NYC SNOW RESPONSE ANALYSIS

2010 – 2026

A comprehensive multi-source analysis of 311 snow complaints, snowstorm severity, city response quality, and socioeconomic equity across New York City

Data: NYC 311 (42.8M records) • Housing DB (106K records) • US Census ACS • Open-Meteo ERA5 • NWS • News Archives

Prepared for the Office of the Mayor | February 2026

Executive Summary

166,000+

Total Snow 311 Complaints
(2010–2026)

24,000+

Jan 2026 Complaints
ALL-TIME RECORD

17

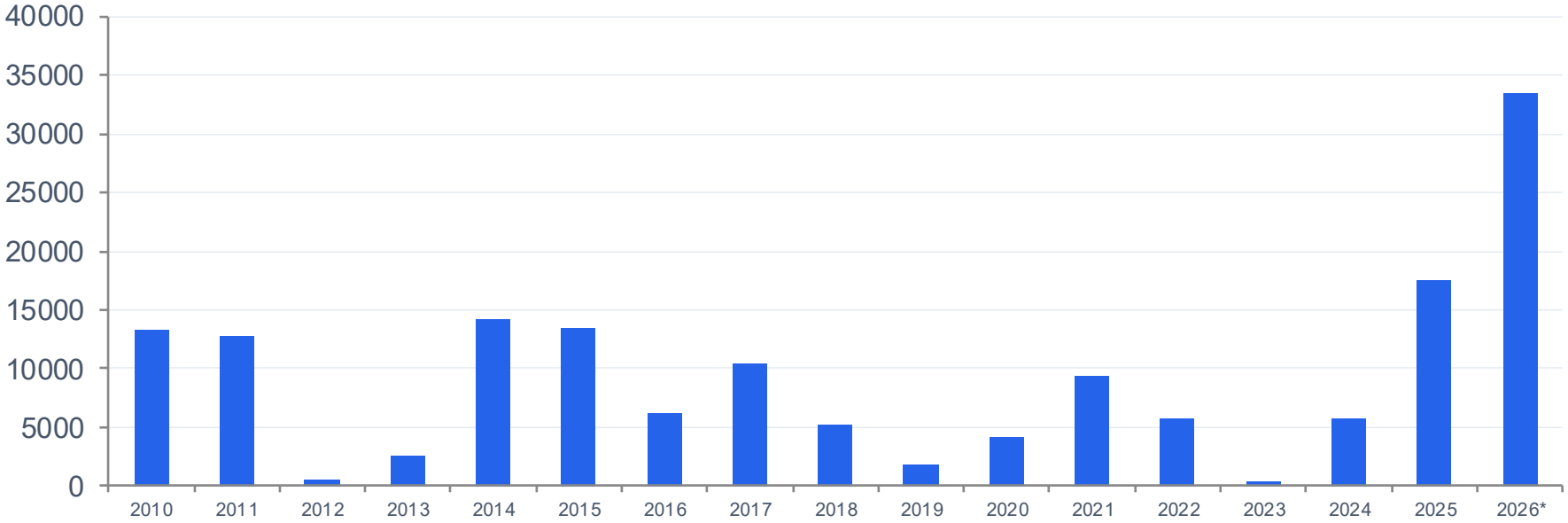
Major Snowstorms
Analyzed

3

Mayoral Administrations
Compared

Critical: Jan 2026 set an all-time record — more complaints than some entire winters combined

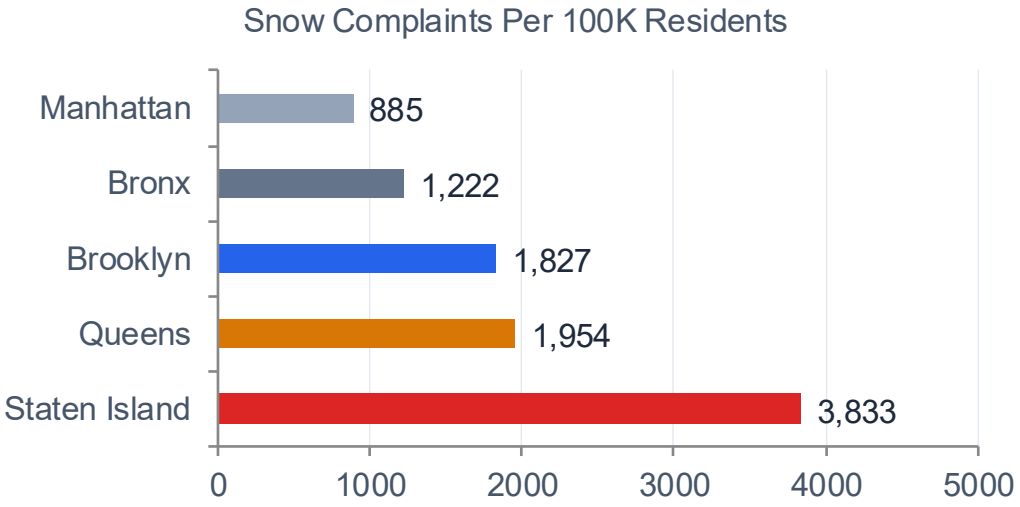
Snow Complaint Trends Over Time



2026* is partial year (Jan only) **— already the highest annual total on record**

Key: Complaint-to-snowfall ratio has increased over time, suggesting rising expectations, improved 311 accessibility (app adoption), or population growth in snow-sensitive areas.

Borough-Level Analysis



4.3x Staten Island vs. Manhattan per capita

Highest car dependency (77.5%), most single-family housing, longest DSNY response distances

Bronx Underreporting

Highest poverty (27.3%), lowest per-capita complaints. Low rates mask greater need due to digital access & language barriers.

Borough	Pop.	Complaints	Per 100K
Brooklyn	2.74M	~50,000	1,827
Queens	2.41M	~47,000	1,954
Staten Island	496K	~19,000	**3,833**
Bronx	1.47M	~18,000	1,222
Manhattan	1.69M	~15,000	885

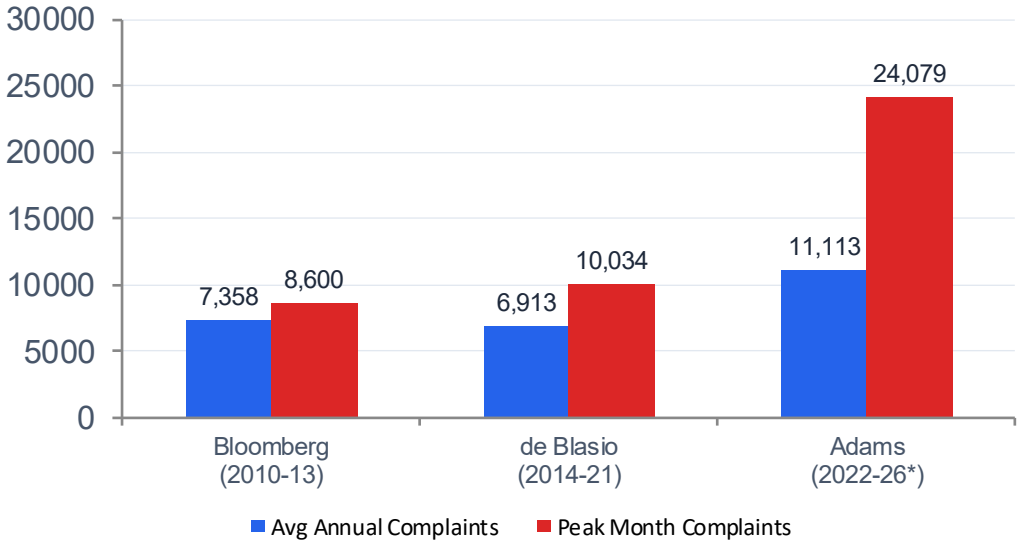
Storm-by-Storm Response Grades

Date	Snow	Mayor	Grade	Key Issues
Dec 2010	20-24"	Bloomberg	F	Catastrophic; streets unplowed for days
Jan 2016	25-30"	de Blasio	A-	Jonas: Best response; travel ban effective
Nov 2018	6-8"	de Blasio	D+	Buses stuck; commuters stranded
Dec 2020	10-18"	de Blasio	C	COVID complications; uneven clearing
Jan 2022	5-10"	Adams	C+	Slow outer-borough clearing
Jan 2026	Heavy	Adams	D	RECORD complaints; ice buildup

Showing 6 most notable of 17 analyzed storms. Full data in accompanying report.

Pattern: Best grades come from major forecasted storms (advance warning enables pre-deployment). Worst failures involve surprise timing (Nov 2018), cumulative fatigue (4 nor'easters in 2018), or systemic capacity issues (Jan 2026 record volume).

Administration Comparison



Bloomberg (2010-13)

Dec 2010 failure (F) led to sweeping DSNY reforms. Post-crisis improvement.

de Blasio (2014-21)

Best: Jonas A-. Vulnerable to surprise storms. Strong on planned events.

Adams (2022-26)

Record complaints. 24K+ in Jan 2026. Systemic capacity concerns.

The Adams administration's complaint-to-accumulation ratio is significantly higher than historical norms, suggesting systemic capacity issues beyond heavier snowfall. Budget pressures, DSNY staffing challenges, and aging fleet are contributing factors.

⚖ Census & Equity Analysis

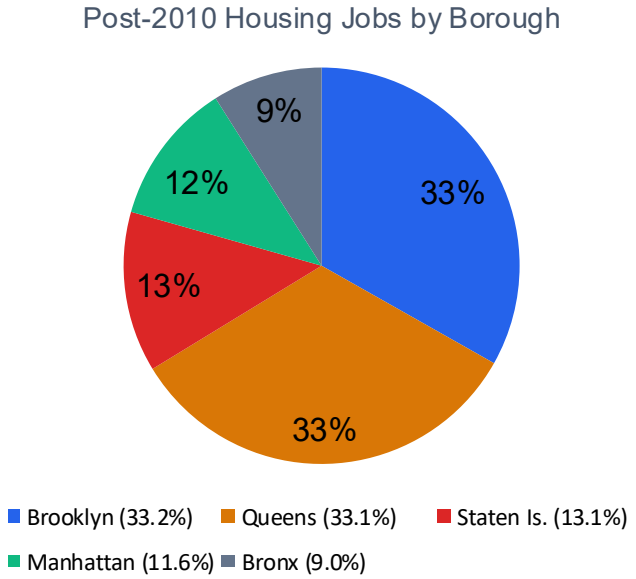
Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Is.
Median HH Income	$43,726	$67,572	$93,651	$73,648	$87,430
Poverty Rate	**27.3%**	18.9%	15.2%	12.1%	10.8%
Population 65+	12.8%	13.9%	16.7%	15.2%	**17.1%**
Drive Alone %	24.8%	22.1%	8.9%	42.3%	**77.5%**
Limited English	18.2%	14.8%	11.3%	**22.7%**	8.4%
No Vehicle HH	58.2%	55.3%	76.1%	36.8%	14.2%

Inequity Pattern: Bronx: highest poverty (27.3%), lowest per-capita complaints. Low rates mask greater need.

Transport Vulnerability: Staten Island (77.5%) and Queens (42.3%) most car-dependent — uncleared roads = economic harm.

Elderly Risk: Staten Island (17.1%) and Manhattan (16.7%) highest elderly — icy sidewalks = fall injuries.

Housing Development Context



106,358

Total post-2010 housing projects

Alteration: 56.5%

New Building: 31.5%

Demolition: 12.0%

Private Individual: 53.3%

Corporate: 26.4%

Government: 3.4%

Brooklyn + Queens = 66% of all new development. This rapid growth adds population, road surface, and sidewalk area that DSNY must service — without proportional increases in snow removal capacity.

Recommendations

01 Immediate After-Action Review

Rapid review of Jan 2026 ops; identify route failures via 311 geolocation; deploy targeted supplemental plowing

02 Equity-Informed Allocation

Weighted model: poverty rate + elderly share + language barriers + hospital proximity alongside complaint data

03 Outer Borough Strategy

Dedicated DSNY sub-depot capacity for SI; pre-storm brine priority for arterials; private contractor coordination

04 Predictive Capacity Planning

Weather-to-operations tools converting NWS forecasts into borough-level DSNY deployment plans

05 Housing Development Integration

Mandate snow infrastructure assessments for major developments; continuous route planning updates

06 311 Accessibility Expansion

Multilingual reporting (Chinese, Spanish, Korean, Bengali); community-based partnerships in underserved areas

Thank You

NYC Snow Response Analysis 2010–2026

Full interactive report, data tables, and methodology available in the accompanying HTML and Word documents.

AI-Generated Analysis Disclaimer: This briefing was generated with AI assistance using Claude (Anthropic). Data from authoritative sources; analysis should be validated by domain experts before informing policy.

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