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TRANSPORTATION



AGENDA

- Future School Program Enrollment + Parking Needs
- Net-New Vehicle Trip Generation
- COVID-19 Considerations
- Proposed Site Plan
- Study Area Intersections
- Net-New Traffic Summary Impacts
- Key Findings + Area Improvements
- Transportation Collaboration



TRAFFIC ASSESSMENT

COVID-19 CONSIDERATIONS

- Vehicle Data Collection
 - Traffic patterns are atypical due to the ongoing COVID-19 pandemic
 - Coordination with TP&T to approve the use of *StreetLight* (smartphone geolocation data) to evaluate traffic patterns
 - Average of Tues, Weds, and Thurs from Sept. 2019 – Feb. 2020

- Pedestrian/Bicycle Data Collection
 - Based upon available data from recently available area Certified TIS Reports



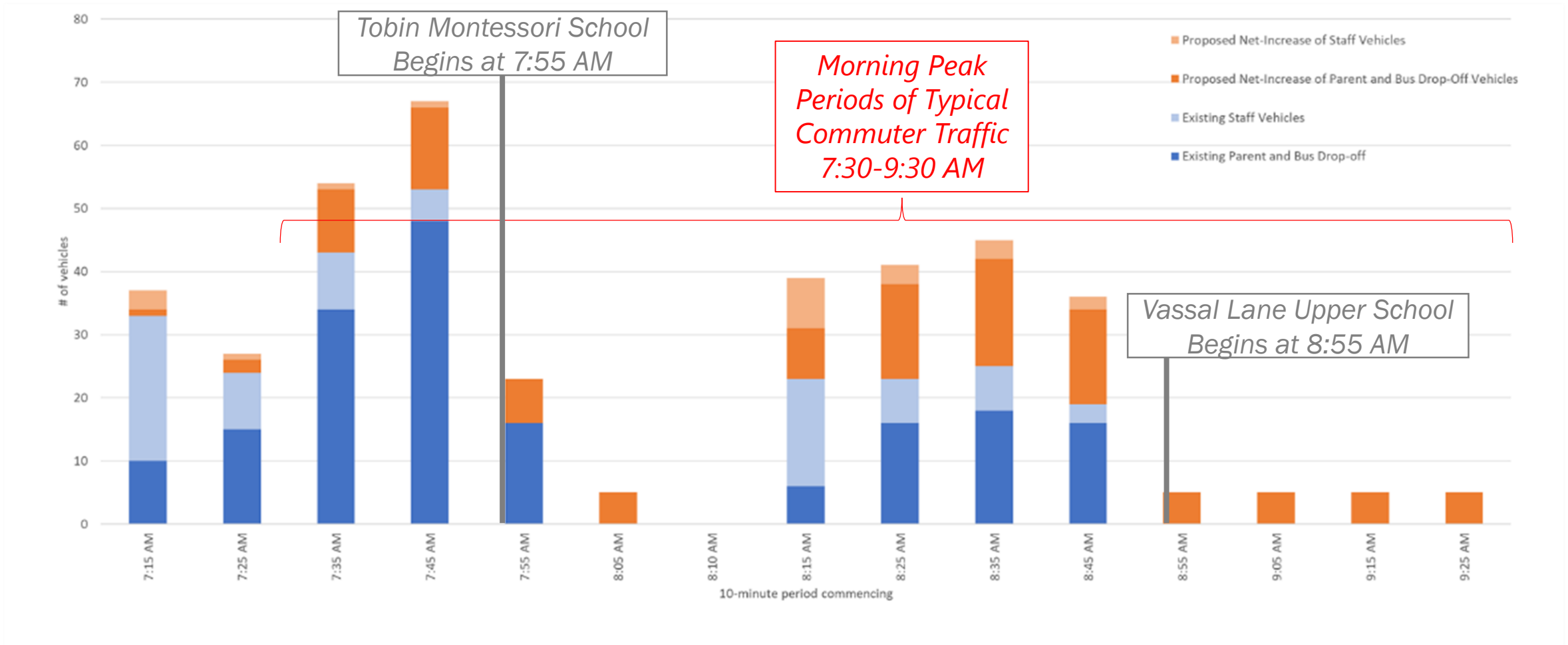
KEY PROGRAM ENROLLMENT + PARKING ASSUMPTIONS

	Existing Condition (# of students)	Proposed Program (# of students)
Tobin Montessori	312	336
Vassal Lane Upper School	283	450
Special Programs	23 (1/2 at Tobin; 1/2 at Vassal)	113 (approx. 45 at Tobin; 68 at Vassal)
Preschool	0	80

	Existing Condition	Proposed Program
Provided Staff Parking Spaces	80 parked vehicles	100 spaces

FUTURE SITE CONDITIONS

MORNING ARRIVAL DROP-OFF PROFILE (VEHICLES)

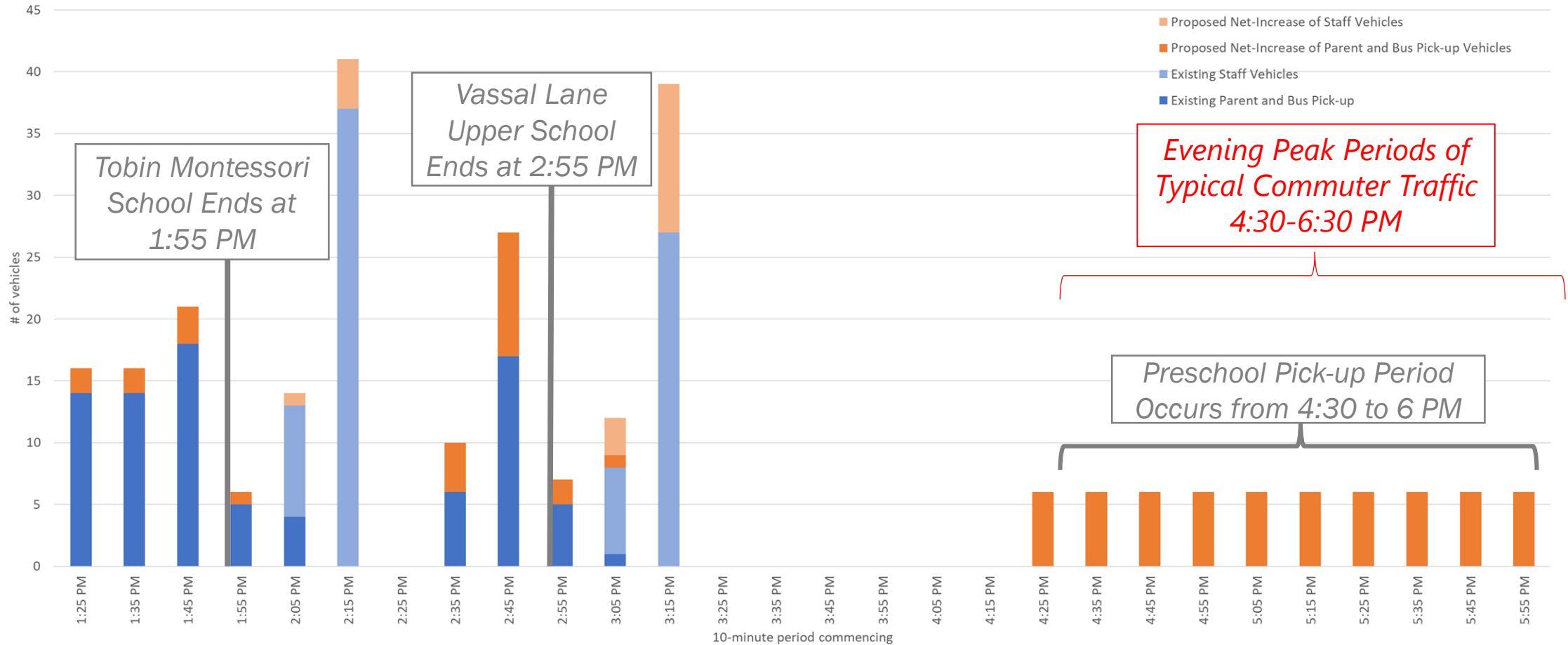


Preschool Drop-off Period Occurs from 7:30 to 9:30 AM



FUTURE SITE CONDITIONS

AFTERNOON DISMISSAL PICK-UP PROFILE (VEHICLES)



NET-NEW VEHICLE

PROJECT-GENERATED TRIPS

	Staff Trips	Student /Parent Trips	Total Trips
Morning In	13	58	71
Morning Out	0	58	58
Total Morning	13	116	129
Afternoon In	0	8	8
Afternoon Out	5	8	13
Total Afternoon	5	16	21
Evening In	0	36	36
Evening Out	0	36	36
Total Evening	0	72	72



STUDY AREA INTERSECTIONS



- 1 Concord Avenue at Birch Street
- 2 Concord Avenue at Fern Street
- 3 Concord Avenue at Corporal Burns Road
- 4 Concord Avenue at Alpine Street
- 5 Concord Avenue at Chilton Street
- 6 Concord Avenue at Fayerweather Street
- 7 Fresh Pond Parkway at Vassal Lane
- 8 Vassal Lane at Lakeview Avenue
- 9 Vassal Lane at TMVLUS Parking Driveway
- 10 Vassal Lane at TMVLUS Bus Loop (Exit)
- 11 Vassal Lane at Standish Street/
TMVLUS Bus Loop (Entrance)
- 12 Vassal Lane at Alpine Street
- 13 Vassal Lane at Chilton Street
- 14 Vassal Lane at Fayerweather Street
- 15 Fresh Pond Parkway at Lexington Avenue
- 16 Lexington Avenue at Worthington Street
- 17 Lakeview Avenue at Worthington Street



STAFF DISTRIBUTION

CARS ONLY

➡ Entering Trips
➡ Exiting Trips



STUDENT DISTRIBUTION

(CARS ONLY)

➡ Entering Trips
➡ Exiting Trips

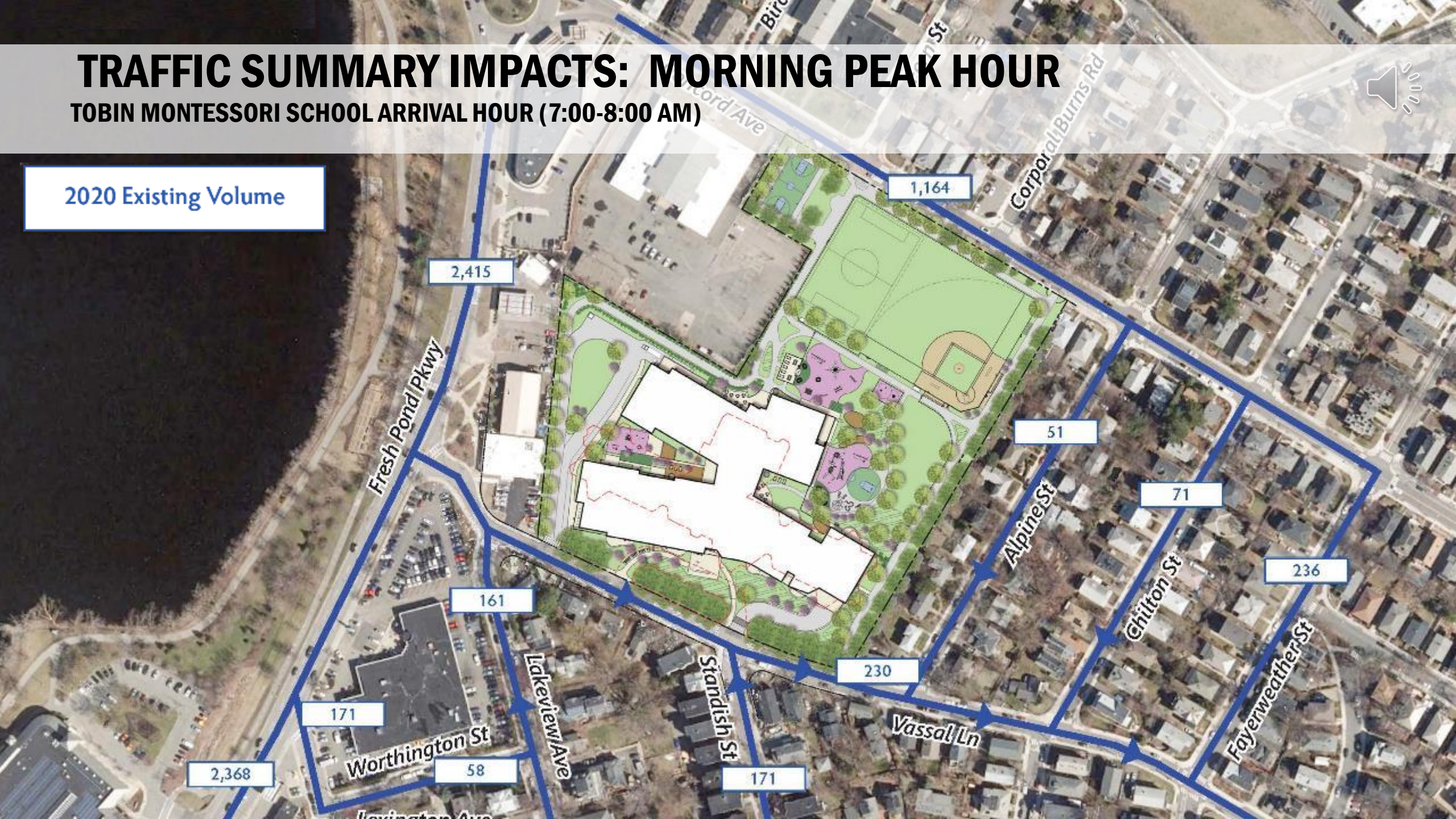


TRAFFIC SUMMARY IMPACTS: MORNING PEAK HOUR

TOBIN MONTESSORI SCHOOL ARRIVAL HOUR (7:00-8:00 AM)



2020 Existing Volume



NET-NEW TRAFFIC SUMMARY IMPACTS: MORNING PEAK HOUR

TOBIN MONTESSORI SCHOOL ARRIVAL HOUR (7:00-8:00 AM)



2020 Existing Volume

Net-New Vehicle Volumes
(Project Trips)

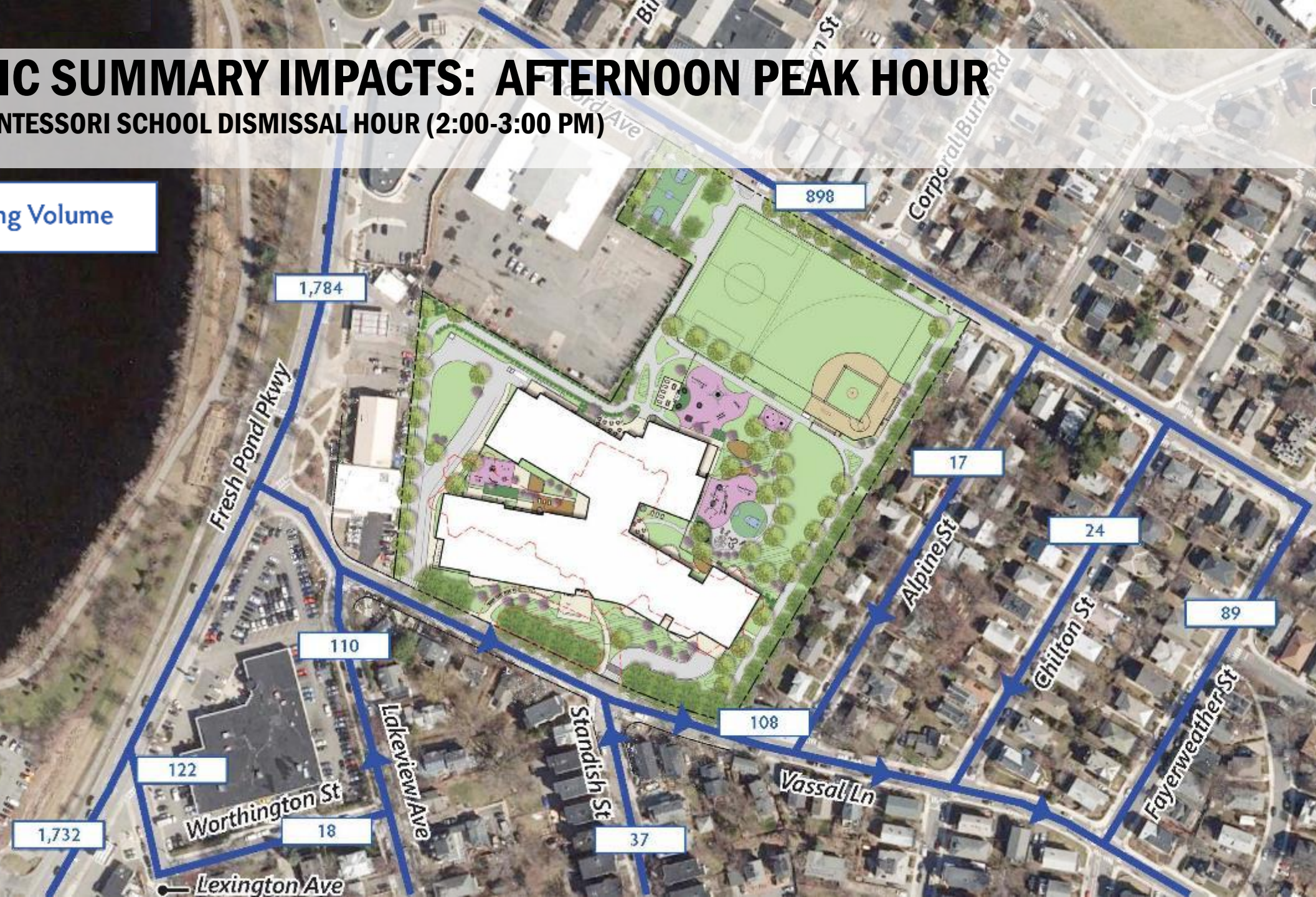


TRAFFIC SUMMARY IMPACTS: AFTERNOON PEAK HOUR

TOBIN MONTESSORI SCHOOL DISMISSAL HOUR (2:00-3:00 PM)



2020 Existing Volume



NET-NEW TRAFFIC SUMMARY IMPACTS: AFTERNOON PEAK HOUR

TOBIN MONTESSORI SCHOOL DISMISSAL HOUR (2:00-3:00 PM)



2020 Existing Volume

Net-New Vehicle Volumes
(Project Trips)

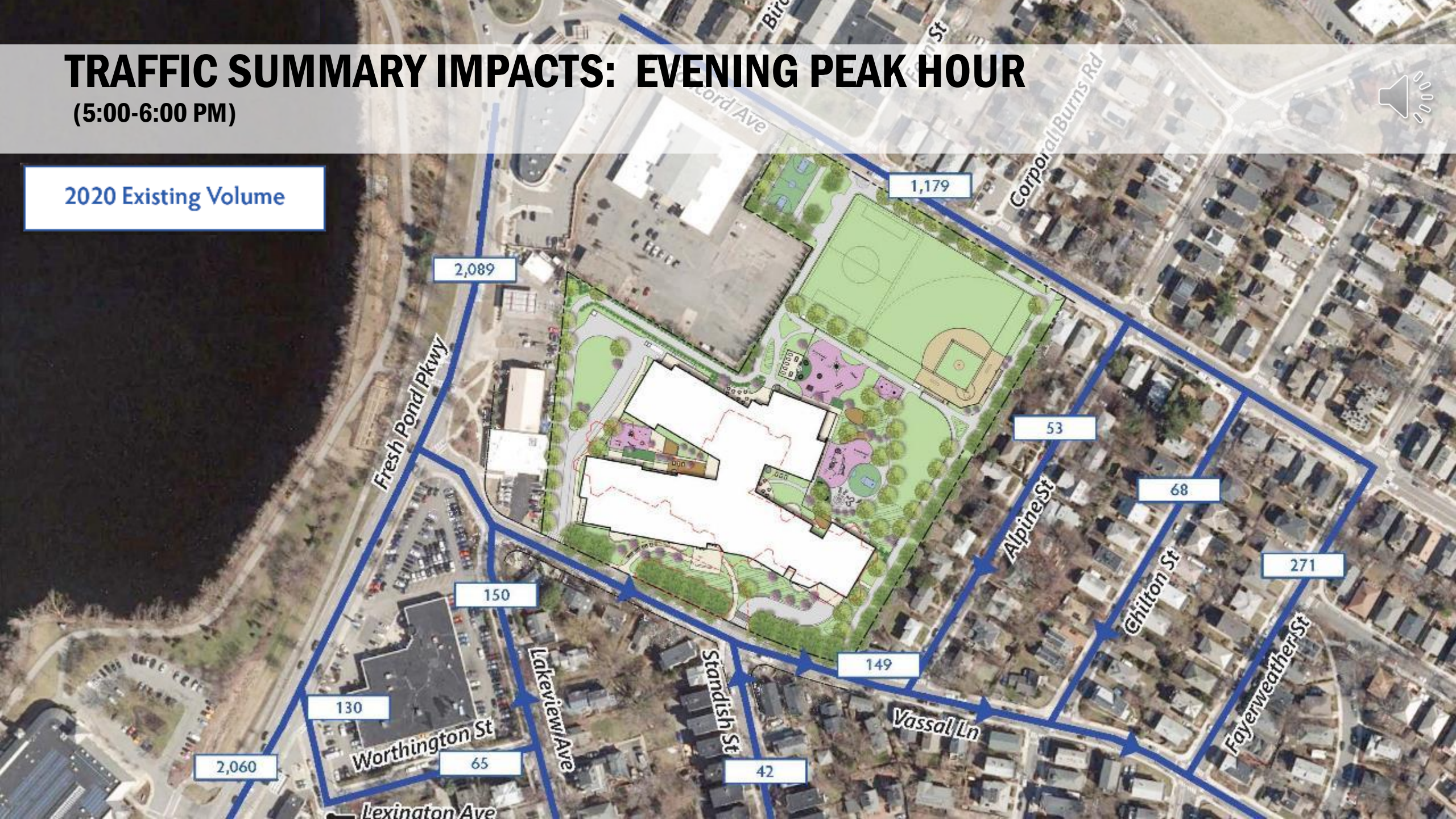


TRAFFIC SUMMARY IMPACTS: EVENING PEAK HOUR

(5:00-6:00 PM)



2020 Existing Volume



NET-NEW TRAFFIC SUMMARY IMPACTS: EVENING PEAK HOUR

(5:00-6:00 PM)



2020 Existing Volume

Net-New Vehicle Volumes
(Project Trips)



AREA IMPROVEMENTS

Site Planning Accomodations

- 1 Ample bike parking and Bluebikes station
- 2 Below-grade parking solution maximizes playground and open space
- 3 Pedestrian connection through school property & Service/Emergency access enabled via wide pedestrian ways
- 4 Internal Loading Area
- 5 Complete area bicycle route connectivity (Envision Plan)
- 6 Add LED pedestrian warning signs at Concord/Fern Intersection
- 7 **Bus Loop**
Loading & emergency vehicle access with 8 bus capacity & Mid-day use for visitors outside of arrival/dismissal periods
- 8 **Parent Drop-Off/Pick-Up**
Separate parent drop-off/staff parking from buses/walkers/cyclists
- 9 **Vassal Lane Improvements**
Restrict on-street drop-offs & traffic calming measures



AREA IMPROVEMENTS

STUDENT DROP OFF AND PICK UP

- 1 Bike and bike share parking
- 2 Below grade parking
- 8 Parent drop-off/pick-up separated from busses
- 9 Eliminate on-street drop-off



AREA IMPROVEMENTS

SITE PLANNING AND BUS LOOP



- 3 Pedestrian path with emergency/service access
- 4 Loading zone
- 5 Community Path
- 6 Pedestrian signals
- 7 Bus loop



AREA IMPROVEMENTS

PARENT DROP-OFF AND PICK-UP BY CAR

- 1 Bicycle storage
- 2 Sub-grade parking across from Standish
- 8 Student drop-off/pick-up

-  Student drop-off / pick-up travel pattern
-  Long-term bicycle storage travel pattern



AREA IMPROVEMENTS

VASSAL LANE IMPROVEMENTS

- 1 School zone flashers
- 2 Sidewalk and pedestrian improvements
- 3 Traffic calming measures
- 4 Safety measures at Standish intersection



TRANSPORTATION COLLABORATION

MOVING FORWARD

- TP&T reviews and certifies TIS before Planning Board review
- PTDM Plan includes:
 - Single-occupancy vehicle mode-share commitment
 - Comprehensive set of transportation demand management (TDM) measures
 - Annual monitoring and reporting

