



Reliability Enhancement Plan for The City of Somerville September 8, 2010





Too Many outages

(Outages in the past 6 months)

Date	Location	Cause	Duration
4/22/10	Cross St/ East Som (250-1N81H)	Cable fault	4 minutes
4/22/10	Cross St/East Som PNU 14 (13N14)	Loss Supply	1 hour
4/22/10	Cross St/East Som PNU 14 (14N26)	Loss Supply	1 hour
4/22/10	Cross St/East Som PNU 14 (14N29)	Loss Supply	1 hour
4/22/10	Cross St/East Som PNU 14 (14N17)	Loss Supply	1-2 hours
5/23/10	Broadway/East Som (14N17)	Cable Fault	1-2.5 hours
6/10/10	Broadway/East Som (14N17)	Cable Fault	1-2 hours
6/22/10	Washington/East Som (14N17)	Tree Contact	1-2 hours
7/10/10	Broadway/East Som (14N17)	Cable Fault	1-13 hours
7/10/10	Windsor Ave/East Som (29N33)	Cable Fault	2-5 hours
8/09/10	Ball Sq Area (1605)	Switching	4 minutes
8/23/10	Ball Sq Area (1605)	Switching	30 minutes
8/17/10	Marshall St./East Som (14N26)	Tree Contact	1 hour
8/23/10	Marshall St/East Som (14N26)	Wires wrapped	1-2 hours
8/31/10	Ball Sq Area (1605)	Cable Fault	1-4 hours
9/1/10	Ball Sq Area (1605)	Switching	30 minutes

Two Problem Areas Identified

Ball Square Area

East Somerville Area

City of Somerville

McFadden Brook Park
Missisquoi River Park (MDC)
Central Park
Dorel Playground
Pinard Playground
7 Park (MDC)

Ball Square Area

East Somerville Area

City of Somerville

Wetlife Brook Park

(CJIM) PP

Robinson Park

Team Field

Mystic River Park (MDC)

7 Park (MDC)

Font Park (NDC)



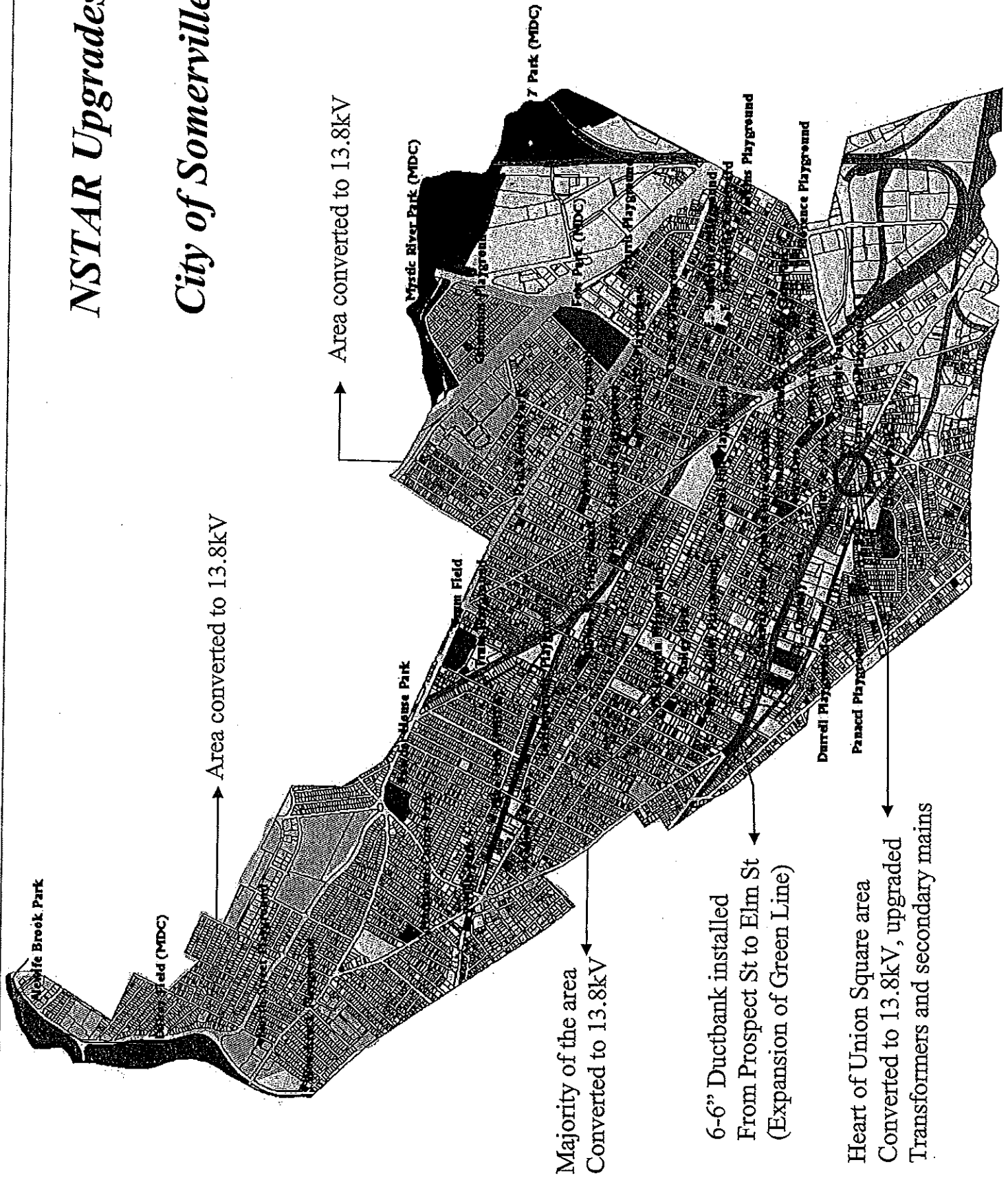
Pinetree Playgroup

James Playgroup

Daniel Play

Frased Players

City of Somerville



East Somerville Action Plan – Phase I (2010)

- **Broadway, Mt Vernon, Pennsylvania Ave Area**

(NSTAR Circuit 14N17 – 1,837 Customers)

Accelerated Maintenance Plan

- Substation
 - Inspect all substation equipment.
 - Replace defective substation equipment
- Underground System Improvements:
 - Detailed Inspection of all underground equipment
 - Replace/upgrade equipment as necessary
- Overhead system improvement:
 - Survey all lines and poles
 - Install additional fuses to minimize outages
 - Address tree trimming as required

- **Linwood & Medford Streets area**

(NSTAR Circuit 17N29 - 9 Customers)

- Rebuild and upgrade existing infrastructure.

East Somerville Action Plan – Phase II (2011)

- **Broadway, Mt Vernon, Pennsylvania Ave Area**
(NSTAR Circuit 14N17 - 1,837 Customers)
 - Comprehensive rebuild/replacement of electric infrastructure.
- **South St, Windsor St, Columbia St and Webster Ave Area**
(NSTAR Circuit 29N33 – 420 Customers)
 - Comprehensive rebuild/replacement of electric infrastructure.

West Somerville Action Plan

– Phase I (2010)

- **Broadway, Medford St – Ball Square Area**

(NSTAR Circuit 16-05 – 549 Customers)

Accelerated Maintenance Plan

- Substation
 - Inspect all substation equipment.
 - Perform relay calibration and trip test.
- Underground System Improvements:
 - Detailed Inspection of all underground equipment
 - Replace/upgraded equipment as necessary
- Overhead system improvement:
 - Survey all lines and poles
 - Install additional fuses to minimize outages
 - Address tree trimming as required

Cedar St & Morrison Ave Area

(NSTAR circuits 16-04 & 16-08 – 2,248 Customers)

- Replacement of overhead wire - in progress.



West Somerville Action Plan – Phase II (2011)

- **Broadway, Medford St – Ball Square Area**
(NSTAR Circuit 16-05 - 549 Customers)

- Comprehensive rebuild/replacement of electric infrastructure.
- Install automated/remote reporting equipment