

Portsmouth Safe Routes to School Program

New Franklin School Infrastructure Assessment



Introduction

The Portsmouth Safe Routes to School (SRTS) Program aims to encourage and enable students in the City to walk and bicycle for the school commute. This Infrastructure Assessment evaluates existing facilities at the New Franklin School and recommends improvements designed to improve walk/bike connectivity and enhance safety. The information provided in this Assessment is based on the City's GIS database, field observations and a group walking audit performed on September 10, 2015 (attended by City of Portsmouth staff, New Franklin staff and PTO representatives). The report complements the New Franklin School recommendations found in the City's 2010 *Safe Routes to School Action Plan* and includes an inventory of walking and bicycling infrastructure available to students and parents within a quarter-mile radius of each school. Although this report does not include recommendations related to encouragement, education, evaluation and enforcement programs, New Franklin School should consider working with the City, school district, parents and teachers to implement non-infrastructure SRTS programs to complement and support the recommended facility improvements.

Existing Conditions

School Layout and Circulation

The New Franklin Elementary School sits in a location that limits the number of students who can comfortably walk or bike to school. It is bordered on three sides by Interstate 95, the Route 1 Bypass and Woodbury Avenue, a busy collector road with on/off ramp connections to the Portsmouth Traffic Circle. Accessing the school from the north requires crossing under I-95 along either Woodbury or Maplewood Avenues, busy collector roads with some gaps in the sidewalk network. Only Woodbury includes a short stretch with bike lanes. From the south, children and parents are able to access the school in some relative comfort, but the missing or crumbling sidewalks along the Stark Street bridge over the Route 1 Bypass make the walk less than ideal. Motor vehicle traffic along Franklin Drive and confusing vehicle circulation within the parking lot adjacent to the school offer additional challenges to safe and convenient walking and bicycling. Parents/guardians picking up their children typically park along Franklin Drive (with some parked illegally on the north sidewalk) and after pick-up do a loop through the parking lot before exiting the campus via Franklin. For those dropping off or picking



Parents and guardians pick up students during a typical dismissal at New Franklin School.

up students, many have a difficult time turning onto Woodbury, due to the complex intersection with high demand for turning movements and no traffic control along Woodbury. A map of the overall study area is shown in Figure 1 below.



Figure 1: Map of the study area in which the New Franklin Elementary School Audit was performed.

Walking and Bicycling Access to School

The main entry to the school lies to the west, where most parent/guardian drop-off activity occurs. Additionally, some children are dropped off at the end of Myrtle Avenue and walk around the school to access the main entry. Children and parents/guardians walking to school access the campus primarily from the neighborhood to the south (via Stark Street bridge over the Route 1 Bypass), with smaller numbers walking to school from neighborhoods to the north using Woodbury/Franklin streets or via Maplewood/Central/Myrtle. There is one crossing guard for New Franklin School, located at the intersection of Stark Street and Dennett. A good number of students arrive at New Franklin by bicycle as well. Students who arrive either with parents/guardians or unaccompanied come from the same routes used by walkers. Bikes are typically parked in racks provided in the back of the school. Those heading home on bicycle typically leave after others have been picked up in cars to avoid the traffic levels immediately after the dismissal period begins at 2:40 pm.



Families leaving the school on bike typically wait until motor vehicle traffic clears on Franklin Drive.

Drop-off and Pick-up Activity

Students who are dropped off or picked up at school primarily come or go via Franklin Drive. A small number of vehicles also access the school from the Stark Street bridge, or via Myrtle Avenue. Those using Stark Street must sometimes compete for access with the school buses that reach the school via Stark and form a queue that typically blocks vehicular access to and from the bridge. With most of the parent/guardian driving activity along Franklin Drive, traffic moves quite slowly. This is due not only to the volume of vehicles but the difficulty drivers have accessing Woodbury from Franklin Drive. Though simple geometrically, the various turning movements to and from the Route 1 Bypass makes this a complex and challenging intersection. The heavy commuter traffic in the morning especially makes for difficult left turns from Franklin for parents/guardians immediately after morning drop off.

Primary Loading Zone

Currently, the school has developed drop-off and pick-up protocols aimed to increase efficiency. A line of traffic cones and bollards at the main entry area creates distinct zones for loading/unloading and the “thru traffic” looking to exit the campus. At afternoon dismissal, this creates some conflicts with children and their parents/guardians walking home or to their cars parked along Franklin. The area between the cones and the curb in front of the school has been marked with yellow paint in a hatch pattern to discourage parking for more than a few minutes. In the morning and afternoon, school staff are present to help children into and out of vehicles and ensure orderly queues to the buses. Buses access the school via Stark Street and



The active drop off zone is differentiated from “thru” traffic by bollards and cones.

line up in the drop off zone on the south side of the school. From there, students line up to access the buses which exit the campus via Franklin Drive.

Walk Audit Observations

On September 10, 2015, Alta Planning + Design lead a Walk Audit and Infrastructure Assessment of the New Franklin School campus and surrounding areas. Attendees included representatives from the City of Portsmouth Planning Department and Department of Public Works, New Franklin School staff, and members of the New Franklin School PTO. The assembled group discussed opportunities and challenges over a large scale map before heading outside to observe the flow of children, parents, vehicles and buses during afternoon dismissal. Afterwards, the group walked around the campus and along nearby streets to discuss key issues and brainstorm ideas. Some of the observations from the dismissal period as well as findings in the field include:

- **Infrastructure conditions:**

- Sidewalks – the gathering area and sidewalk in front of the school which receives many of the dropped off students is in good shape. Sidewalks along the streets that lead to the school are sometimes narrow and in relatively poor shape. Some feature asphalt rolled curbs which are easily encroached upon by parked cars. This is a particular problem along the north side of Franklin Drive, where some parents will block the sidewalk in order to wait for their child at dismissal. Currently, there are missing sidewalks along portions of Stark Street between Dennett and the bridge over the Route 1 Bypass.
- Crosswalks – currently, there are marked crosswalks at the Stark/Dennett intersection and along Woodbury at Franklin Drive. Some families also use the crosswalks at the Woodbury/Rockingham intersection. What’s noteworthy is the lack of crosswalks that could provide connectivity from the Franklin Drive sidewalk to the main entry area.
- ADA access – from the neighborhood to the south, access to the school for people with disabilities is a serious challenge due to the grade of the hill leading to the Stark Street bridge over the Route 1 Bypass. The route to school from Franklin Drive is accessible, though the lack of crosswalk described above particularly impacts students with special needs, due to visibility issues. Via Myrtle Avenue, the portion of the street with a sidewalk provides an accessible route to the back entry to the school.
- School area signs and pavement markings – currently, there is minimal use of signs in the New Franklin School area, including a “Do Not Enter” sign at the southbound approach to the Stark Street bridge, “No Parking is Allowed” on the north side of Franklin Drive—though these signs are ineffective as parents park there frequently—and one referencing that no thru traffic is allowed at the west end of Myrtle Avenue. Pavement markings include yellow directional arrows in the staff parking lot/parent drop-off zone and a yellow hatched no parking zone adjacent to the main entry (drop off allowed however).



Despite the restriction, some parents park on Franklin Street’s sidewalk.

- Bike facilities – though not observed directly during the Walk Audit, the bike lanes along Woodbury provide an important facility that improves bicycle access along the corridor. However, due to traffic volumes and speeds, parents report riding with their children on the east sidewalk instead of the on-street bike lane. For those bicycling to school, “wave” style bike racks exist in the rear of the school. While those work well for those coming by way of Myrtle Avenue, there is an absence of good bike parking near the main entry area.
- **Traffic circulation and behavior:**
 - Walking and bicycling – the modest number of children and parents currently walking and bicycling to New Franklin School does not create any capacity challenges on the sidewalks that lead to the school. As such, many child bicyclists ride on the sidewalk with minimal conflicts. A number of families were seen riding legally within the roadway on Franklin Drive after the initial wave of motor vehicle pick-ups were clear (perhaps the parked cars blocking the sidewalk had an impact as well). All children observed were wearing helmets.
 - Motor vehicle traffic – there is virtually no motor vehicle thru traffic or cut thru traffic that passes by the school. Therefore, nearly all traffic coming to and from the school along Franklin, Stark or Myrtle are school staff, parents/guardians or school visitors. Vehicle speeds therefore are low and drivers tend to defer to pedestrians, especially when children are present. However, some drivers park where “no parking” signs are posted or block the sidewalk along Franklin Drive. During afternoon pick-up, others will crowd the main entry and block site lines, pedestrian access or bus movement.



Motor vehicle crowding of the main entry pick-up area can negatively impact site lines and bus circulation.

Infrastructure Recommendations

The following table and subsequent Implementation Plan map graphic are intended to help the City of Portsmouth prepare to apply for grant funding and to place projects onto local funding priority lists. These recommendations should be considered complementary to those developed in the City’s 2010 *Safe Routes to School Action Plan*. All projects were placed into Short- (1-2 years), Medium- (2-4 years) or Long-term (>6 years) categories based on the rough cost estimate and engineering complexities expected. The order-of-magnitude cost estimates range from one to three “\$” signs and include:

- \$ - <\$5,000
- \$\$ - \$5,000 to \$25,000
- \$\$\$ - >\$25,000

Project #	Type	Project Description	Cost
Short term projects (1 -2 year time period)			
S1	Circulation	To help clarify the northbound traffic flow over the Stark Street Bridge, stripe bridge as one-way, 12' wide northbound traffic lane with shoulders (<i>supercedes 2010 Travel Plan recommendations</i>)	\$
S2	Signs and road markings	Increase the number of No Parking signs along the north side of Franklin Drive and increase enforcement of the regulatory sign.	\$
S3	Signs and road markings	Paint crosswalk between the east end of the Franklin Street sidewalk and the entry way area of the school	\$
S4	Circulation	Encourage—via parent info and on web site—more drop-off/pick up activity along Myrtle Avenue to reduce the number of vehicles accessing New Franklin School via Franklin Drive	None
S5	Signs and road markings	Create clearer “no standing” and “drop off only” zones using additional paint and signage adjacent to the primary drop-off area	\$
Mid-term Projects (2 - 5 year time period)			
M1	Circulation	Work with NHDOT to explore possibility of incorporating a new traffic light or other traffic control device at the Woodbury/Franklin Drive intersection as part of their future reconstruction effort	\$\$\$+
M2	Sidewalk	New 5 foot sidewalk and curb along the north side of Franklin Drive between the school and Woodbury Avenue	\$\$
M3	Sidewalk	New 5 foot sidewalk and curb along the east side of Stark Street between Dennett and Thornton Street	\$\$
M4	Sidewalk	Extend existing east sidewalk on Stark near Dennett to meet with existing sidewalk on the bridge over the Route 1 Bypass (in lieu of NHDOT replacement of the bridge in the long term)	\$
M5	Circulation	New drop-off circle large enough for bus loading/unloading at west end of Myrtle Avenue near the current gate to the school property	\$\$\$+
M6	Sidewalk	Widen existing sidewalk on Myrtle Avenue to 5 feet and extend to Central Avenue intersection; add new 5 foot wide sidewalk and curb along the west side of Central to Maplewood	\$\$
Long-term Projects (>6 year time period)			
L1	Circulation and sidewalk	Re-orient drop-off area, parking and circulation: a) to allow one-way travel from Franklin Drive to Myrtle Avenue (two-way traffic to be considered for school staff, however); b) staff parking and circulation to be expanded into the black-top play area to be relocated to the back of the school; c) current staff parking lot to be replaced by expanded drop-off zone and parent pick-up queueing area	\$\$\$

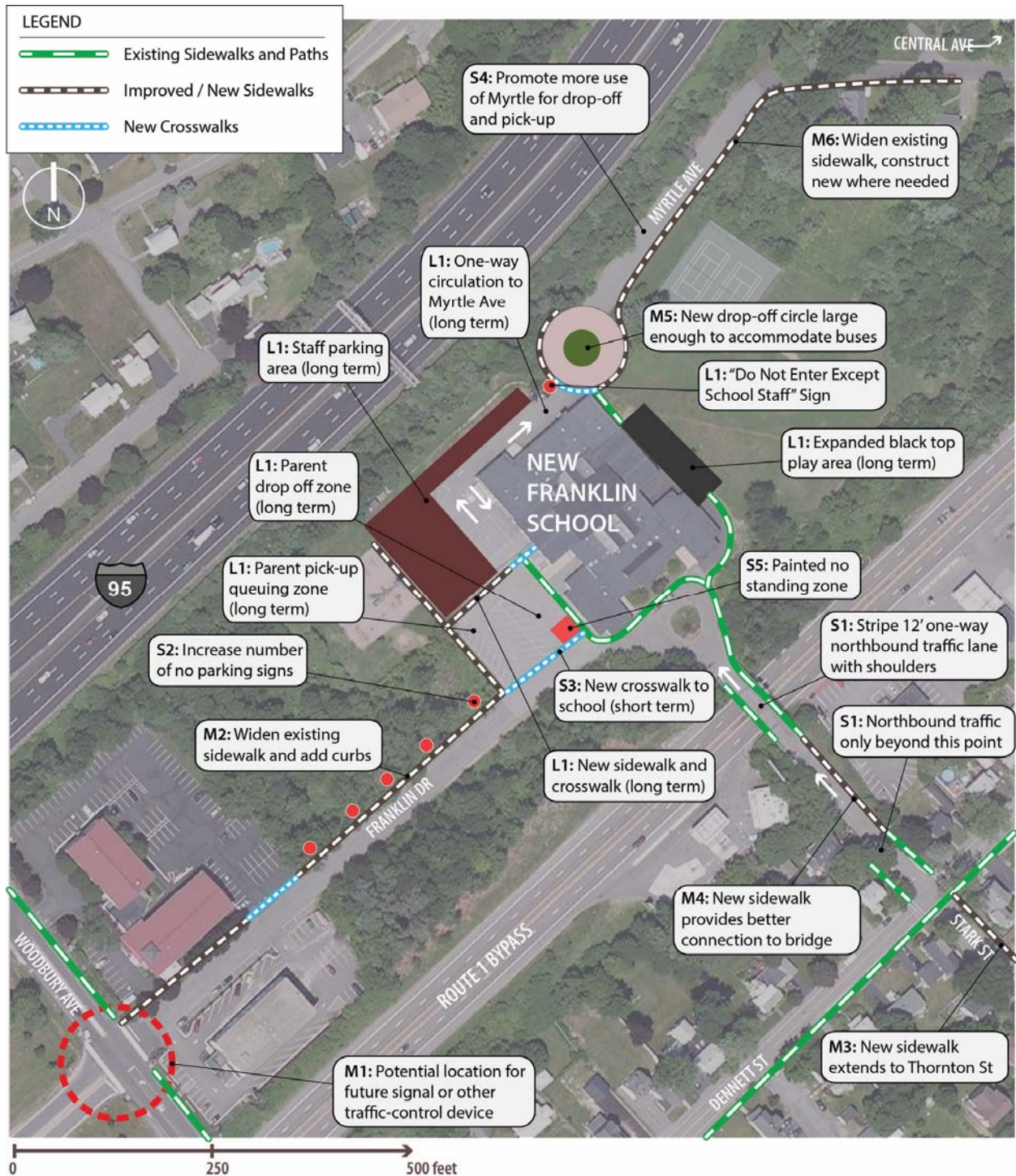


Figure 2: Summary map of the New Franklin School infrastructure recommendations.