

Existing Conditions

Orchard Street @ East Houston Street

Orchard Street has a heavy concentration of mixed-use commercial and residential, with some multi-family walk-up and elevator buildings. Once a Jewish wholesale enclave, it is still a thriving shopping destination for bargains as well as designer merchandise. The Lower East Side Tenement Museum, a National Trust for Historic Preservation site, is located at 97 Orchard Street, between Broome Street and Delancey Street.

Street Geometry

Orchard Street carries light traffic one-way northbound, until it terminates at a T-intersection with East Houston Street. Traffic on Orchard Street is permitted to turn onto both eastbound and westbound East Houston Street. The 24-foot wide roadbed has one moving lane and parking lanes on both sides of the street. There is a ladder crosswalk and stop line traversing Orchard Street; high visibility crosswalks traverse East Houston Street.

Signalization

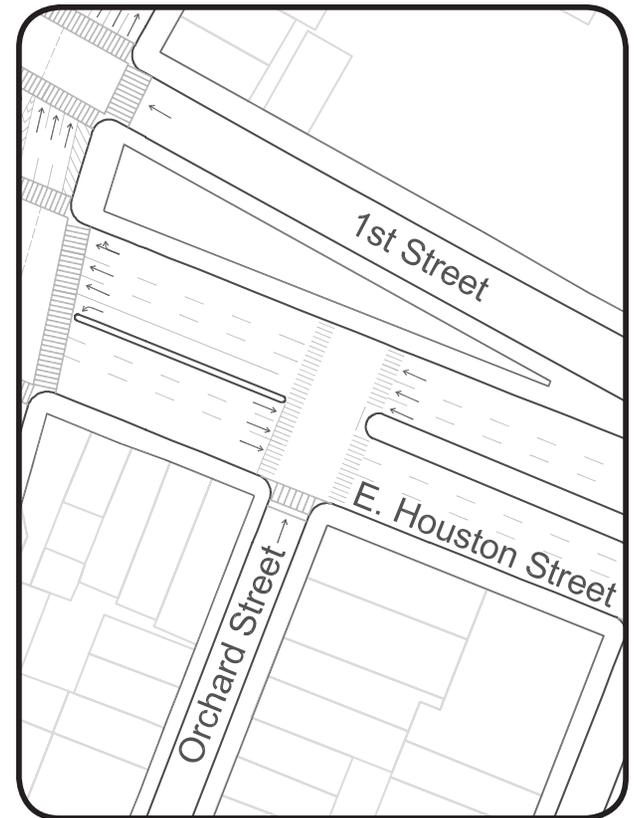
This signalized intersection has a 90-second signal cycle. Traffic has 54 seconds of green time on East Houston Street and 26 seconds on Orchard Street, with three seconds of amber and two seconds of red at each phase for both streets.

Parking Regulations

Parking is permitted on the east side of Orchard Street except from 7:00am to 7:00pm not including Sunday, and standing is permitted except from 8:00am to 6:00pm on Sunday. Two-hour Parking is permitted on the west side of Orchard Street from 9:00am to 7:00pm except Sunday. Parking is also not permitted from midnight to 3:00am Tuesday, Thursday, and Saturday.

Accidents

There were a total of 33 accidents at this intersection, 12 of which were reportable, between the years 1998 through 2000. One of these accidents involved a cyclist, and four involved a pedestrian.



A view of Orchard Street.

Ludlow Street @ East Houston Street

Ludlow Street is comprised primarily of mixed residential and commercial buildings, with some commercial and office and industrial and manufacturing buildings. Katz's Delicatessen, the oldest kosher-style New York delicatessen, founded in 1888, is located on East Houston Street at Ludlow Street.

Street Geometry

Ludlow Street carries light, one-way southbound traffic, starting at a T-intersection with East Houston Street. Traffic from both east and westbound East Houston Street is permitted to turn onto southbound Ludlow Street. The 24-foot wide roadbed has one moving lane and parking lanes on both sides of the street. There is a ladder crosswalk traversing Ludlow Street.

Signalization

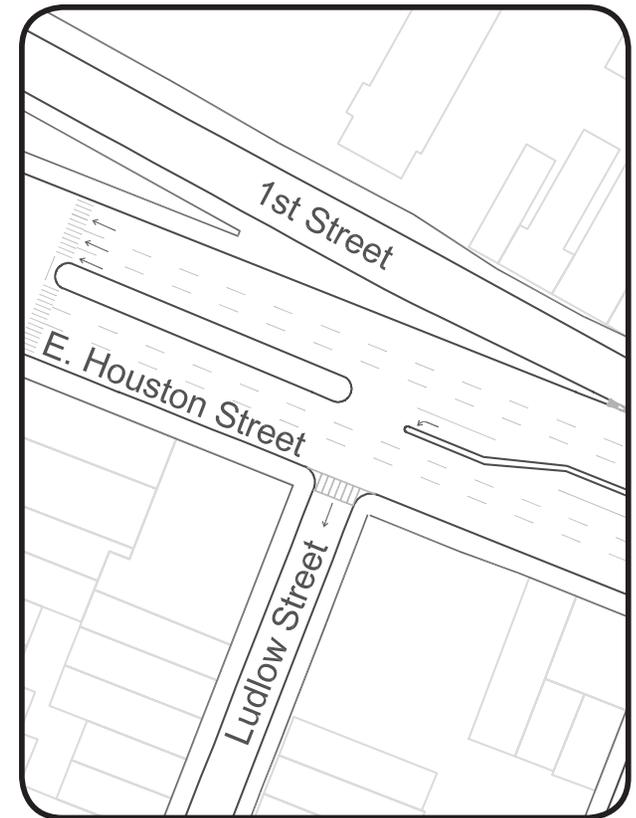
This intersection is unsignalized.

Parking Regulations

Parking is permitted on the east side of Ludlow Street except from midnight to 3:00am Tuesday, Thursday and Saturday, and one-hour parking is permitted from 9:00am to 7:00pm including Sunday. Parking is not permitted on the west side of Ludlow Street from 7:00am to 7:00pm Monday through Friday and from midnight to 3:00am Monday, Wednesday and Friday. One-hour parking is permitted from 9:00am to 7:00pm Saturday and Sunday.

Accidents

There were a total of 38 accidents at this intersection, 10 of which were reportable, from the years 1998 through 2000. One of these accidents involved a pedestrian.



Katz's Deli on the corner of Ludlow Street and East Houston Street.

Existing Conditions

Avenue A and Essex Street @ East Houston Street

The area around Essex Street at East Houston Street is comprised primarily of mixed residential and commercial buildings with some commercial and office buildings as well. ABC Playground, maintained by the Department of Parks and Recreation, is located on East Houston Street between and Essex and Norfolk streets. P.S. 20 lies adjacent to the playground on Essex Street between East Houston and Stanton streets.

Street Geometry

Essex Street and Avenue A connect north-south traffic across East Houston Street, with both streets carrying moderate traffic. Avenue A is approximately 49 feet wide and runs north of East Houston Street with one northbound travel lane, one southbound travel lane and two parking lanes. Essex Street is approximately 54 feet wide and runs south of East Houston Street with two northbound travel lanes, two southbound travel lanes and two parking lanes. East of the intersection the right lane of westbound East Houston Street branches off and turns into East First Street, creating a traffic triangle between East Houston Street and East First Street. At the corner of Avenue A and First Street there is a striped neckdown that channels vehicular traffic onto East First Street.

Signalization

This signalized intersection has a 90-second signal cycle. Traffic has 33 seconds of green time on East Houston Street, 27 seconds on Essex Street and Avenue A and 9 seconds for the protected left turn bays on East Houston Street. The amber phase is three seconds for East Houston Street, Essex Street/Avenue A and for the dual turn lanes on East Houston Street. The red phase is two seconds on East Houston Street, three seconds on Essex Street/Avenue A and two seconds for the left turn bays on East Houston Street. There is a five-second LPI for pedestrians crossing East Houston Street.



Parking Regulations

North of East Houston Street, parking is permitted on the west side of Avenue A except from 8:00am to 8:30am; one-hour parking is permitted from 8:30am to 7:00pm including Sunday. There is a bus stop on the east side of Avenue A and one-hour parking is permitted from 9:00am to 7:00pm. Parking is not permitted from 8:30am to 9:00am except Sunday.

South of East Houston Street, parking is permitted on the east side of Essex Street except from midnight to 3:00am Tuesday, Thursday and Saturday, and two hour parking is permitted 9:00am to 7:00pm including Sunday. There is a bus stop on the west side of Essex Street, just south of East Houston Street.

Accidents

There were a total 141 accidents at this intersection, 58 of which were reportable, from the years 1998 through 2000. Three of these accidents involved a cyclist, and 16 involved a pedestrian. There was one fatality at this intersection.



Opposite page: A pedestrian using the north crosswalk (left); A view of East Houston Street and East 1st Street; looking west (middle). A pedestrian crossing East 1st Street (right). This page: A view of ABC Playground (above) and Essex Street (left).

Existing Conditions

Norfolk Street @ East Houston Street

The area around Norfolk Street at East Houston Street is comprised of multi-family walk-up buildings and mixed residential and commercial buildings. Norfolk Street also borders both the ABC Playground and P.S. 20.

Street Geometry

Norfolk Street carries light, one-way northbound traffic terminating at a T-intersection at East Houston Street. Traffic on Norfolk Street is permitted to turn onto both east- and westbound East Houston Street. It has a 25-foot wide roadbed with one moving lane and parking lanes on either side of the street. There is a ladder crosswalk traversing Norfolk Street and standard crosswalks traversing East Houston Street.

Signalization

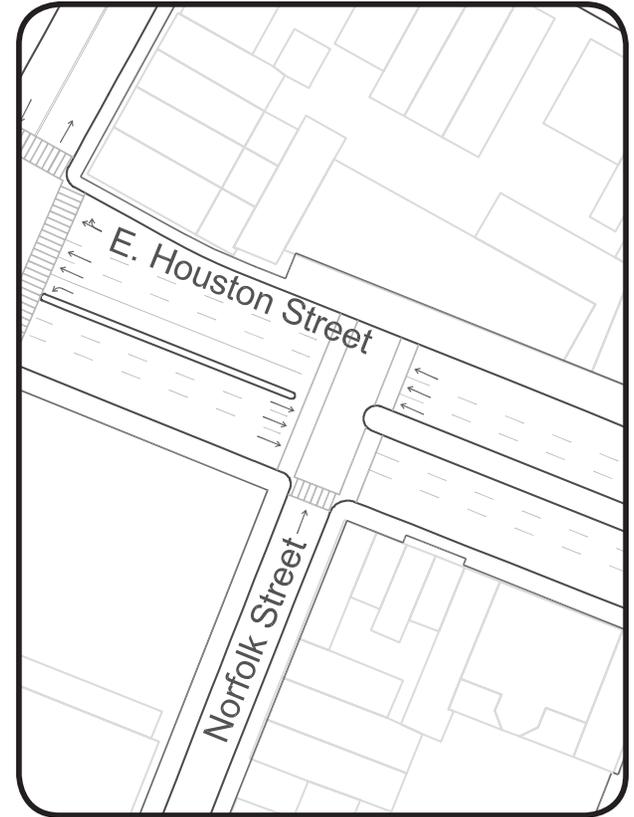
This signalized intersection has a 90-second signal cycle. Traffic has 54 seconds of green time on East Houston Street and 26 seconds on Norfolk Street, with three seconds of amber and two seconds of red at each phase for both streets.

Parking Regulations

Parking is permitted on the east side of Norfolk Street except from 9:00am to 10:30am Tuesday and Friday, and parking is not permitted anytime on the west side of Norfolk Street.

Accidents

There were a total of 19 accidents at this intersection, six of which were reportable, from the years 1998 through 2000. Two of these accidents involved a cyclist.



Norfolk Street and ABC Playground.

Suffolk Street @ East Houston Street

The area around the intersection of Suffolk Street at East Houston Street is comprised of mixed residential and commercial, multi-family walk-up and some commercial and manufacturing buildings.

Street Geometry

Suffolk Street is a one-way southbound street, carrying light traffic, starting at a T-intersection with East Houston Street. Both east- and westbound traffic on East Houston Street is permitted to turn onto Suffolk Street. It has a 25-foot wide roadbed, with one moving lane and a parking lane on the east side of the street. A high visibility crosswalk and a stop line traverse Suffolk Street.

The left turn bay on East Houston Street was initially closed off as a result of Suffolk Street being reversed from a southbound to a northbound street due to the Williamsburg Bridge reconstruction. Since the restoration of Suffolk Street to a southbound street, the left turn bay has remained closed.

Signalization

This intersection has a 90-second signal cycle. Traffic has 54 seconds of green time on East Houston Street and 26 seconds on Suffolk Street, with three seconds of amber and two seconds of red at each phase for both streets. There is no movement on Suffolk Street when cars on East Houston Street are stopped, allowing a de facto all-pedestrian phase.

Parking Regulations

Parking is permitted on the east side of Suffolk Street except from 9:00am to 10:30am Tuesday and Friday; parking is permitted on the west side of Suffolk Street except from 9:00am to 10:30am Monday and Thursday.

Accidents

There were a total of 43 accidents at this intersection, 17 of which were reportable, from the years 1998 through 2000. Four of these accidents involved a cyclist, and two involved a pedestrian.



A view of Suffolk Street (left) and the west crosswalk traversing East Houston Street (right).



Existing Conditions

Avenue B and Clinton Street @ East Houston Street

At the intersection of East Houston Street and Avenue B there are multi-family walk-up and multi-family elevator buildings as well as mixed commercial and residential and commercial and office buildings. A Gaseteria gas station is located at the northeast corner of the intersection.

Street Geometry

North of East Houston Street, Avenue B carries moderate traffic. It is approximately 33 feet wide with one northbound travel lane, one southbound travel lane and two parking lanes. South of East Houston Street, Clinton Street is a one-way, northbound street that carries moderate traffic. It is approximately 25 feet wide with one travel lane and one parking lane along its western curb. Traffic along Clinton Street has increased with the recent redirection of the street from southbound to northbound, allowing Clinton Street to function as a northbound corridor for traffic exiting the Williamsburg Bridge. Ladder crosswalks traverse Avenue B, Clinton Street and Houston Street east of Clinton Street. There is a standard crosswalk traversing East Houston Street west of Clinton Street.

Signalization

This signalized intersection has a 90-second signal cycle. Traffic has 46 seconds of green time on East Houston Street and 29 seconds on Avenue B. The amber phase is three seconds on East Houston Street and Avenue B. The red phase is two seconds on East Houston Street and Avenue B. There is a five-second LPI for pedestrians crossing East Houston Street.



A view of the north crosswalk and Gaseteria gas station at the intersection of Avenue B and East Houston Street (left). Pedestrians using the west crosswalk (right).



Parking Regulations

North of East Houston Street, parking is not permitted from 11:00am to 12:30pm Tuesday and Friday on the east side of Avenue B. Parking is not permitted from 11:00am to 12:30pm Monday and Thursday on the west side of Avenue B. In addition, there is a bus stop located midblock on the west side of Avenue B.

South of East Houston Street parking is not permitted anytime on the east side of Clinton Street, and standing is not permitted from 7:00am to 10:00am, except Sunday, on the west side of Clinton Street.

Accidents

There were a total of 70 accidents at this intersection, 26 of which were reportable, from the years of 1998 through 2000. One of these accidents involved a cyclist, and four involved a pedestrian.



A view from the northwest corner of Avenue B and East Houston Street.

Existing Conditions

Attorney Street @ East Houston Street

The area around the intersection of East Houston Street at Attorney Street is comprised primarily of multi-family walk-up and mixed commercial and residential buildings, with a number of parking facilities along Attorney Street between East Houston and Stanton Streets.

Street Geometry

Attorney Street carries light traffic one-way, northbound until terminating at a T-intersection with East Houston Street. Traffic on Attorney Street is permitted to turn onto both east- and westbound East Houston Street. It has a 25-foot roadbed, with one moving lane and parking lanes on both sides of the street. A high visibility crosswalk and a stop line traverse Attorney Street and no crosswalks traverse East Houston Street.

Signalization

This intersection is unsignalized. A stop sign controls Attorney Street traffic entering East Houston Street.

Parking Regulations

Parking is permitted on the east side of Attorney Street except from 7:00am to 6:00pm not including Sunday, and parking is permitted on the west side of Attorney Street except from 7:00am to 6:00pm Monday through Friday.

Accidents

There were a total of 17 accidents at this intersection, four of which were reportable, from the years 1998 through 2000. One of these accidents involved a pedestrian.



A view of Attorney Street.

Ridge Street @ East Houston Street

East Houston Street at Ridge Street is comprised primarily of multi-family elevator and multi-family walk-up buildings with some mixed commercial and residential buildings as well. Le Petit Versailles, a garden maintained by Greenthumb, is located northeast of the intersection.

Street Geometry

Ridge Street carries light, one-way southbound traffic, starting at a T-intersection with East Houston Street. Traffic from both east and westbound East Houston Street is permitted to turn onto southbound Ridge Street. It is approximately 25 feet wide with one travel lane and two parking lanes. A high visibility crosswalk traverses Ridge Street.

Signalization

This intersection is unsignalized.

Parking Regulations

Parking is permitted on the east side of Ridge Street except from 9:00am to 10:30am Tuesday and Friday; parking is permitted on the west side of Ridge Street except from 9:00am to 10:30am Monday and Thursday.

Accidents

There were a total of 13 accidents at this intersection, six of which were reportable, from the years 1998 through 2000. One of these accidents involved a pedestrian.



A view of Ridge Street (left) and Le Petit Versailles garden (right).

Existing Conditions

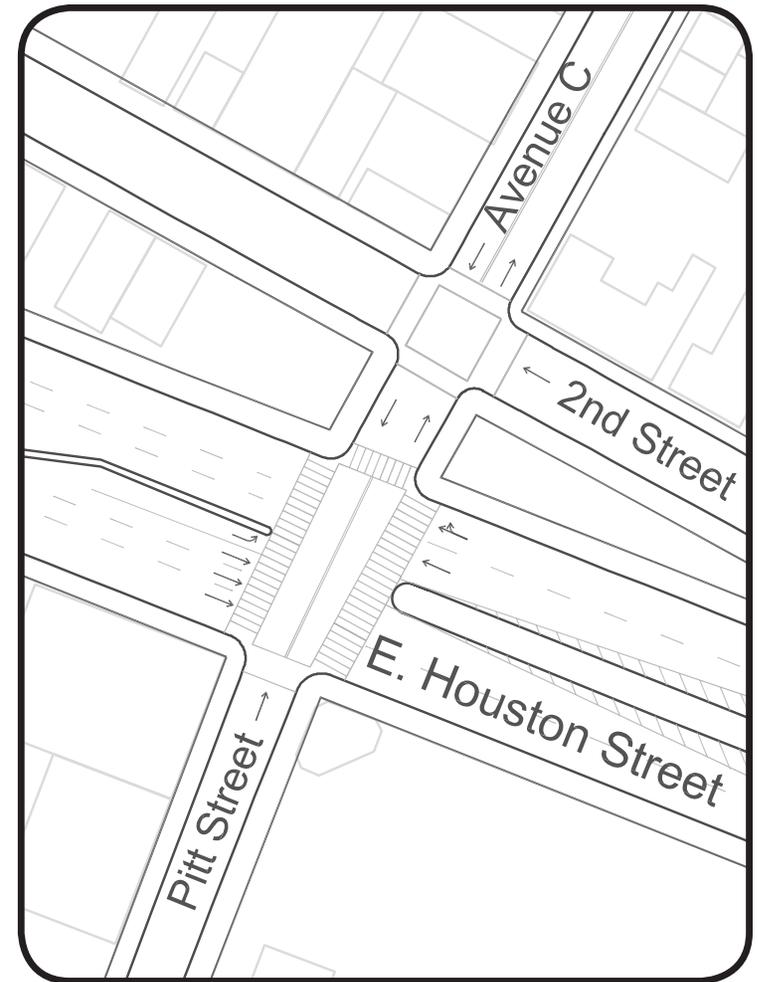
Avenue C and Pitt Street @ East Houston Street (and Avenue C @ Second Street)

The area around East Houston Street at Second Street, Avenue C and Pitt Street is one of open space and recreation. Gustav Hartman Square, a pocket park maintained by NYCDPR, occupies the triangle formed by East Houston Street, East Second Street and Avenue C. The Hamilton Fish Recreation Center, also maintained by NYCDPR, is located on Pitt Street between East Houston and Stanton streets. Barrier Free Living Inc., an institution for the disabled, is located on East Second Street west of Avenue C. A Mobil gas station occupies the northwest corner of the intersection.

Street Geometry

Avenue C is approximately 33 feet wide north of East Houston Street, carrying moderate traffic along one northbound travel lane, one southbound travel lane, and one parking lane along its west curb. The eastern lane is a fire zone. Pitt Street is a one-way street that extends south of East Houston Street and is approximately 25 feet wide with one northbound travel lane and two parking lanes. A standard crosswalk traverses Pitt Street. Ladder crosswalks traverse Avenue C and East Houston Street.

Second Street is a one-way westbound street with one travel lane and two parking lanes. Standard crosswalks connect the corners of its intersection with Avenue C, and a short block separates the intersection of Second Street and Avenue C from East Houston Street.



Left: Looking north up Avenue C. Top: Hamilton Fish Park, at the southeast corner of the intersection. Bottom: Hartman Square, at the northeast corner of the intersection.

Signalization (East Houston Street @ Avenue C)

This intersection has a 90-second signal cycle. Traffic has 46 seconds of green time on East Houston Street and 29 seconds on Avenue C. The amber phase is three seconds on East Houston Street and Avenue C. The red phase is two seconds on East Houston Street and Avenue C. There is a five-second LPI for pedestrians crossing East Houston Street.

Signalization (Avenue C @ Second Street)

This intersection has a 90-second signal cycle. Traffic has 31 seconds of green time on Avenue C and 49 seconds on East Second Street. The amber phase is two seconds on Avenue C and three seconds on East Second Street. The red phase is five seconds on Avenue C and two seconds on East Second Street.

Parking Regulations

Between East Houston Street and Second Street, standing is not permitted anytime on the east side of Avenue C. There is a driveway for the Mobil station on the west side of Avenue C. North of Second Street on the east side of Avenue C there is a no standing "fire zone". Parking is not permitted from 11:00am to 12:30pm Tuesday and Friday on the west side of Avenue C.

South of East Houston Street, parking is not permitted from 8:00am to 6:00pm except Sunday, on the east side of Pitt Street, and parking is not permitted from 9:00am to 10:30am Monday and Thursday on the west side of Pitt Street.

Accidents

There were a total of 59 accidents at this intersection, of which 24 were reportable, from the years 1998 through 2000. Three of these accidents involved a cyclist, and four involved a pedestrian.



Top: Looking south down Pitt Street. Above: Mobil gas station, at the northwest corner of the intersection.

Existing Conditions

Avenue D and Columbia Street @ East Houston Street

East Houston Street east of Avenue D, Columbia Street and Second Street is dominated by a group of multi-family elevator buildings, the Lillian Wald Houses. Mixed commercial and residential and retail and office buildings occupy the northwest corner, and a grade school, New Explorations Into Science Technology and Math, is located at the southwest corner. There is a beer distributor located near the west corner of Avenue D at Second Street.

Street Geometry

Avenue D is approximately 46 feet wide and runs north of East Houston Street carrying moderate traffic along one northbound travel lane, one southbound travel lane and one parking lane along its west curb. Columbia Street is approximately 52 feet wide and runs south of East Houston Street with one northbound travel lane, one southbound travel lane and two parking lanes. Ladder crosswalks traverse Avenue D, Columbia Street and East Houston Street west of Columbia Street. A standard crosswalk traverses East Houston Street east of Columbia Street. West of the intersection, the right lane of westbound East Houston Street branches off and turns into East Second Street, creating a traffic triangle between East Houston Street and East Second Street.



Looking east at Houston Street.

Signalization

This intersection has a 90-second signal cycle. Traffic has 46 seconds of green time on East Houston Street and 29 seconds on Columbia Street. The amber phase is three seconds on East Houston Street and Columbia Street. The red phase is two seconds on East Houston Street and Columbia Street. There is a five-second LPI for pedestrians crossing East Houston Street.

Parking Regulations

North of East Houston Street, there is a bus stop located on the east side of Avenue D, and parking is not permitted from 11:00am to 12:30pm Monday and Thursday on the west side of Avenue D. South of East Houston Street, parking is not permitted from 11:00am to 12:30pm Tuesday and Friday on the east side of Columbia Street, and parking is not permitted from 7:00am to 4:00pm on schooldays; or from 11:00am to 12:30pm Monday and Thursday on the west side of Columbia Street.

Accidents

There were a total of 79 accidents at this intersection, 43 of which were reportable, from the years 1998 through 2000. Five of these accidents involved a cyclist, and seven involved a pedestrian.



Top: Looking east, a pedestrian crossing East 2nd Street. Above: Looking west at Houston Street and East 2nd Street.

Existing Conditions

Baruch Drive @ East Houston Street

The area around East Houston Street at Baruch Drive is residential, and comprised almost entirely of multi-family elevator buildings including the Baruch Houses. P.S. 188 is on the north side of East Houston Street, across from Baruch Drive, as is Wald Playground, which is affiliated with the school.

Street Geometry

Baruch Drive carries light, one-way, southbound traffic from East Houston Street into Baruch Houses, and is approximately 34 feet wide with one travel lane and two parking lanes. Only eastbound Houston Street traffic can access Baruch Drive. A standard crosswalk traverses East Houston Street to the west of Baruch Drive, and a ladder crosswalk traverses the street to the east of Baruch Drive.

Signalization

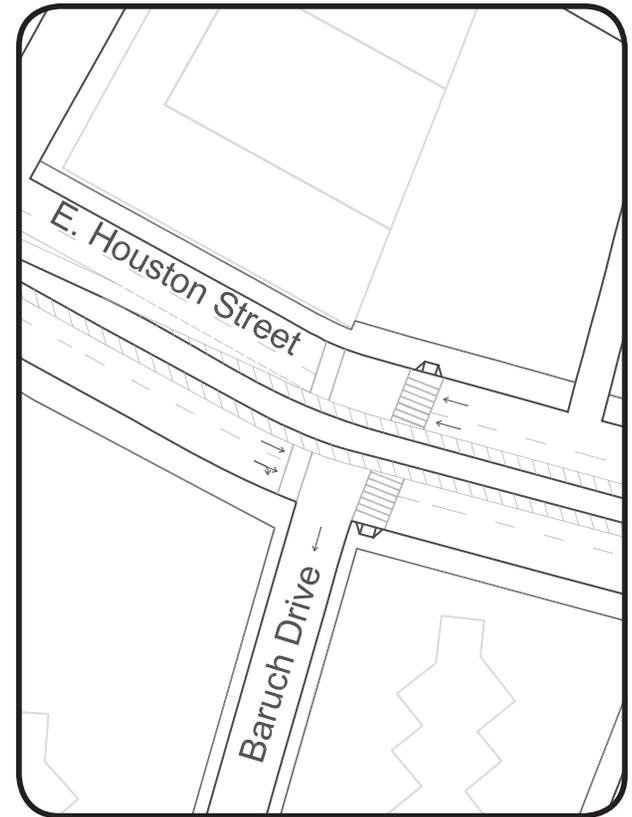
This signalized intersection has a 90-second signal cycle. Traffic has 53 seconds of green time on East Houston Street and 27 seconds on Baruch Drive, with three seconds of amber and two seconds of red at each phase for both streets. When traffic along East Houston Street is stopped there is no movement on Baruch Drive, thereby creating a de facto all-pedestrian phase.

Parking Regulation

Parking is permitted on the east side of Baruch Drive except from 11:00am to 12:30pm Tuesday and Friday, and parking is permitted on the west side of Baruch Drive except from 11:00am to 12:30pm Monday and Thursday.

Accidents

From 1998 through 2000 there were no accidents at this intersection.



Looking south, the east crosswalk at Baruch Drive and East Houston Street.

Baruch Place @ East Houston Street

The area around East Houston Street at Baruch Place is comprised primarily of multi-family elevator and walk-up buildings.

Street Geometry

Baruch Place carries light, one-way, southbound traffic from East Houston Street into Baruch Houses and is approximately 42 feet wide with one travel lane and two parking lanes. Ladder crosswalks traverse Baruch Place and East Houston Street to the east of Baruch Place. A standard crosswalk traverses East Houston Street to the west of Baruch Place.

Signalization

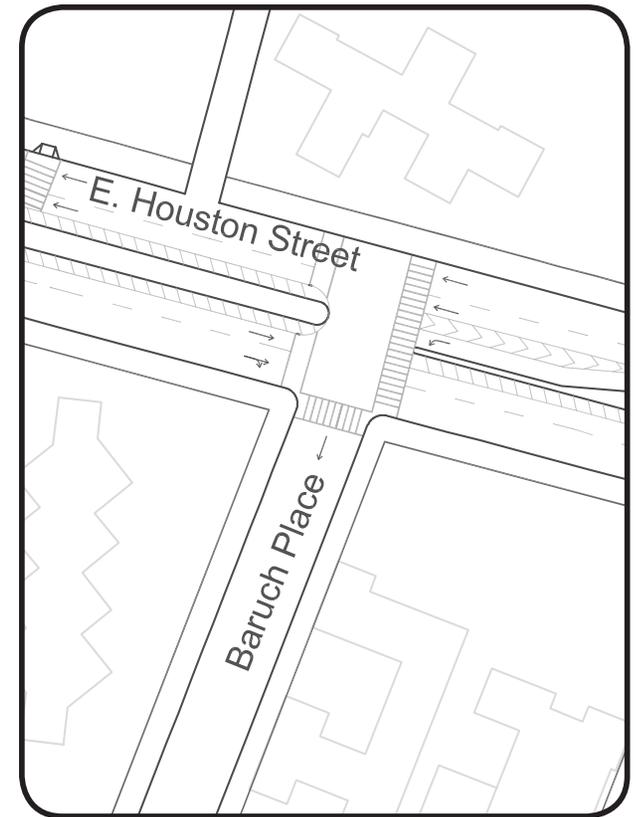
This intersection has a 90-second signal cycle. Traffic has 53 seconds of green time on East Houston Street and 27 seconds on Baruch Place, with three seconds of amber and two seconds of red at each phase for both streets. When traffic along East Houston Street is stopped there is no movement on Baruch Place, thereby creating a de facto all-pedestrian phase.

Parking Regulations

Parking is not permitted on the east side of Baruch Place from 11:00am to 12:30pm Tuesday and Friday, and parking is not permitted from 11:00am to 12:30pm Monday and Thursday on the west side of Baruch Place.

Accidents

There were a total of 45 accidents at this intersection, 19 of which were reportable, from the years 1998 through 2000. Six of these accidents involved a cyclist, and two involved a pedestrian.



Looking north, the east crosswalk at Baruch Place and East Houston Street.

Existing Conditions

Mangin Street @ East Houston Street

The area around East Houston Street at Mangin Street is mainly residential, with multi-family elevator buildings on both sides of East Houston Street. Bard High School Early College (BHSEC), a joint creation of the New York City Board of Education and Bard College, is located at the southwest corner of Mangin and Stanton Streets.

Street Geometry

Mangin Street carries light, one-way, northbound traffic from Baruch Houses to East Houston Street and is approximately 25 feet wide with one travel lane. A ladder crosswalk and stop line traverse Mangin Street. Traffic on Mangin Street may turn east or west onto East Houston Street.

Signalization

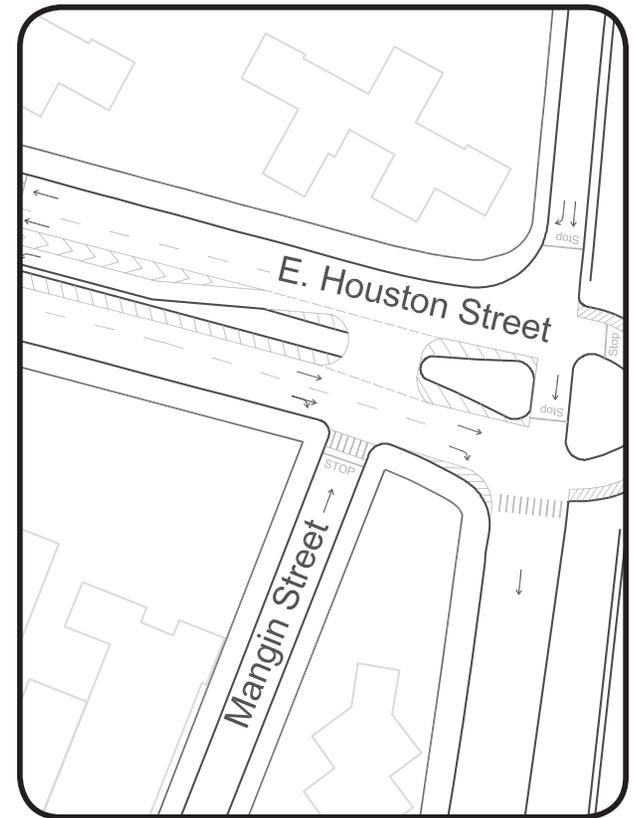
This intersection is unsignalized. A stop sign controls traffic entering East Houston Street from Mangin Street.

Parking Regulations

Parking is not permitted at anytime on Mangin Street.

Accidents

There were a total of 29 accidents at this intersection 16 of which were reportable. One of these accidents involved a cyclist, and one involved a pedestrian.



Looking west from the intersection of Mangin Street and East Houston Street.

FDR Drive @ East Houston Street

FDR Drive at East Houston Street provides vehicular access between the street system and a limited access highway. This intersection is also an access point to East River Park for pedestrians and cyclists. The park, maintained by the Department of Parks and Recreation (DPR), stretches from Montgomery Street to 14th Street, and can be accessed by the entrance located to the east of the northbound FDR Drive exit ramp.

Street Geometry

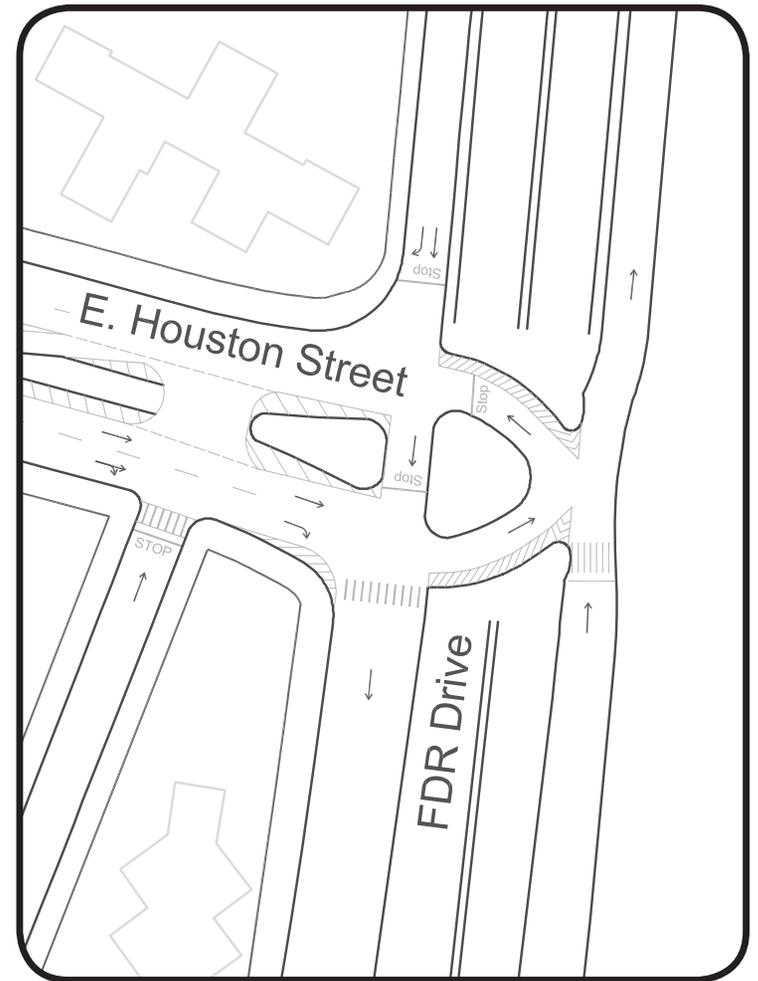
The intersection of the FDR Drive and East Houston Street is complex, with irregular geometry and multiple approaches. Traffic is heavy and the traffic semi-circle allows vehicles traveling along the northbound and southbound service roads of the FDR Drive to either access East Houston Street or the opposite service road. High visibility crosswalks traverse the roads on the southern side of the intersection. Stop signs control traffic on the northbound and southbound service roads. While striping reduces the width of the service roads into one lane of traffic, frequently they operate as two lanes of traffic as vehicles queue in the striped areas.

Signalization

This intersection is unsignalized. Stop signs control the movement of FDR Drive traffic entering and exiting East Houston Street.

Accidents

Few accidents were reported at this intersection from 1998 through 2000. Accident data from NYSDOT show that two accidents occurred at the southbound exit ramp, one occurred at the southbound entrance ramp, two occurred at the point between the southbound exit and entrance ramps, and four occurred at the intersection of the northbound exit ramp and northbound entrance ramp. Two of these accidents were reportable and both involved pedestrians.



Left to right: Pedestrians crossing the south crosswalk of the southbound FDR Drive entrance ramp; northbound FDR Drive exit ramp; southbound FDR Drive exit ramp traffic.

Issues and Opportunities

The analysis of existing pedestrian and vehicular conditions along East Houston Street identified a number of issues and opportunities for improvement. Some of these issues may be found corridor-wide; others are unique to specific focus intersections, resulting from irregular street geometry or other localized problems.

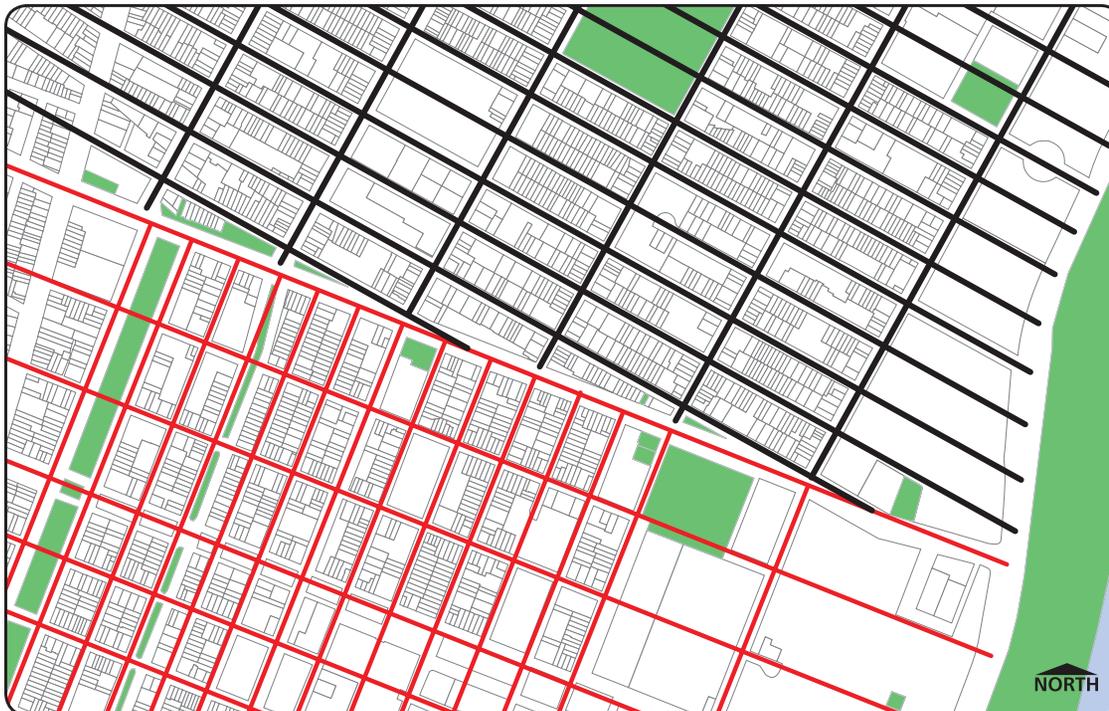
Corridor-Wide Issues

An inspection of the East Houston Street corridor revealed several reoccurring issues at various intersections. Because of the frequency at which these issues appeared, they will be addressed on the corridor-wide level.

Non-continuous Traffic Flow

East Houston Street functions as the border where the disjointed street geometry of early development meets the modern, symmetric geometry of the grid. Prior to 1811, streets in Manhattan were laid out haphazardly, as still evident today in many neighborhoods south of Houston Street. The *Commissioner's Plan of 1811* established a street grid of north-south avenues and east-west streets starting north of Houston Street but not exactly parallel to it. As a result, certain cross streets begin at East Houston Street, then skew away from it, causing discontinuities in pedestrian circulation and forcing pedestrians to cross streets against traffic.

In addition, the 1811 Plan mapped fewer north-south streets. As a result, there are a number of T-intersections where streets begin or terminate, and intersections where two-way streets meet one-way streets, resulting in a disruption of the continuity of north-south traffic along the corridor. This poses problems for both pedestrians and motorists when trying to determine the direction of oncoming traffic.



New York City Department of City Planning

Figure 8: Irregular Street Geometry

The street plan to the south of East Houston Street (left, in red) was established prior to the *Commissioner's Plan of 1811* (right), which proposed a grid that would extend from Houston Street north to regulate the development of Manhattan as its population expanded.



Harper's Weekly

Lack of East-West Bicycle Facilities

Currently, there are no east-west bicycle routes on Houston Street, and the lack of east-west connectors between the Manhattan Waterfront Greenway and striped north-south on-street bicycle routes is a borough-wide issue. East Houston Street is a recommended route in the *New York City Bicycle Master Plan*, and would be the first east-west bicycle connection in Manhattan south of Central Park. The existing Second Avenue bicycle lane ends abruptly at East Houston Street, and cyclists are discharged onto the street into East Houston Street traffic.

Varied Crosswalk Styles

A lack of appropriate crosswalk markings may result in decreased pedestrian safety. With a truck route from the Bowery to First Avenue/Allen Street, the western end of the corridor from the Bowery to Avenue C is primarily commercial. The eastern end from Avenue C to the FDR Drive, however, is primarily residential, with a number of schools nearby. Crosswalk types are employed inconsistently throughout the corridor, without reference to land use. Also, at several intersections there are crossings that do not have pedestrian ramps. Pedestrian ramps should be paired with crosswalks to improve circulation and access for all populations, including pedestrians with disabilities and the elderly.

Constricted Access to Open Spaces

There are many open spaces throughout the study area; however, much of that space is obscured from the street, particularly East River Park due to the elevated entrance and exit ramps for the FDR Drive which block views of the park. Jersey barriers along the eastern side of the FDR Drive also block views and limit access to East River Park. The entrance to Hamilton Fish Park does not front East Houston Street, but is located on a side street, making it more difficult for pedestrians to locate.



Clockwise from above: a bicyclist on East Houston Street; detail of the NYC Cycling Map; the entrance to Hamilton Fish Park; the entrance to East River Park.

Figure 9: NYC Cycling Map



Focus Intersection Issues

In addition to the corridor-wide issues, this study focuses on eight specific intersections along East Houston Street. The intersections were targeted based on collected traffic data and its analysis, an analysis of accident data, numerous site visits, and an examination of the complex traffic flow resulting from streets that terminate at East Houston Street.

The Bowery

The intersection of the Bowery at East Houston Street is the crossroads of two major through-corridors, and therefore, services a heavy volume of vehicular traffic. As such, the Bowery and East Houston Street had the highest number of overall accidents (261), the highest number of vehicular accidents (73) and the highest number of bicycle accidents (8) in the study area. Additionally, cars making left turns conflict with pedestrians using the crosswalks. This intersection had the second highest number of pedestrian accidents (15).

Second Avenue/Chrystie Street

Two-way Chrystie Street meets one-way, southbound Second Avenue at East Houston Street, creating irregular street geometry and non-continuous traffic flow. Cars traveling north along Chrystie Street must turn either right or left onto East Houston Street. Left-turning vehicles conflict with pedestrians in the crosswalks at this intersection as well. The Second Avenue bicycle lane ends abruptly at East Houston Street, leaving cyclists to fend for themselves in an area of heavy traffic.

First Avenue/Allen Street

Irregular street geometry is an issue at East Houston Street where two-way Allen Street meets one-way, northbound First Avenue. The intersection of Allen Street at East Houston Street is extraordinarily wide. Pedestrians crossing either East Houston Street or Allen



Street must walk across six lanes of traffic in just 35 seconds of pedestrian walk time, only four seconds of which is designated exclusively for pedestrians.

Avenue A/Essex Street

Avenue A/Essex Street at East Houston Street had the highest number of pedestrian accidents (16) in the period studied. Westbound First Street begins at this intersection, where it angles away from East Houston Street, creating a traffic triangle, and leaving pedestrians on the north side of the corridor to cross the street without the benefit of a crosswalk. The street geometry permits fast-moving vehicles to bear right onto First Street without slowing, creating unsafe conditions for pedestrians. Excess roadbed at the northwest corner of Avenue A at First Street affords opportunities to recapture a portion of the street for the use of pedestrians.

From the top: the irregular street geometry of First Avenue and East Houston Street; the long crossing at the north crosswalk of East Houston Street at First Avenue; the irregular street geometry of Second Avenue and East Houston Street; the end of the Second Avenue bike lane; a woman trying to cross First Street near Avenue A and East Houston Street.



Avenue B/Clinton Street

One-way northbound Clinton Street meets two-way Avenue B at East Houston Street, creating irregular street geometry and non-continuous traffic flow. Southbound vehicles on Avenue B must make left or right turns onto East Houston Street, thereby conflicting with pedestrians.

The north side of East Houston Street is lined with the backs of buildings. East Houston Street was widened in the 1930s for the construction of the subway lines running underneath the street. Buildings fronting the north side of East Houston Street were removed to accommodate the subway. As a result, the backs of buildings abut the East Houston Street sidewalk and roadway, sometimes contributing to “pedestrian unfriendly” activities such as parking on the sidewalk near service stations.

Avenue C/Pitt Street

One-way Pitt Street meets two-way Avenue C at East Houston Street, creating issues of non-continuous traffic flow and irregular street geometry. Vehicles turning left onto eastbound East Houston Street conflict with pedestrians in the crosswalk. As with Avenue B, backs of buildings fronting East Houston Street at this intersection have been neglected. The buildings are boarded up in the back and are covered in graffiti; the property lines are fenced by unattractive corrugated metal.



Left: Cars blocking the sidewalk at the service station. Below: A view looking west at the intersection of Avenue D and East Houston Street and a diagram displaying the street geometry of the intersection.



Avenue D/Columbia Street

At this intersection, as with Avenue A/Essex Street at East Houston Street, Second Street diverges from East Houston Street, creating a traffic triangle, and leaving pedestrians on the north side of the corridor to cross the street mid-block without the benefit of a traffic signal or a crosswalk. The street geometry permits fast-moving vehicles to bear right onto Second Street without slowing, creating unsafe conditions for pedestrians. As a result, this intersection has had a relatively high number of pedestrian accidents (7).

FDR Drive

Pedestrians at the northwest corner of the FDR Drive at East Houston Street are unable to safely cross either the FDR Drive or East Houston Street. The lack of signage, change in grade, presence of jersey barriers along the eastern side of the FDR, and difficulty of crossing an unsignalized intersection result in constricted access to East River Park for both pedestrians and cyclists. Eastbound Houston Street traffic has the right-of-way at its intersection with the FDR Drive; the left turn to the northbound FDR Drive entrance ramp or the right turn to southbound FDR Drive entrance ramp is uncontrolled. Because there is no traffic control device, cars traveling eastbound on East Houston Street make right turns at high speeds onto the southbound FDR Drive entrance ramp, conflicting with pedestrians using the crosswalk to get to and from East River Park. The lack of a traffic control may contribute to confusion amongst pedestrians, cyclists and motorists as to who has the right-of-way. Also, it is difficult for crosswalk users seeking to access the park to see approaching eastbound traffic because they must look behind them for traffic.

There is limited queuing space for vehicles exiting northbound FDR and turning west onto East Houston Street. However, in the peak hours, vehicles use the painted roadway to effectively turn one marked travel lane into two lanes and thereby maximize traffic flow. Poor sight lines make it difficult to see oncoming traffic, so vehicles inch out into the intersection in order to have a clearer view.



Top-left: Pedestrians crossing from the northwest corner of the intersection of East Houston Street and the FDR Drive. Top-center: Pedestrians crossing the southbound FDR Drive entrance ramp. Top-right: Ramp to East River Park, east of the FDR Drive. Above: The entrance to the East River Park across the northbound FDR Drive exit ramp. Right: A detail showing the lack of pedestrian ramps at the crossing.

