Transportation, Traffic, and Parking City of New Haven Annual Report 2019

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Transportation, Traffic, & Parking

Annual Key Performance Evaluation

New Haven, Greatest Small City in America

MISSION

The City of New Haven's Transportation, Traffic and Parking Department combines elements of traffic safety and engineering; parking management; community and economic development and urban planning. Our goal is to deliver safe and efficient traffic control and transportation systems, while planning for future mobility needs and continuously integrating sustainable transportation supports, thereby improving the quality of life throughout the City of New Haven and contributing to the economic growth of the City.

The Department of Transportation, Traffic and Parking is responsible for all aspects of traffic safety and control as well as management of all on-street parking in the City. These responsibilities include traffic planning and analysis; installation and maintenance of traffic control devices, signs, signals and markings; parking planning, meter distribution, operation; parking enforcement; public transportation planning, and the management of street lights. The department is organized in four groups: Traffic Control, Parking Operations, Safety Guards and Transportation Planning.

Going forward in a time of increasing urbanization and global climate change, the depth and breadth of the transit and non-motorized system will become ever more critical to our overall environmental performance and economic growth. As New Haven grows into a regional center of global significance, the depth of our transit and non-motorized systems become even more vital to our overall environmental performance and economic growth. The department therefore strives to develop an integrated transportation system which connects housing to jobs and people to their community; a system that is built for all users and made safe for all ages.

MEET OUR TEAM

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Doug Hausladen	Director	(203) 946-8067
Karla Lindquist	Acting Deputy Director	(203) 946-8077
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James Harriott	Executive Administrative Assistant	(203) 946-8067
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Madeline Dundee	Receptionist	(203) 946-8075
Chris Brockenberry	Intern	(203) 946-8075
Chelsea Colon-Oliveras	Intern	(203) 946-8075

Traffic Control

Bruce Fischer	Traffic Operations Engineer	(203) 946-8073
Rajat Mathur	Traffic Project Engineer	(203) 946-8070
Bijan Notghi	Traffic Project Engineer	(203) 946-8069

Signs / Markings Crew (203) 946-8079

Danny Cruz Signs & Markings Lead Dan Estremera, Kevin Rose, Geraldo Olavarria

Signal Crew (203) 946-8080

J. Scott Westervelt Traffic Signal Superintendent James Mesner, Albert Rivas, Justyn Valle, Joseph Chapman

Meter Crew (203) 946-8081

Mark Sobolewski Parking Meter Supervisor

Carlos Herrara, Raymond Shaw

Parking Management

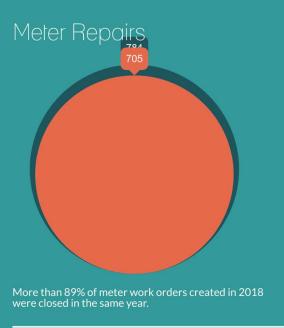
Velisha Cloud Parking Enforcement Supervisor (203) 946-6777

Stephen Saladino Parking Enforcement Supervisor

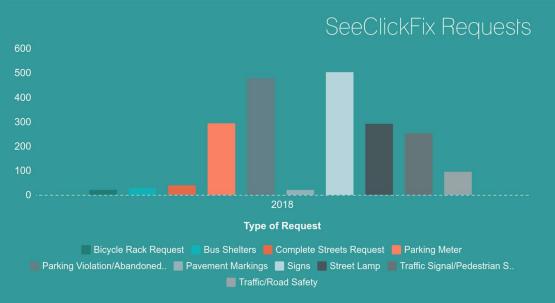
Joe Canzanella, Stephen Randolph, Michael Granucci, Cheryl Horner, Nakeya Harrison, Roy Ketchum, Darryl Lewis, Enrique Olavarria, Rolando Perez, John Rispoli, Albert Ruggiero, Erank Buig, Gaarge Stane, Arthur Alvaredo, Plaine McVay, Vim Angivele

Frank Ruiz, George Stone, Arthur Alvarado, Blaine McKay, Kim Arciuolo

Transportation, Traffic, & Parking







I. Administration and Planning

2018 Highlights:

- Managed and oversaw the vendor installation of first 25 of 40 Phase I Bike New Haven bike share stations; deployed over 200 bike share bicycles;
- Implemented full digitization of street banner and Emergency Order No Parking systems
- Implemented digitization of Department Snow Emergency Operations management system through VEOCI software system.
- Awarded Parklet Grant with GoNewHavenGo, CAO departments and installed the first Parklet in New Haven at Grand Avenue at Maltby Place in cooperation with Parks Department and Yale School of Architecture.
- Negotiated pedestrian upgrades for intersections adjacent to new developments at Audubon Square (Audubon at Orange), now completed and MetroStar/Blake Hotel (High at George).
- Created an online Portal for Traffic Authority activities.
- Completion of the Move New Haven transit study research and work with the General Assembly and CT Transit to begin implementing recommendations for New Haven bus system upgrades.
- Consolidation of Whalley Avenue and Grand Avenue bus stops to improve CT Transit efficiency and service along the Whalley and Grand Avenue corridors.

2019 Workplan:

- Fully implement License Plate Recognition equipment to improve efficiency and effectiveness of parking enforcement systems and officers.
- Implement dynamic meter pricing downtown to achieve overall 85 percent occupancy, reducing circling, parker frustration, and pollution.
- Fully implement Digital Permitting system for Residential and other Parking Permits.
- Manage vendor completion of all 40 Phase I Bike New Haven, bike share stations; complete replacement of existing "Noa" technology bike fleet with new "NextBike" fleet of smart bike share bikes; add 100 e-scooter mopeds to Bike Share fleet.
- Complete departmental reorganization to improve operational efficiency and planning and contracting efficiencies.
- Rework the Meter Bag program including new bags, including full automation of the inventory control and billing system.
- Construct Howard Avenue and Crescent Street traffic calming and corridor improvements in conjunction with the Engineering Department.
- Re-bid mobile enforcement and parking enforcement applications.
- Launch City-wide Transportation Master Plan.
- Continual structural inspection and necessary replacement of street lights and luminaires citywide.

Signals Division

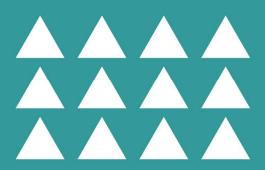
2018 Work Orders



Total work orders compl.. (99.31%)

The crew completed 2014 work orders of the 2028 closed in 2018

Intersections



Closed out the signal reconstruction of 12 intersections.



Edgewood Avenue Cycle Track

Completed the design of the Edgewood Avenue Cycle Track, which will be bid for construction in 2019.

II. Signals Division

2018 Highlights:

- On-going upgrades to all streetlights in vicinity of Temple Street between Chapel Street and Elm street to improve lighting along the New Haven Green; upgraded street lighting along the Sargent Drive and Long Wharf Drive corridors.
- Currently in construction, under the LOTCIP Project 092-0001, of six signalized intersections citywide at the following locations: Hallock at Sargent; East at Ives, Cedar at Spring, Congress at West, Davenport at Winthrop, and Davenport at Asylum.
- Ongoing structural inspection and necessary replacements of aging bishop's crook light poles in Downtown and citywide.
- Added luminaire arms to existing intersection poles to improve intersection lighting at various intersections citywide.
- Added streetlighting along Crown Street between Orange Street and Church Street.
- Upgraded pedestrian safety experience adjacent to Yale-New Haven Children's Hospital and new Ronald McDonald House at Howard Avenue at Park Street with the installation of new crosswalks and modernized pedestrian signal heads.
- Completed the Downtown Crossing Route 34 Phase 2 design plans and awarded project for construction.
- Completed the CMAQ Downtown Traffic Signal Replacement Project 92-666 design plans and advertised project for construction.
- Currently in process of redesigning 4 traffic signals in the West River and Hill North neighborhoods. CMAQ Project # 92-682 will reconstruct traffic signals along the western sections of MLK and Legion Avenue corridors.
- Completed design of the Edgewood Avenue corridor cycle track.
- Performed engineering evaluation and operational performance improvements along the Grand Avenue corridor traffic signal system from Quinnipiac Avenue to Olive Street.
- Performed engineering evaluation and operational performance improvements along the State Street corridor traffic signal system from Grace Street to Audubon Street.
- Installation of a radar-based detection system at the intersection of Whitney Avenue at Humphrey Street.
- Participated in the Long Wharf Responsible Growth Plan Project to evaluate future traffic and transportation concepts to improve mobility and enhance economic development of the local region.
- Project closeout for Project # 92-488 which included the reconstruction of 12 signalized intersections.
- Preparation of plans and documents relative to updating Traffic Management Schematics by gathering and compiling the existing fiber optic communication network and Traffic Management Center (TMC). The intent of this project was to identify the existing spare fiber optic strands for use by other City agencies in New Haven.
- Prepared a traffic study to improve traffic signal operations at the Ferry at Lombard intersection.
- Installed multi-space parking meters on roadway segment along Park Street, George Street, College Street, Court Street, State Street, Grove Street, and Church Street South.

- Completed the redesign of nine signalized intersections in vicinity of Downtown New Haven to include a Lead Pedestrian Interval (LPI) and upgrade ADA amenities.
- In process of designing the first HAWK traffic signal at the Whalley Avenue and Stop & Shop site drive intersection.
- Installation of a speed sign at the Dixville Avenue and Argyle Street intersection.

2019 Workplan:

- Manage start of construction of the Downtown Crossing Phase II Project; reconstruction of all signals and intersection at South Orange at MLK and Oak Street.
- Advance the Downtown Crossing Route 34 Phase 3 Design-Build Project.
- Begin construction of CMAQ Project # 92-666 The Downtown Traffic Signal Replacement Project.
- Begin construction of the pedestrian signal improvement project at nine signalized intersections.
- Begin construction of the HAWK traffic signal at the Whalley Avenue and Stop & Shop site drive intersection.
- Complete the signal design of CMAQ Project 92-682 redesign of the West River signalized intersections along MLK Boulevard and Legion Avenue corridors.
- Begin construction of the Edgewood Avenue and Yale Avenue Cycle Tracks.
- Construct a signalized four-way intersection at Winthrop Avenue at Edgewood Avenue as part of Edgewood Cycle Track.

Signs & Markings Division







III. Signs and Markings Division

2018 Highlights:

- Installed Court Street contra-flow bike lane between Orange Street and State Street.
- Installed upgraded crosswalk markings at 141 intersections.
- Installed 603,144 linear feet of centerline paint markings.
- Installed 104,567 feet of epoxy longline markings on newly paved roads.
- Installed 2 new bus shelters.
- Reviewed and approved 1167 right of way permit applications.
- Reviewed and approved 235 special event applications.
- Reviewed and approved 159 outdoor seating applications.
- Reviewed 79 site plan applications.
- Prepared 23 Traffic Authority items.

2019 Workplan:

- Completion of redesign and field test of new downtown parking meter and parking enforcement signage to improve legibility and user comprehension.
- Continue citywide crosswalk markings improvement program.
- Continue centerline markings improvement program.
- Construct and stripe two-way cycle track along Yale Avenue.
- Construct and stripe two-way cycle track markings and delineators along Edgewood Avenue

IV. Initiatives

Bike New Haven

New Haven has consistently worked to not only maintain but increase its commitment to environmentally conscious initiatives that promote activity, inclusivity, and community connectivity, making a bike share program a perfect fit.

Bike New Haven is growing into an integral part of the city's transportation network, and compliments our bicycle infrastructure improvements and education initiatives, making New Haven a better place to get around.

Bike New Haven customers surveyed report that over 1/4th of every ride is going someplace they previously would have driven.

By creating mode shift such as this, Bike New Haven is helping improve our air quality by reducing carbon emission, decreasing traffic congestion of cars, and improving the safety of our roads.

Bike New Haven usage is consistently increasing, and we've seen over 16,000 trips over 11,000 sessions and 12,000 miles by over 3,700 registered users.

Progressive Pricing

Proposed Price Zones

The City of New Haven is beginning what will be a three-year pilot program to test the effects of charging different rates for metered on-street parking depending on the time of day and level of parking demand. This is known as performance-based pricing (congestion pricing, demand-responsive pricing, or dynamic pricing). The goal of this effort is to price on-street metered parking in high-demand areas to achieve 1-2 empty spaces per block at any given time during busy periods.

Metrics for price change per utilization

As part of the pilot program, price changes would be gradual. Meter pricing if raised, in certain areas, would only be increased 25 cents once every three months ("A Quarter A Quarter"). Meter prices could also decrease as part of the pilot program on underutilized blocks in a similar fashion. The 1-2 empty spaces per block would be achieved by using price differences to influence some price sensitive motorists to park on underutilized lower-priced blocks, which may be a slightly further walk from their destination, instead on high-demand higher-priced blocks essentially (balancing demand with supply). Increases to meter price in high-demand areas can also have the effect of increasing parking turnover, which is beneficial to downtown retail. Note that "similar variable charges have been successfully utilized in other industries - for example, airline tickets, cell phone rates, and electricity rates" (Federal Highway Administration).

Move New Haven

Strategies for improving our public transit system Current schedule of progress

STRATEGY 1: Bus Rapid Transit (BRT) Features

- Frequent and reliable service of 10-15 minutes or less on designated lines
- Early morning to after midnight service
- Faster service with fewer stops
- Direct service with effective connections to local service and other modes
- Dedicated lanes or portions of lanes
- Bus priority at intersections
- Real-time information and user-friendly maps
- Faster fare payment to reduce dwell times at bus stops
- Improved, distinct level-boarding bus-stops/stations with amenities
- Unique bus branding to increase visibility
- Smart technology buses

STRATEGY 2: Bus Stop Consolidation

Bus stop consolidation is one of the least cost and most effective ways to provide faster, more reliable, and comfortable service. The placement and spacing of bus stops has an impact on the reliability and travel time of a route. With more bus stops, bus riders don't have to walk as far to access transit service, but they may spend more time on the bus and waiting at the bus stop because service reliability is eroded and travel time is increased. Bus stop consolidation focuses on balancing travel time and effective customer access.

STRATEGY 3: Transit Hubs

- Increasing the number of hubs provides more direct travel
- Establish mini-hubs where two or more frequent bus routes intersect or multiple bus/rail transfers occur
- Coordinate transit timetables so that wait time is reduced
- Provide hub infrastructures such as benches, shelters, canopies and perhaps a fixed building with amenities

STRATEGY 4: Route Simplification & Restructuring

- Symmetrical inbound and outbound routes
- Eliminate route deviations with low demand
- Introduce route variations only if there is a very compelling reason
- Provide direct path of travel with multiple transfer locations
- Rename/renumber routes so they are logically linked to their markets, landmarks, hubs or orientation
- Make sure the route serves a well-defined market
- Frequent and fewer routes with coordinated transfer opportunities results in a faster overall trip

STRATEGY 5: Transit Priority

- Traffic Lanes prioritized for bus use only on medians, curb lanes, grade separated busways Reserved all-day or peak period-only
- Queue Jump Lanes are a short stretch of roadway before a traffic signal that gives the bus driver a few seconds to jump to the front of the traffic signal queue before regular traffic is given a green light. This helps speed up the bus and avoids buses getting stuck behind slow moving traffic.

• Transit Signal Priority extends the green signal for buses using GPS technology. It allows buses to pass through the intersection before the light turns red and provides them with an early green signal.

STRATEGY 6: Frequent & Diverse Transit Networks

- Service that is frequent enough on major corridors to not require passengers to consult a schedule. It is important to employ frequent service on a number of major corridor routes that serves popular locations within a transit network.
- Strong connections to other services such as local service, express bus service or limited stop service and other modes

Preparing for Automated Vehicles

Goals for project include designing a concept plan that allows project stakeholders (NHPA, YNHH, Yale) to provide greater access to YNHH campuses and parking facilities such as Air Rights Garage, observe how an AV performs under real-world conditions and meets user needs in comparison to legacy vehicles, and gain AV operations experience to create short-and long-term AV strategy.

We are working toward Traffic Authority stakeholders gaining an understanding of emerging technology that they might use in considering and define roles and responsibilities in an autonomous vehicle pilot program for the City of New Haven.