

Supplementary Material S2: Urban Disruptions Questionnaire (Full Instrument)

Overview

This supplementary material presents the complete Urban Disruptions Questionnaire (UDQ) used in the Phase 1 pilot study. The instrument was designed to capture citizen experiences of urban mobility disruptions, adaptive responses, and perceptions of city resilience across European contexts.

Survey Administration Details

Platform and Access

- **Platform:** EU Survey (hosted on European Commission servers)
- **Primary language:** English
- **Translations:** Three additional European languages (professionally translated; specific languages withheld for review)
- **Access URLs:**
 - Master link: [withheld for review]
 - Language-specific variants: [withheld for review]

Data Collection Period

- **Pilot phase:** 9 July 2025 – 21 July 2025
- **Extended period:** 22 July 2025 – 30 July 2025
- **Promotion:** Social media campaigns in all four languages; [research community invitation]

Ethical Approval

- **Ethics committee:** [institution withheld for review] Research Ethics Committee
- **Ethics review:** Reviewed and approved by the named committee; no committee reference number is available for reporting
- **GDPR compliance:** Data were collected via EU Survey and stored on EU-based servers; no direct identifiers were requested; results are analysed and reported in aggregate
- **Consent:** Mandatory informed consent before survey access

Questionnaire Structure

The survey comprises 46 questions organized into 8 thematic sections:

1. **Consent and Demographics** (Q1–Q3): Location, settlement type
2. **Recent Disruptions Experience** (Q4–Q9): 26 disruption categories across 4 domains
3. **City Resilience Perceptions** (Q10–Q17): Likert scales on city performance
4. **Priorities for Improvement** (Q18–Q19): Policy preferences
5. **Future Hazards and Preparedness** (Q20–Q24): Risk awareness, early warning
6. **Personal Agency and Community** (Q25–Q33): Control, trust, community support
7. **Urban Challenges** (Q34–Q41): Systemic issues (housing, employment, etc.)
8. **Respondent Profile** (Q42–Q46): Age, gender, occupation, travel modes

Total completion time: Median 12 minutes (range 8–25 minutes)

Full Questionnaire Text

INTRODUCTION SCREEN

Urban Disruptions Questionnaire

Daily life in cities can be disrupted by events such as transportation delays, power outages, or extreme weather. Your responses will help make European cities better prepared and adaptable in the face of these challenges.

Privacy Notice:

- We do NOT collect personal data such as names, email addresses, or IP addresses
- All responses are anonymous and securely stored on EU-based servers
- Data will only be used for research purposes within the the research project
- You may exit the survey at any time

Time required: Approximately 10–15 minutes

SECTION 1: CONSENT AND DEMOGRAPHICS

Informed Consent Form

Purpose of Study: This study investigates how residents respond to city-level disruptions and how cities can become more adaptable.

Your Participation:

- Voluntary: You may skip questions or exit at any time
- Anonymous: No direct identifiers (name, email, IP) are collected
- Confidential: Data stored on secure EU servers
- Duration: 10-15 minutes

Data Protection (GDPR):

- Legal basis: Your explicit consent (GDPR Art. 6(1)(a))
- Data use: Research analysis only; published in aggregated form
- Retention: Data retained for duration of project (2025–2030)
- Your rights: Access, correction, erasure (within 14 days of submission)
- Contact: [email withheld for review]

Consent Declaration:

- ☐ I confirm I am 18 years or older AND I give informed consent to participate
☐ I do not consent [Survey ends]
-

Q1. In which country do you currently live?

[Dropdown menu with 27 EU countries + UK + Switzerland + Other]

If “Other”: _____

Q2. Which city or town do you spend most of your week in?

(e.g., for work or study)

Q3. How would you describe the area where you currently live?

(your main place of residence)

- ☐ Urban centre (city centre with high population density)
- ☐ Suburban area (residential neighbourhood near a city)
- ☐ Rural area outside a city
- ☐ Mixed-use area (residential and commercial)
- ☐ Industrial area
- ☐ Coastal area
- ☐ Remote area

SECTION 2: RECENT DISRUPTIONS EXPERIENCE

Q4. In the past 6 months, have you personally experienced any of the following disruptions in your city?

For each disruption, select the time period when it LAST occurred. Choose “Did not experience” if not relevant.

Q4a. TRANSPORT-RELATED DISRUPTIONS

Disruption Type	Did not experience	Past week	Past month	Past 3 months	Past 6 months
Public transport delays or cancellations	☐	☐	☐	☐	☐
Strikes (transport & related services)	☐	☐	☐	☐	☐
Traffic signal outages or malfunction	☐	☐	☐	☐	☐
Heavy road traffic congestion	☐	☐	☐	☐	☐
Road works or street closures	☐	☐	☐	☐	☐
Parking shortages	☐	☐	☐	☐	☐
Infrastructure failures (bridges, tunnels)	☐	☐	☐	☐	☐
Fuel shortages	☐	☐	☐	☐	☐

Q4a_other. Other transport disruptions (please describe):

Q4b. ENVIRONMENT & WEATHER DISRUPTIONS

Disruption Type	Did not experience	Past week	Past month	Past 3 months	Past 6 months
Extreme weather (floods, heatwave, snow)	☐	☐	☐	☐	☐
Air quality alerts (smog, dust, pollution)	☐	☐	☐	☐	☐
Natural disasters (earthquake, wildfires)	☐	☐	☐	☐	☐
Waterlogging after rainfall	☐	☐	☐	☐	☐
Power outages (weather-caused)	☐	☐	☐	☐	☐
Public space closures due to weather	☐	☐	☐	☐	☐

Q4b_other. Other environment/weather disruptions (please describe):

Q4c. UTILITIES & CONNECTIVITY DISRUPTIONS

Disruption Type	Did not experience	Past week	Past month	Past 3 months	Past 6 months
Power outage (equipment failure, grid)	☐	☐	☐	☐	☐
Water supply interruption	☐	☐	☐	☐	☐
Digital connectivity outage (mobile/internet)	☐	☐	☐	☐	☐
Long delays in utility repairs	☐	☐	☐	☐	☐

Q4c_other. Other utilities/connectivity disruptions (please describe):

Q4d. PUBLIC SPACE & SOCIAL DISRUPTIONS

Disruption Type	Did not experience	Past week	Past month	Past 3 months	Past 6 months
Overcrowded public spaces	☐	☐	☐	☐	☐
Excessive noise (construction, nightlife)	☐	☐	☐	☐	☐
Vandalism or property damage	☐	☐	☐	☐	☐
Restricted access to public spaces	☐	☐	☐	☐	☐
Safety concerns (poor lighting, unsafe areas)	☐	☐	☐	☐	☐

Q4d_other. Other public space/social disruptions (please describe):

SECTION 2 (continued): DISRUPTION IMPACT & RESPONSE

The following questions ask about your experience with disruptions.

Q5. Thinking about the SINGLE MOST DISRUPTIVE incident you experienced (from Q4 above):

Please briefly describe what happened and when it occurred:

[Large text box]

If you did NOT experience any disruptions, skip to Q10 (City Resilience Perceptions section)

Q6. Did this incident lead to any unexpected POSITIVE outcomes or changes?
(for you, your household, or your community)

[Large text box - Optional]

Examples: discovered new route, learned new skill, community cooperation

Q7. How disruptive was this incident to your daily routine?

- ☐ Not at all disruptive
- ☐ Slightly disruptive
- ☐ Moderately disruptive
- ☐ Very disruptive
- ☐ Extremely disruptive

Q8. How quickly was normal service restored?

- ☐ Within 1 hour
- ☐ Same day (2–8 hours)
- ☐ 2–3 days
- ☐ More than 3 days
- ☐ Still ongoing / not resolved

Q9. Which actions did you take to cope with this disruption?

(Select ALL that apply)

- ☐ Changed transport route
- ☐ Changed mode (e.g., walked, cycled, carshared)
- ☐ Postponed or cancelled my trip/activity
- ☐ Worked or studied remotely
- ☐ Sought information via app/social media
- ☐ Contacted service providers/authorities for support
- ☐ Sought help from friends or family
- ☐ Did nothing and waited
- ☐ Used community-based solution (mutual aid)
- ☐ Discovered a new, more efficient way to handle similar situations
- ☐ Adopted a new habit or routine that improved my daily life
- ☐ Collaborated with others to find alternative solution
- ☐ Other (please specify): _____

SECTION 3: CITY RESILIENCE PERCEPTIONS

Please indicate how much you agree with the following statements about your city.

Scale: 1 = Strongly Disagree — 2 = Disagree — 3 = Neither — 4 = Agree — 5 = Strongly Agree — 0 = Not sure/Don't know

Statement	1	2	3	4	5	0
Q10. My city communicates clearly and promptly when disruptions occur	☐	☐	☐	☐	☐	☐
Q11. My city learns from past disruptions and improves its ability to handle future ones	☐	☐	☐	☐	☐	☐
Q12. As a result of past disruptions, my city's infrastructure has become more robust	☐	☐	☐	☐	☐	☐
Q13. Authorities are transparent about disruption causes and timelines	☐	☐	☐	☐	☐	☐
Q14. Citizens' feedback on disruptions is regularly used to make improvements	☐	☐	☐	☐	☐	☐
Q15. I can usually find practical alternatives when something stops working	☐	☐	☐	☐	☐	☐
Q16. Recent disruptions have affected my stress levels or wellbeing	☐	☐	☐	☐	☐	☐
Q17. I feel confident navigating disruptions when they occur	☐	☐	☐	☐	☐	☐

SECTION 4: PRIORITIES FOR IMPROVEMENT

Q18. Which THREE improvements would most reduce the impact of disruptions on your daily life?

(Select up to 3)

- ☐ More reliable public transport
- ☐ Improved traffic management
- ☐ Real-time, multi-sourced information
- ☐ Safer walking & cycling infrastructure
- ☐ Greener and bluer public spaces (parks, riversides, waterfronts)
- ☐ More inclusive and accessible infrastructure
- ☐ Constant maintenance of infrastructure
- ☐ Faster repair of services/infrastructure
- ☐ Improved emergency services coordination
- ☐ Community support networks
- ☐ Regular emergency response training at community level
- ☐ Improved data sharing between city departments
- ☐ More inclusive planning considering all citizen needs
- ☐ Other (please specify): _____

Q19. Would you prefer your city to focus more on:

(Select ONE primary preference)

- ☐ Preventing disruptions before they happen
- ☐ Responding quickly when they occur
- ☐ Learning from disruptions to become stronger for future ones
- ☐ Enhancing community involvement in planning and response
- ☐ Investing in resilient infrastructure to withstand disruptions
- ☐ Fostering partnerships between public and private sectors
- ☐ Giving equal priority to all of the above
- ☐ Not sure

SECTION 5: FUTURE HAZARDS & PREPAREDNESS

Q20. Which TWO future hazards worry you MOST about your city?

(Select up to 2)

- ☐ Extreme weather events (floods, heatwaves, storms, high winds)
 - ☐ Natural disasters (earthquakes, wildfires, landslides)
 - ☐ Prolonged power outage
 - ☐ Cyber-attack on infrastructure
 - ☐ Public health emergency
 - ☐ Terrorism/security incident
 - ☐ Infrastructure failures (bridges, utilities, transport)
 - ☐ Industrial accidents
 - ☐ Traffic accidents and road safety
 - ☐ Air pollution / Environmental degradation
 - ☐ Other (please specify): _____
-

Q21. Do you receive sufficient advance information and alerts from local authorities about such hazards?

- ☐ Yes, always
- ☐ Yes, usually
- ☐ Sometimes, but not consistently
- ☐ Rarely
- ☐ Never
- ☐ Not sure / Don't know

Q22. How prepared is your household to manage 72 hours without external assistance if a major disruption occurs?

- ☐ Not at all prepared
- ☐ Slightly prepared (minimal supplies, no plan)
- ☐ Moderately prepared (some supplies and basic plan)
- ☐ Well prepared (necessary supplies and plan in place)
- ☐ Fully prepared (comprehensive supplies and detailed plan)

Q23. Are you aware of any early-warning system that would alert you in an emergency?

(e.g., SMS alerts, sirens, city apps)

- ☐ Yes, I am aware and have used them before
- ☐ Yes, I am aware but have never used them
- ☐ I have heard of some but never used them
- ☐ No, I am not aware of any early-warning systems
- ☐ Not sure

Q24. How effective are current early-warning systems in helping you adapt and minimize impact during an emergency?

- ☐ Not at all effective
- ☐ Slightly effective
- ☐ Moderately effective
- ☐ Effective
- ☐ Very effective
- ☐ Not applicable / Not sure

SECTION 6: PERSONAL AGENCY & COMMUNITY

Q25. How much control do you feel you have over managing disruptions in your daily life?

- ☐ No control at all
- ☐ Little control
- ☐ Some control
- ☐ A lot of control
- ☐ Complete control
- ☐ Not sure

Q26. Who is primarily responsible for managing disruptions in your city?

(Select ALL that apply)

- ☐ City/local government
- ☐ Regional government
- ☐ National government
- ☐ Private companies (e.g., utility providers)
- ☐ Community groups
- ☐ Not sure / Don't know
- ☐ Other (please specify): _____

Q27. How much do you trust your city's authorities to manage disruptions effectively?

- ☐ Not at all
- ☐ Slightly
- ☐ Somewhat
- ☐ Mostly
- ☐ Completely
- ☐ Not sure

Q28. On average, how often do you experience disruptions in your city?

- ☐ Daily
- ☐ Several times a week
- ☐ Once a week
- ☐ A few times a month
- ☐ Rarely
- ☐ Never

Q29. In the last 30 days, have you helped or received help from neighbours/community members during a disruption?

- ☐ Yes
- ☐ No

Q29a. If Yes, please briefly describe how this helped:

[Text box]

Q30. Which digital tools do you use to stay informed about disruptions?

(e.g., apps, social media platforms, websites)

[Text box - Optional]

Q31. Would you be willing to participate in community efforts to help your city manage disruptions?

(e.g., volunteering, reporting issues)

- ☐ Yes
☐ Maybe
☐ No

Q32. During past disruptions, have you observed or taken part in citizen-led initiatives that helped your city adapt or improve?

☐ Yes ☐ No ☐ Not sure

Q32a. If Yes, please briefly describe:

[Text box]

Q33. How much do you believe citizen involvement can make your city stronger and more adaptable?

- ☐ Not at all
☐ Slightly
☐ Somewhat
☐ Quite a lot
☐ Very much
☐ Not sure

SECTION 7: URBAN CHALLENGES

Please indicate how much you agree with each statement about your city.

Scale: 1 = Strongly Disagree — 2 = Disagree — 3 = Neither — 4 = Agree — 5 = Strongly Agree — 0 = Not sure

Statement	1	2	3	4	5	0
Q34. Disruptions have become more frequent over the past three years	☐	☐	☐	☐	☐	☐
Q35. Disruptions make it difficult to find or keep employment	☐	☐	☐	☐	☐	☐
Q36. Lack of affordable housing is a serious issue in my city	☐	☐	☐	☐	☐	☐
Q37. Public services meet residents' needs during disruptions	☐	☐	☐	☐	☐	☐
Q38. Traffic congestion significantly worsens during disruptions	☐	☐	☐	☐	☐	☐
Q39. Community support is strong and reliable during disruptions	☐	☐	☐	☐	☐	☐
Q40. The city invests enough in resilient infrastructure	☐	☐	☐	☐	☐	☐
Q41. My neighbourhood has resources needed to recover from disruptions	☐	☐	☐	☐	☐	☐

SECTION 8: RESPONDENT PROFILE

These final questions help us understand the diversity of respondents.

Q42. Age group:

- ☐ 18–24
- ☐ 25–34
- ☐ 35–44
- ☐ 45–54
- ☐ 55–64
- ☐ 65 and older
- ☐ Prefer not to say

Q43. Gender:

- ☐ Female
- ☐ Male
- ☐ Non-binary / Third gender
- ☐ Prefer not to say
- ☐ Other (please specify): _____

Q44. What best describes your main daily activity or role?

- ☐ Student
- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Self-employed
- ☐ Unemployed / Between jobs
- ☐ Retired
- ☐ Unable to work due to disability
- ☐ Other (please specify): _____

Q45. Which modes of travel do you use on a typical weekday?

(Select ALL that apply)

- ☐ Car as driver
- ☐ Car as passenger (ride-sharing or taxi)
- ☐ Motorcycle or motor-scooter
- ☐ Public transport (bus, train, tram, subway)
- ☐ Walking
- ☐ Cycling / E-scooter
- ☐ No travel (work from home / retired)
- ☐ Other (please specify): _____

OPTIONAL: FOLLOW-UP PARTICIPATION

Q46. May we contact you for a short follow-up interview?

(30–45 minutes, conducted via video call, with separate consent)

☐ Yes

☐ No

Q46a. If you selected YES, please provide your email address:

IMPORTANT: Your email will be stored SEPARATELY from your survey responses to maintain anonymity. It will ONLY be used to contact you about the follow-up interview and will be deleted after the interview is scheduled (or if you do not respond within 4 weeks).

SURVEY COMPLETION SCREEN

Thank You!

Your responses are valuable for understanding how European cities can become more adaptable to disruptions.

What happens next:

- Your anonymous responses will be combined with others across European countries
- Findings will inform urban mobility planning tools and policies
- Results will be published in open-access research articles
- Project updates: [project website withheld for review]

Questions or concerns about this study?

Contact: [email withheld for review]

By clicking SUBMIT, you confirm that you have answered all questions truthfully and consent to your anonymous data being used for research purposes.

Data Processing and Quality Control

Post-Stratification Weighting

To address geographic sampling imbalance, post-stratification weights were calculated as:

$$w_i = \frac{N_c/N_{\text{total}}}{n_c/n_{\text{sample}}} \quad (1)$$

where:

- N_c = adult population of country c (Eurostat 2024)
- N_{total} = sum of adult populations across sampled countries
- n_c = number of respondents from country c
- n_{sample} = total respondents (140)

Weights were:

- Scaled to mean = 1.0
- Trimmed at $4 \times$ mean to reduce extreme values
- Applied to all percentage calculations in the manuscript

Effective Sample Size:

$$\text{ESS} = \frac{(\sum w_i)^2}{\sum w_i^2} \approx 36 \quad (2)$$

Data Cleaning Protocol

1. **Duplicate detection:** Responses with identical timestamps and IP address patterns (where logged) were manually reviewed; no duplicates identified.
2. **Completion time filtering:** Responses completed in ≤ 4 minutes flagged for review (potentially non-attentive); none excluded after manual inspection.
3. **Straight-lining detection:** Responses with identical answers across all Likert scales flagged; 2 cases identified and excluded.
4. **Free-text review:** All open-ended responses reviewed for spam, profanity, or non-responsive content; 3 cases with gibberish text excluded.
5. **Final sample:** 140 valid responses after exclusions (original $n=145$).

Missing Data Patterns

- **Q5 (most disruptive incident description):** 18% skipped (respondents who experienced no disruptions)
- **Q6 (positive outcomes):** 42% skipped (optional question)
- **Q30 (digital tools):** 35% skipped (optional question)
- **Demographic questions:** $\leq 5\%$ missing per item

No imputation performed; analyses use available cases.

Translation Quality Assurance

Translation Protocol

1. **Forward translation:** Professional translators (native speakers) translated English master version into the three additional target languages (specific languages withheld for review)
2. **Back-translation:** Independent translators back-translated to English
3. **Reconciliation:** Project team compared back-translations with master, resolved discrepancies with original translators
4. **Pilot testing:** Each translated version tested with 3–5 native speakers before public release

Cultural Adaptation Examples

- **Q18 option:** “Greener and bluer public spaces” required cultural explanation in one pilot language (term “bluer” unfamiliar); retained with added tooltip: “waterfront areas, riversides”
- **Q20 hazard list:** “Terrorism/security incident” phrasing reviewed for sensitivity in one pilot context; retained as-is after consultation with local collaborators
- **Q44 occupation:** “Self-employed” category in one pilot language required clarification to distinguish from freelancers; tooltip added

Ethical Considerations

Informed Consent Process

Mandatory consent screen presented BEFORE Q1, covering:

- Study purpose and duration
- Voluntary participation and right to withdraw
- Anonymity and data protection measures (GDPR compliance)
- Data storage and retention (EU servers, project duration)
- Contact information for questions/complaints

No responses collected without explicit consent.

Vulnerable Populations

Survey restricted to adults (18+). No special provisions for vulnerable groups, but:

- Language accessibility via professional translations
- Simple language (Flesch-Kincaid grade level 8–10)
- Option to skip sensitive questions
- Free-text options for non-binary gender, other occupations, etc.

Data Storage and Security

- **Platform:** EU Survey (European Commission infrastructure)
- **Server location:** European Union data centers
- **Encryption:** HTTPS transport; encrypted at rest
- **Access control:** Limited to 3 research team members
- **Retention:** Until project completion (2030); then archived per [institution withheld for review] policy
- **Anonymization:** No IP addresses, emails (except Q46a) stored separately

Survey Instrument Versioning

- **Version 1.0:** Draft instrument (May 2025)
- **Version 1.1:** Post-pilot revisions based on 28 collaborator test responses (June 2025)
- **Version 2.0:** Final instrument with translations (July 2025); CURRENT VERSION

Changelog V1.0 to V1.1:

- Added Q6 (positive outcomes) based on pilot feedback requesting positive adaptation signals
- Reordered Q4 subcategories to reduce fatigue (Transport first as most common)
- Simplified Q18 wording: changed from “multi-sourced information” to “real-time, multi-sourced information”

Changelog V1.1 to V2.0:

- Added professional translations (three additional European languages; specifics withheld for review)
- Platform migration: changed from Google Forms to EU Survey
- No substantive question changes

Contact Information

For questions about the survey instrument, data collection, or request for raw (anonymized) data:

Principal Investigator:

[corresponding author withheld for review]

[institution withheld for review]

Email: [email withheld for review]

Ethics Reference:

[institution withheld for review] Research Ethics Committee

Project Information:

[project name withheld for review]

Website: [withheld for review]

EU Grant Agreement: [withheld for review]

Relocated Survey Tables

The two tables that follow were presented in an earlier version of the main manuscript. They have been relocated here on editorial advice so that the main text can concentrate on demonstrating how the taxonomy differentiates between disruption types rather than on survey-derived descriptive patterns. In keeping with the pilot framing adopted throughout the paper, the values reported below should be treated as illustrative rather than as population-level estimates, given the effective sample size after post-stratification weighting ($ESS \approx 36$). The tables are retained in this supplement both for transparency and for possible reuse in subsequent operational deployments where sampling and weighting can be strengthened.

Disruption Burden and Coping Confidence by Settlement Type

Table 1 disaggregates the reported disruption burden and coping confidence across settlement types, as derived from the pan-European pilot survey. Mixed-use areas are associated with the highest per-person event load, whereas suburban respondents report disproportionately high coping confidence relative to their exposure. Rural respondents report fewer events per person but markedly lower coping confidence, a pattern that may reflect the greater relative severity of infrequent disruptions in resource-scarce settings. Coastal and remote estimates are statistically unreliable because of very small weighted sample sizes and are shown for completeness only. It may be inferred from these gradients that monitoring infrastructure and citizen-facing early-warning communications could usefully be prioritised across settlement types in future deployments, though any such prioritisation would require confirmation on probability-based samples.

Table 1: Disruption burden and coping confidence by settlement type (pan-European pilot survey, weighted; $ESS \approx 36$). Illustrative values; see caveats in text.

Settlement type	Wt. respondents	Events/person	Share %	Confidence %
Urban centre	67.8	12.8	50.0	52.3
Suburban (near city)	32.1	11.9	23.7	79.8
Mixed-use (res.+comm.)	14.2	15.2	10.5	41.7
Rural (outside city)	13.8	10.1	10.5	18.5
Remote area [†]	5.9	9.8	4.3	85.2 [†]
Coastal area [†]	1.9	13.6	1.4	92.1 [†]

[†] Weighted $n < 6$; statistically unreliable, shown for completeness only.

City Resilience Perceptions

Table 2 reports weighted agreement and disagreement with eight statements concerning city resilience. The strongest net agreement concerns the perceived seriousness of the shortage of affordable housing and the perceived impact of disruptions on employment, whereas the sharpest net disagreement concerns the adequacy of municipal investment in resilient infrastructure. These patterns are suggestive rather than confirmatory and should be read alongside the Quality column, which flags items with limited statistical reliability given the pilot sample. The evidence suggests that perceptions of institutional investment in resilience merit further investigation in operational deployments drawing on larger and more representative samples, with implications for urban managers seeking to align resilience communication with areas of citizen concern.

Table 2: City resilience perceptions: weighted agreement and disagreement among pan-European pilot survey respondents. Gap = Agree% – Disagree%; negative values indicate net dissatisfaction. Illustrative values; see caveats in text.

Statement	Agree %	Disagree %	Gap	Quality
Lack of affordable housing is serious	51.2	12.8	+38.4	Moderate
Disruptions affect employment	38.9	15.7	+23.2	Moderate
Congestion worsens during disruptions	34.5	14.2	+20.3	Moderate
Disruptions more frequent in past 3 years	31.7	18.1	+13.6	Moderate
Public services meet needs during disruptions	24.3	19.8	+4.5	Low
Community support is strong during disruptions	25.1	23.4	+1.7	Low
Neighbourhood has recovery resources	16.2	21.5	–5.3	Low
City invests enough in resilient infrastructure	15.7	36.8	–21.1	Moderate

Remainder to 100% = Neutral/No opinion.

Quality reflects statistical reliability based on response spread and ESS:

Moderate = |Gap| > 10 pp; Low = |Gap| ≤ 10 pp.