidates

Wolf Ledges Pkwy in Akron, ADT = 8,400

High Ranking Candidates

E. Exchange St in Akron, ADT ≈ 10,000

High Ranking Candidates

N. Main St in Akron, ADT ≈ 10,000

Questions?

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