



Proposal for Parallel Parking on Henry Law Avenue

Strong Towns Seacoast
April 14, 2025 - Dover Parking Commission



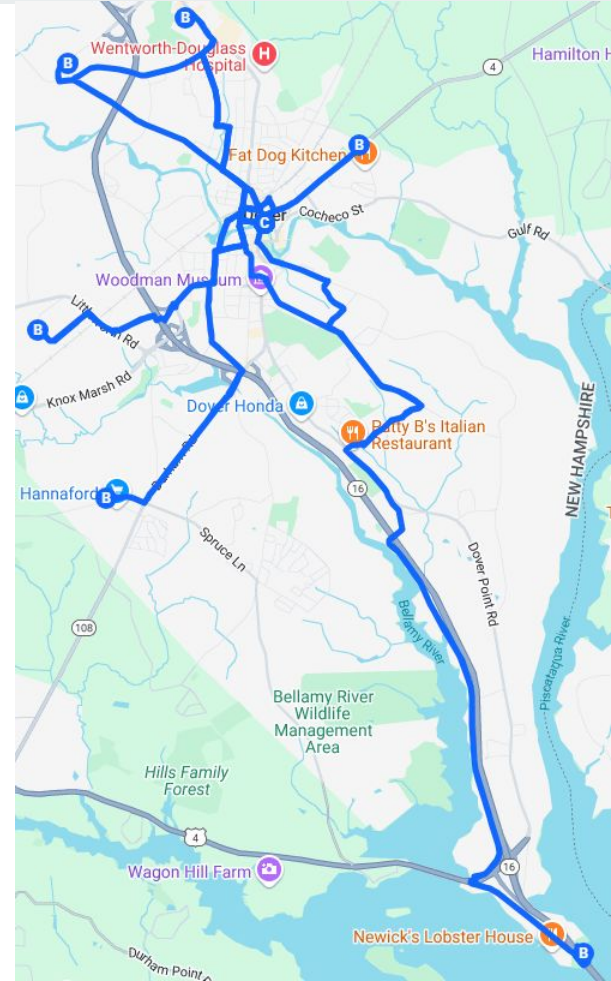
Purpose:

Replace current angled parking with parallel parking in the upcoming redesign of Henry Law Ave to allow for a contraflow bike lane.

**Henry Law Ave is an essential
component of Dover's bicycle
network**

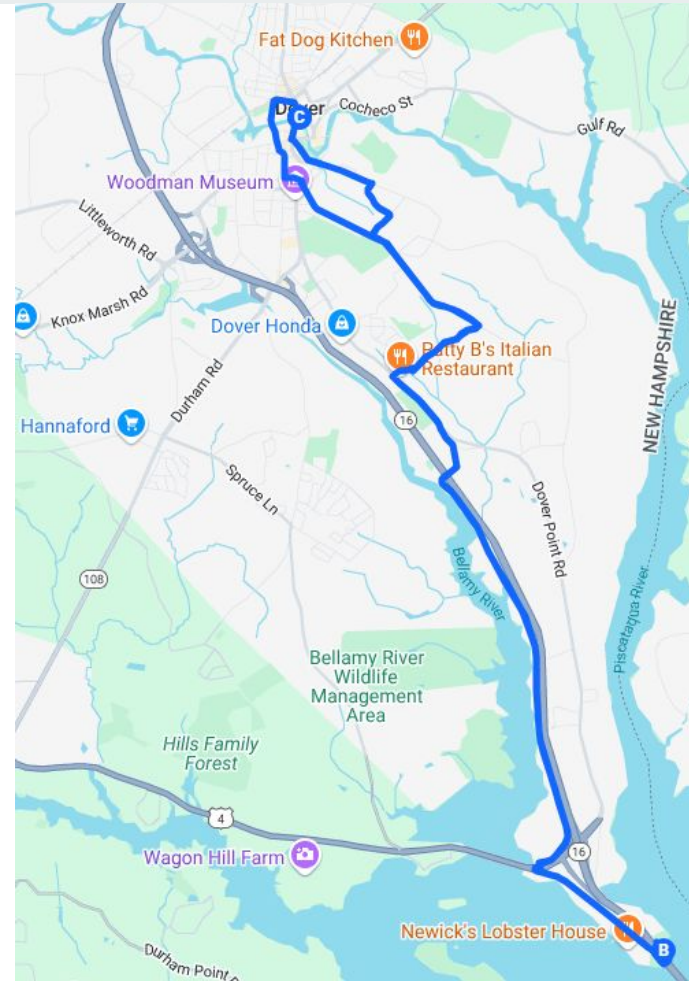
Identifying Downtown Dover Bicycle Routes

- Facilitate functional and recreational travel by bike
- Enhance economic activity within downtown while reducing traffic and demand for parking

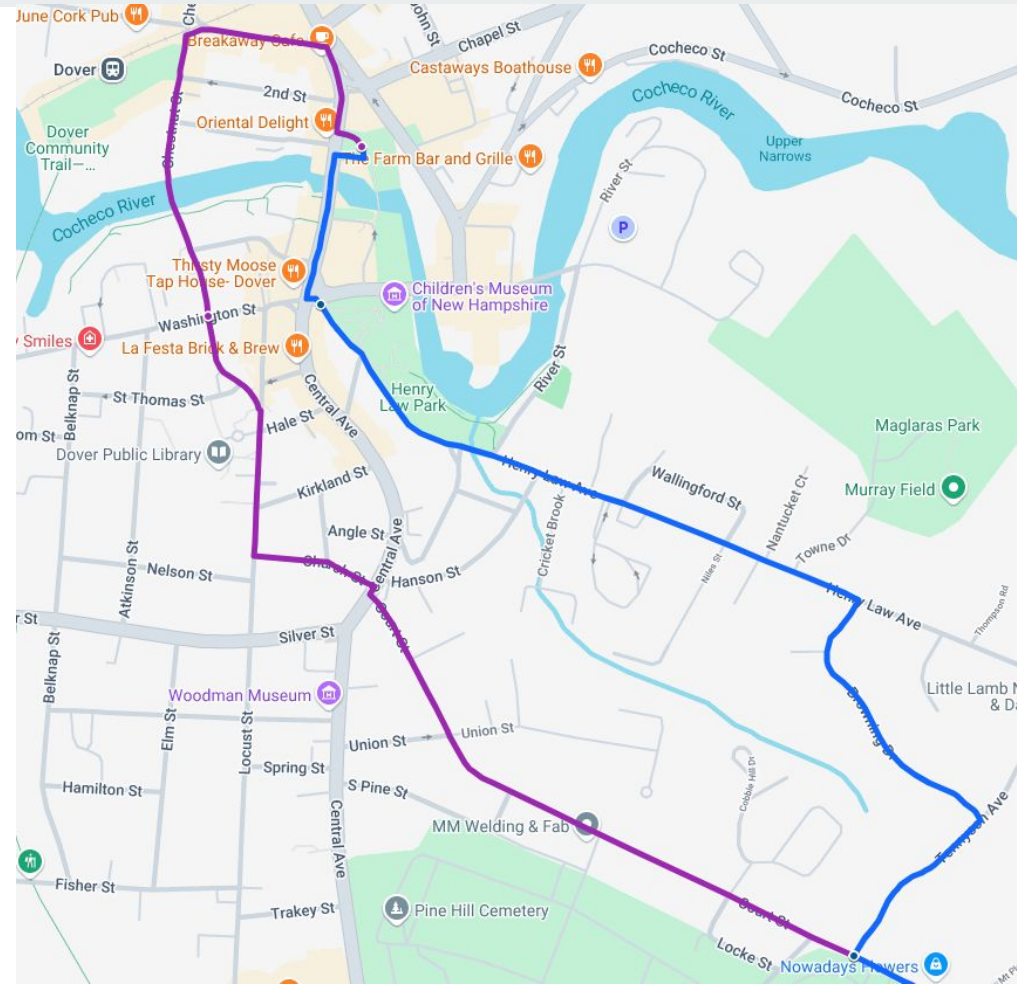


Dover Point Route

- Connects downtown to multi-use path on Little Bay Bridge, Newington, Portsmouth
- Route through Point PI avoids high-stress Central Ave and Dover Point Rd
- Different outbound and inbound paths near downtown (not ideal)

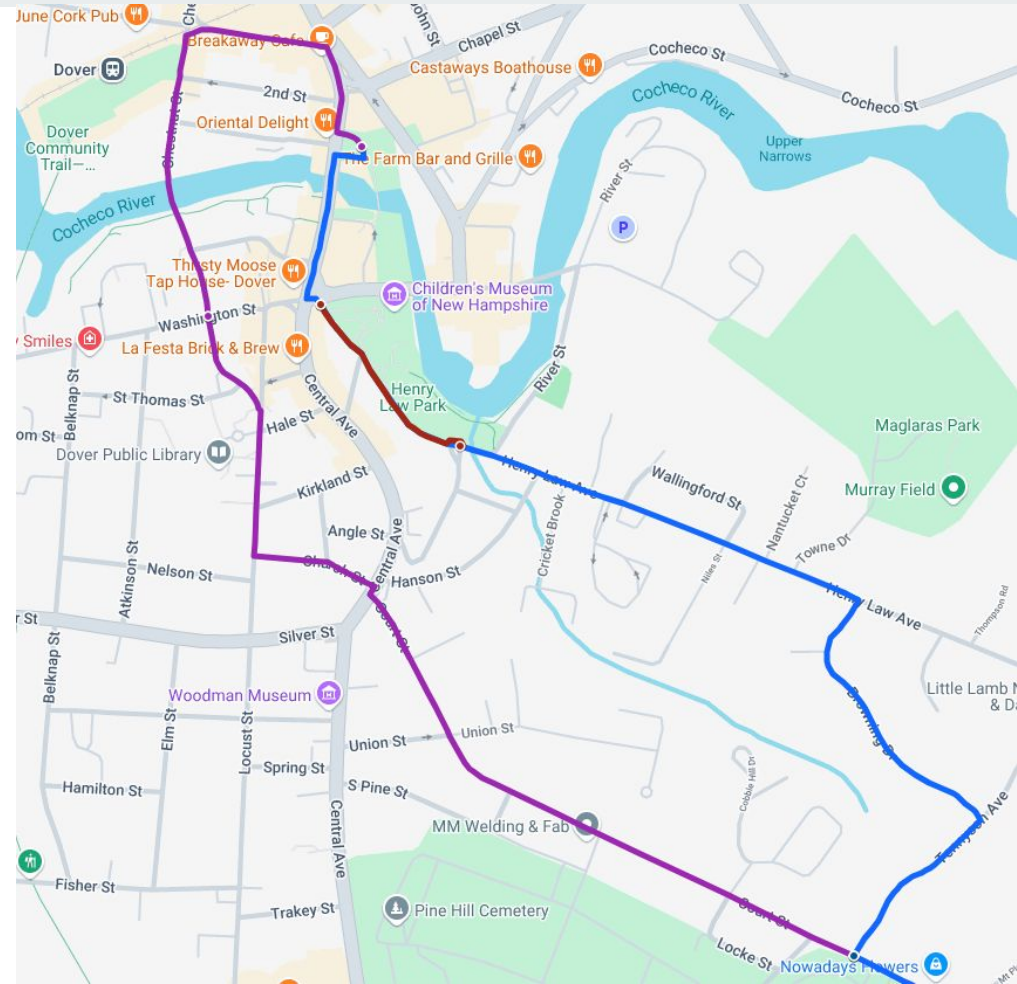


Current Inbound and Outbound Paths



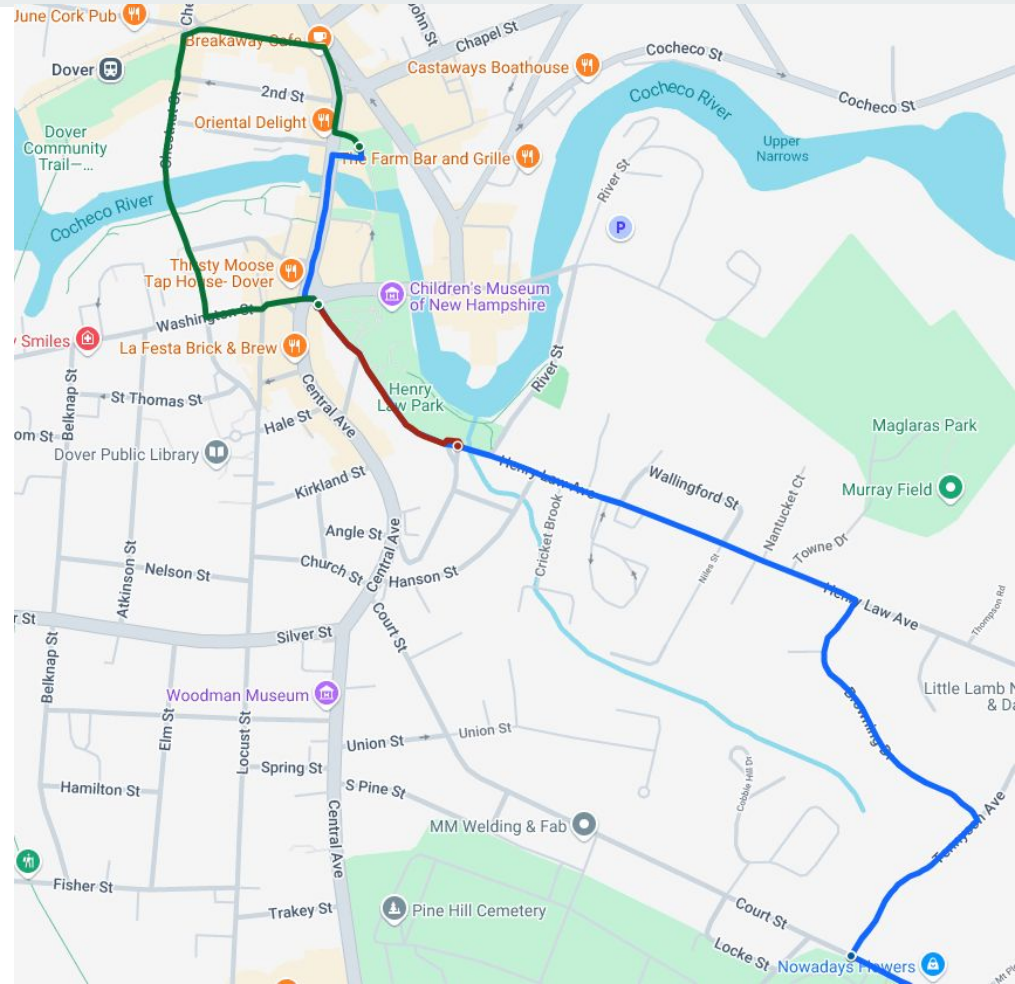
Current Inbound and Outbound Paths

- Consequence of one-way (outbound) traffic on Henry Law Ave
- Complicates wayfinding
- Forces inbound cyclists onto higher-stress Central or Locust
- High-stress crossing of Central at Court/Church



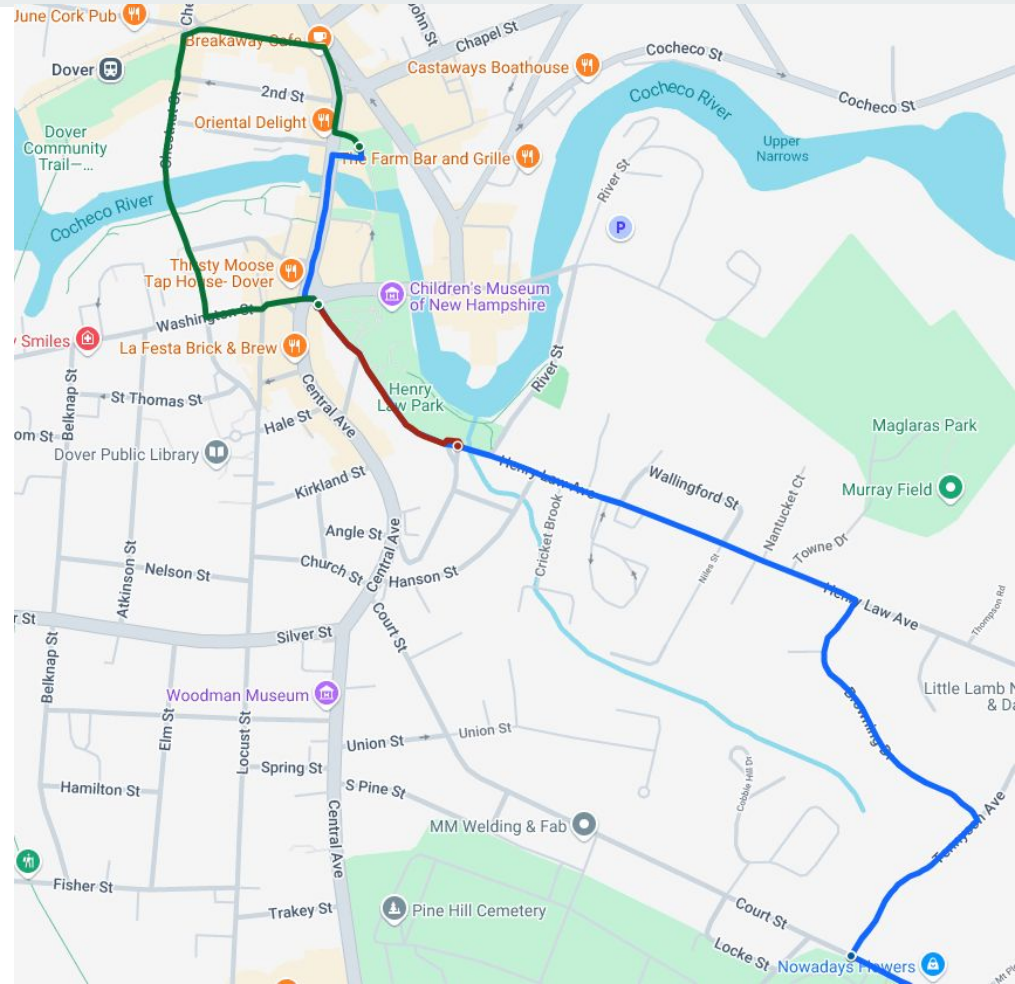
Proposed Contraflow Bike Traffic on Henry Law Ave

- Improved wayfinding – largely consolidates inbound and outbound paths
- Lower stress for inbound leg
- Inbound leg would continue north along Chestnut



Proposed Contraflow Bike Traffic on Henry Law Ave

- Improved access to Henry Law Park for youth and other non-drivers
- Decreased demand for vehicle parking (per park visitor)
- Implements complete streets policy

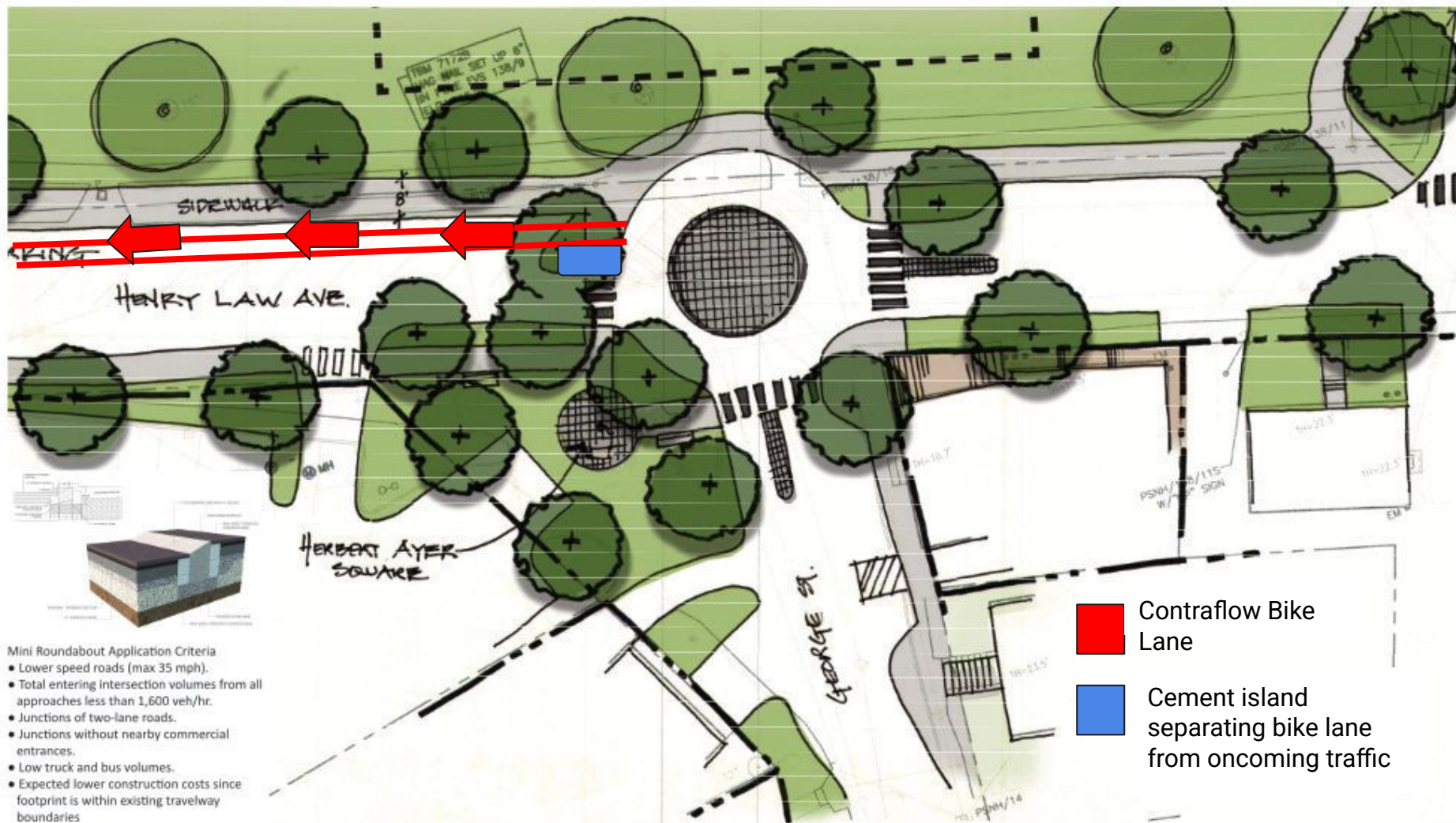




Vision for 2035 - Dover Master Plan

- (6.3) - Bike infrastructure, including protected bike lanes, bike rentals, and storage are available throughout the City.
- (6.6) - Complete streets development fosters non-motorized, alternative transportation options.
- (6.13) - Alternative options help to reduce traffic and congestion and improve safety.
- (6.11) - Car-free life is possible in Dover.
- (4.6) - Housing in the downtown area is available for walkable, car-less living.
- (3.12) - Parking is accessible and adequate for downtown, but does not detract from the walkable experience.

Proposed Contraflow Bicycle Lane on Henry Law Ave



Henry Law Ave Street Design: Option 1

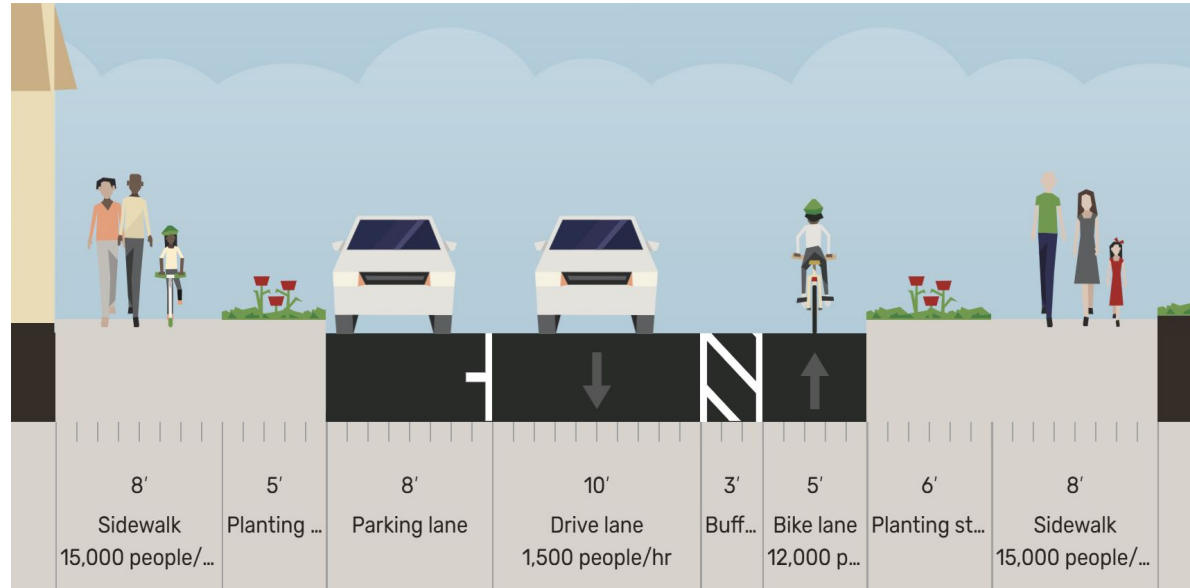


Henry Law Ave

Street view of Henry
Law Ave looking NW
(park is to the right)

Henry Law Ave Street Design: Option 1

- Remove angled parking and replace it with parallel parking on opposite side of the street
 - Additional crosswalk needed to connect parallel parking to Henry Law Park
- Estimated reduction of 32 spaces (53%)



Street view of Henry Law Ave looking NW
(park is to the right)

Henry Law Ave Street Design: Option 2

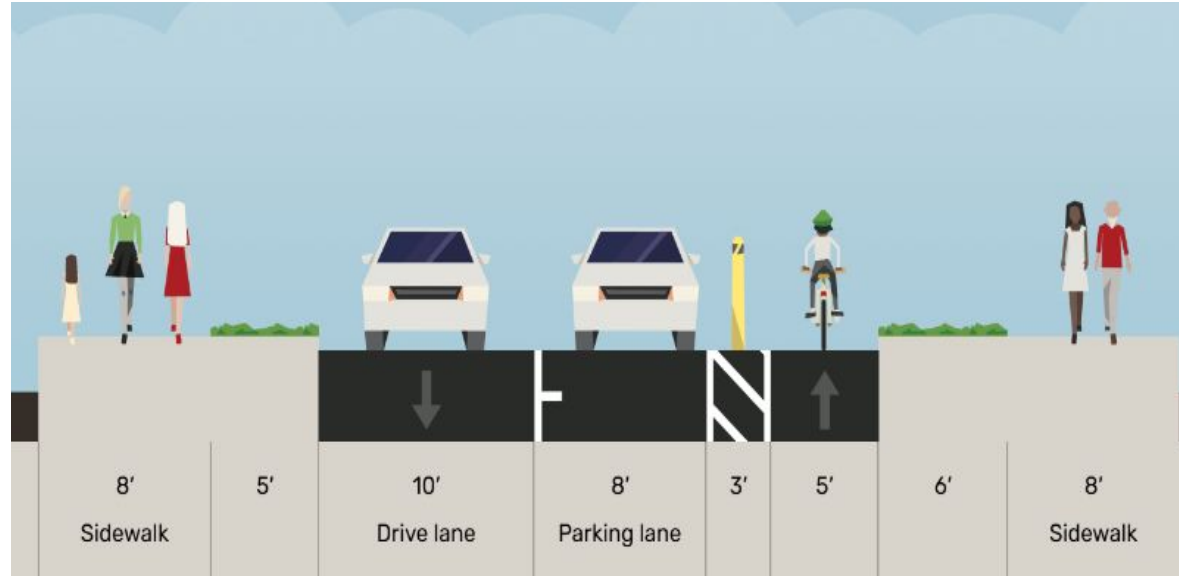


Henry Law Ave

Street view of Henry Law Ave looking NW
(park is to the right)

Henry Law Ave Street Design: Option 2

- Remove angled parking and replace it with parallel parking
- Estimated reduction of 27 spaces (45%)



Street view of Henry Law Ave looking
NW (park is to the right)

Replacing Angled Parking with Parallel Parking

How much parking do we need on Henry Law Ave?

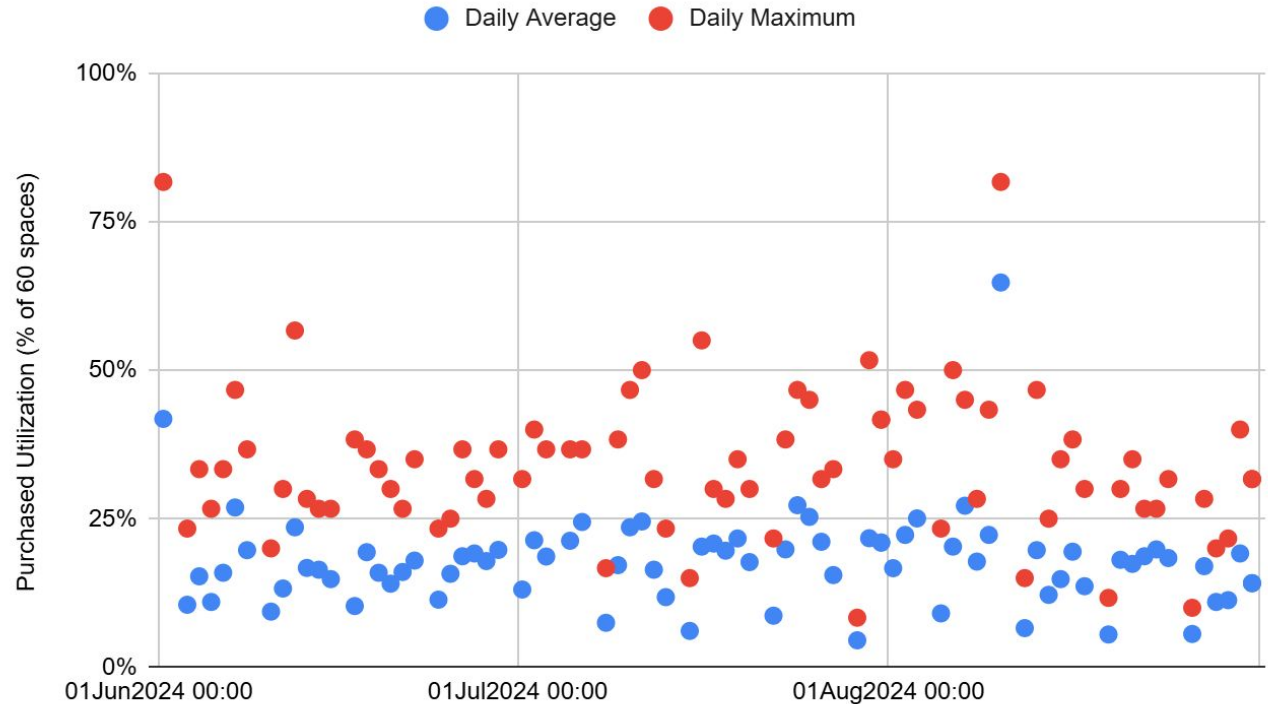
Metered Parking Utilization on Henry Law Ave (2024)



Metered spaces	60
Metered days	302
Metered hours (9am-8pm) / day	11
Total metered hours per year	199320
Hours purchased (2024)	28,694
Utilization (purchased only)	14.4%

Daily Average and Peak Utilization (June-August 2024)

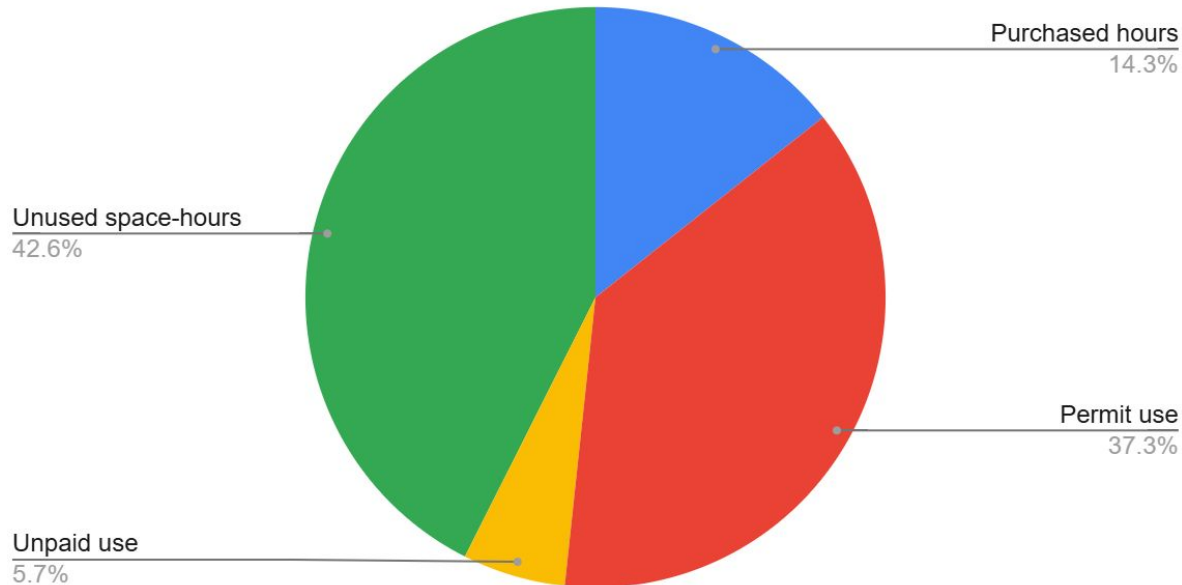
- Daily average purchased utilization slightly higher than annual average (~17% Summer vs 14% annual)
- Daily peak purchased utilization exceeds 50% on only two to three days per month



Total Parking Utilization on Henry Law Ave

Sources (guidance from Bill Simons):

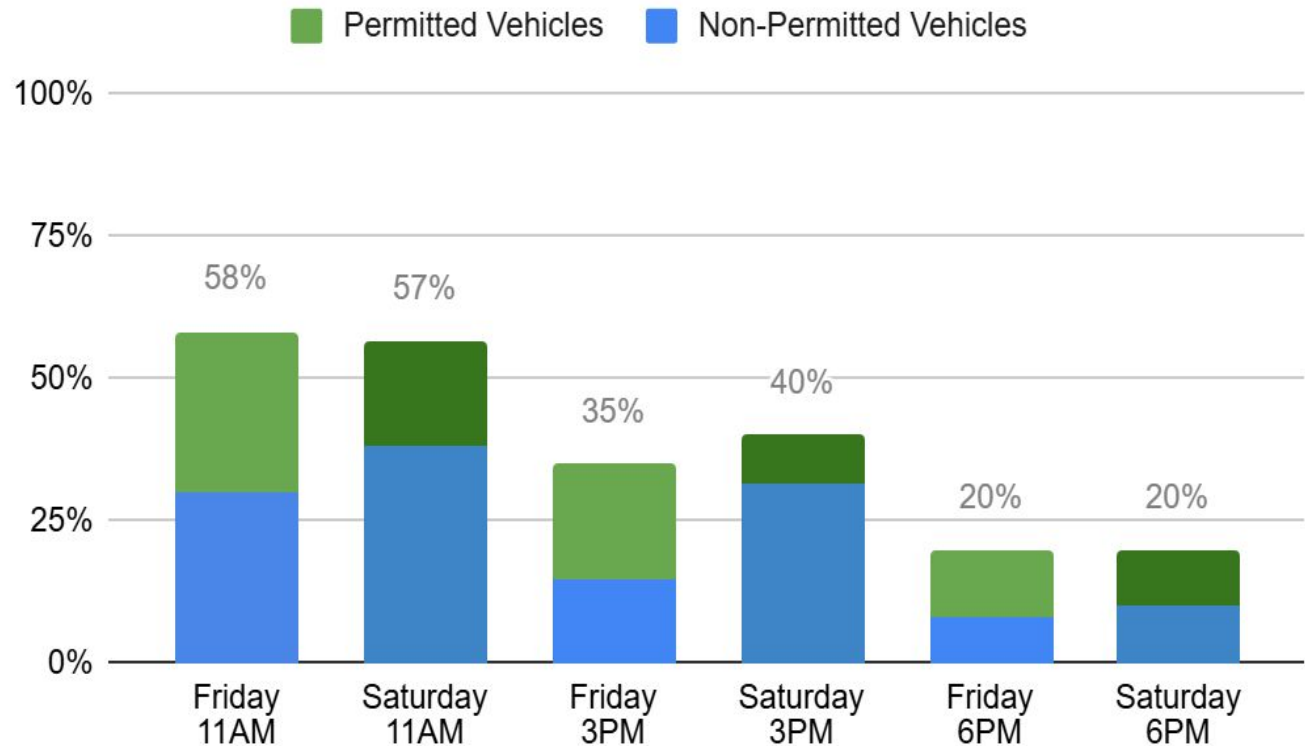
- Purchased hours - Annual (2024) metered data
- Unpaid use - estimates from:
 - Walking disability
 - Military-related
 - Free 15-minute
 - Illegal parking
- Permit use - estimates from:
 - 18 Residential
 - 14 Business



(during metered hours only)

Parking Utilization on Henry Law Ave (Observational Data)

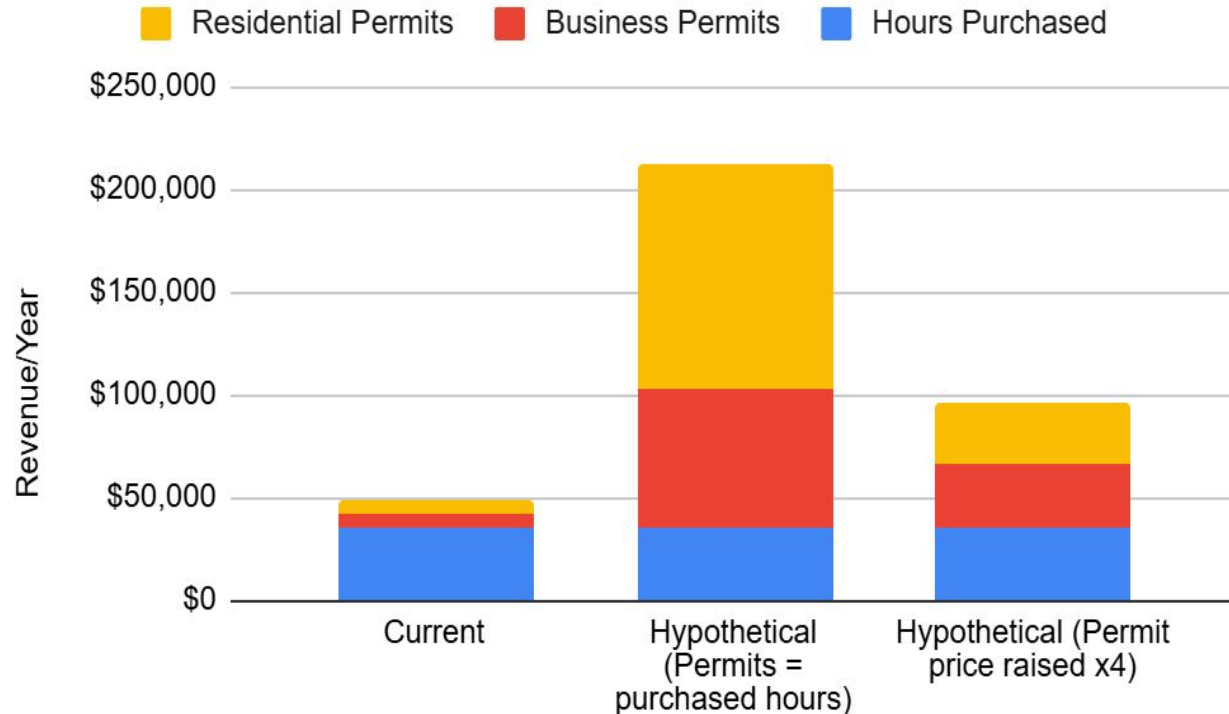
- Consistent with estimated permitted and unused parking
- 40% or more of all spaces go unused
- Permitted vehicles often make up the majority of parked cars



Observations recorded 1/24/25 and 1/25/25

Parking Revenue for Henry Law Ave

- If permit-holders were paying metered prices, the city would make over 4x as much in parking revenue
- At \$35 per permit/per month, permit-holders are getting up to a 94% discount off metered price (no wonder they're sold out)
- Permit prices could be *quadrupled* and still offer a 60% discount, while doubling parking revenue



Summary: Converting Angled Parking to Parallel Parking

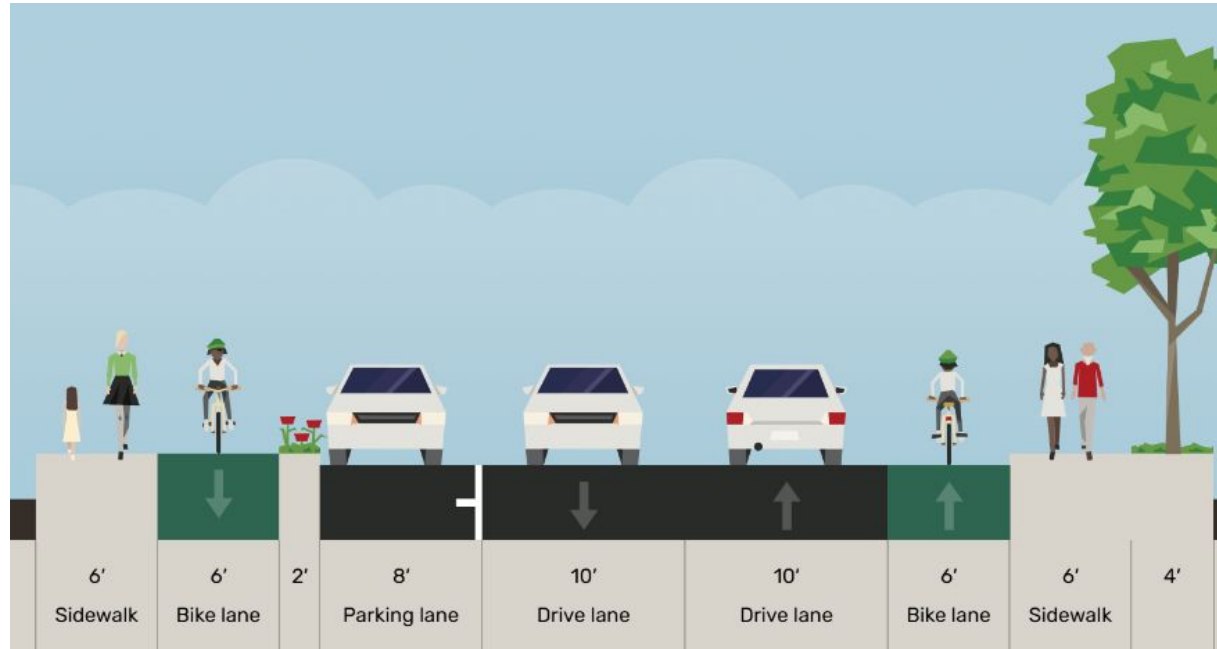


- Conversion is part of effort to implement Dover's Complete Streets Policy
 - Improved bicycle and pedestrian access will reduce demand for vehicle parking
- Converting angled parking to parallel parking would result in approximately a 45% reduction in parking spaces. On average, over 40% of existing spaces are unused
- Majority of current utilization is due to permitted parking
 - Proactively raise permit prices until they stop selling out to mitigate high utilization by permit-holders
- Residents of nearby apartments already have dedicated parking lots
- Visitors may park further down Henry Law Ave, indoor pool lot, new Payne St lot, or elsewhere (eg, Orchard St garage)

Payne St Parking

Payne Street Design Proposal

- Replace 90-degree angled parking with parallel parking to allow for bike lane
- Maintain currently-proposed parallel parking on northern (river) side of street
- Estimated reduction by approximately 4 parking spaces



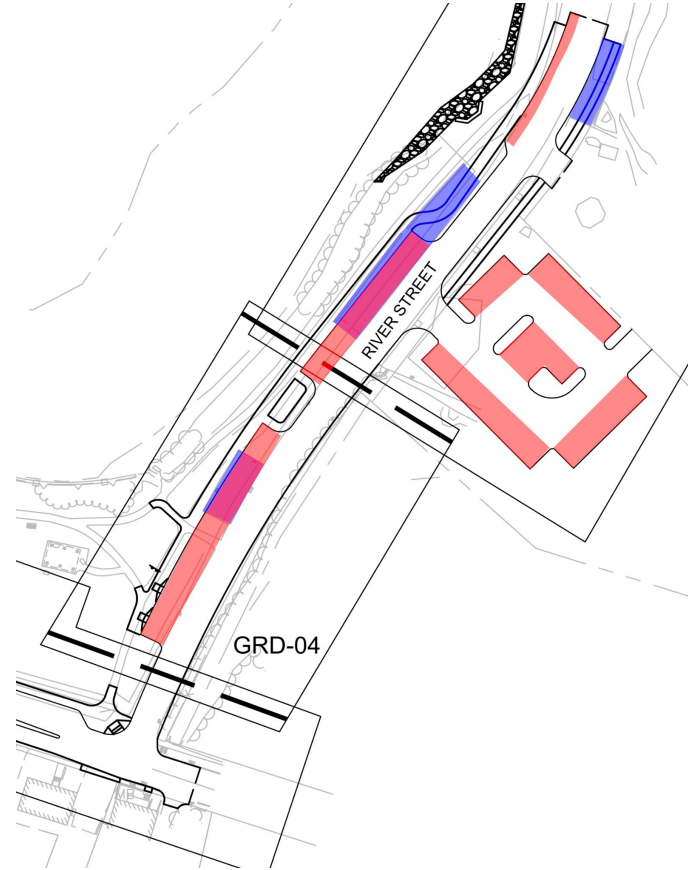
Street view of Payne St. looking NE (park/river is to the left)

Payne Street: New Parking

Current design of Payne St in the Henry Law Ave Redesign adds a large amount of parking, including conversion of the old skate park to a parking lot

Old parking (currently unavailable due to construction)

New parking





Summary: Tally of Parking Spaces

	Existing	75% Design	Strong Towns Seacoast
Upper Henry Law Ave	29	29	≈ 15 to 18 (52-62% existing)*
Lower Henry Law Ave	31	≈ 28 (90% existing)	≈ 13 to 15 (42-48% existing)*
Payne St	n/a (≈ 23)	≈ 32	≈ 19
Off-street lot	0	41	41
Total	60 to ≈ 83	≈ 130	≈ 88 to 91

* Assumes 20' end / 22' non-end spaces. Option 1: 233' + 111' in upper, 294' in lower. Option 2: 392' in upper, 343' in lower.

Questions?

Precedence for Contraflow Bike Lanes

Contraflow Bike Lanes

- Separated bike lane with a painted double yellow line and a buffer area for bicycles traveling in the opposite direction of vehicles
- Shared lane marking on the street for bicycles traveling in the same direction as vehicles

From Urban Bikeway Design Guide 2e
(2014)

National Association of City
Transportation Officials



Contraflow Bike Lanes



◀ (Manchester) *Bicycle Lanes:*

Conventional bike lanes. Bike lanes are on-road lanes exclusively for bicycles, separated from the travel lanes with a single white stripe. They may or may not also have a painted buffer separating them from motorized traffic. If they do, they are called buffered bicycle lanes.

Contraflow bike lanes. One-way streets can be two-way streets for people riding bicycles by painting conventional bike lanes to the right of motorized traffic and contraflow lanes on the opposite side. Contraflow lanes are separated from motorized traffic with double yellow striping.

From “Your Guide To Promoting Walking and Bicycling Accomodations in New Hampshire”

New Hampshire Department of Transportation

Contraflow Bike Lanes

From Manual on Uniform Traffic
Control Devices 11e (2023)

Federal Highway Administration, US
Department of Transportation

