At the Operational Margin: Spatial Planning Administration in Kalaallit Nunaat

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In Kalaallit Nunaat, many planning difficulties concern whether a valid rule can be applied at all. Planning rules may be legally valid, yet their application depends on conditions they do not secure: stable ground, road access, seasonal timing, technical expertise, and administrative memory. Drawing on public planning records from Qeqqata and Avannaata, read in light of my own planning work there and checked against the current plans of the other three municipalities, this article examines what I call the operational margin: the administrative work of determining whether, and in what form, valid planning rules can be applied when the conditions they presuppose are uncertain. It argues that planning relies on administrative judgement to determine what a rule can reasonably require under such conditions. In Kalaallit Nunaat, such judgement is shaped by inherited planning instruments, short-term external expertise, limited local professional training, and environmental and infrastructural uncertainty. The article treats this judgement as a practical form of Arctic intelligence: the administrative capacity through which rules, terrain, infrastructure, and local consequences are brought together into a decision.

Introduction

Questions of where sled dogs should be kept cannot be treated as animal regulation or as land-use planning alone. Dog places are formally temporary, yet some have existed long enough to function as fixed parts of the settlements and towns in which they are located. Relocating them bears on sled routes, tourism, nearby homes and kindergartens, and the direction of urban expansion. The administrative question is which instrument can appropriately regulate a practice that is mobile, cultural, spatial, seasonal, and contested.

The municipal plan, the area-allocation provisions, and the municipal bylaw each address part of the problem, but none determines how the case should be resolved. The decision is produced through planning administration: the preparation, interpretation, and application of plans, area allocations, bylaws, permits and technical requirements. This administration, and the conditions under which it is carried out, are the article's subject. Current Arctic agendas name uncertainty, plural knowledge systems, and self-determination as central challenges (ICARP IV, 2026), and in

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2026 international attention has focused on Kalaallit Nunaat's[1] geopolitical status (Gad, 2026). Much less attention has been paid to the municipal level at which planning decisions are made, although it is in municipal administration that environmental knowledge, regulation, heritage, political direction, and construction reality must be resolved into single decisions. Between a planning rule and a decision lies a practical question: whether the conditions the rule assumes are present, and what the rule can require if they are not. I refer to this interval as the operational margin.

I define the operational margin as the administrative work of determining what a valid planning rule can require, and how it can be made usable, when the conditions it presupposes are absent, uncertain, or changing. Discretion concerns the judgement exercised in implementing rules; the operational margin concerns whether, and in what form, the rule can be applied at all. The two overlap where establishing a rule's conditions itself requires judgement. I argue that this work is essential to planning in Kalaallit Nunaat yet poorly recognized, supported, and retained, and that it is a form of Arctic intelligence on which the formal system depends.

The article asks where, in ordinary municipal planning in Kalaallit Nunaat, valid rules are made to fit conditions they do not secure, and what that work depends on. The planning record is analysed by type of mismatch rather than by municipality or plan: plans that no longer describe their towns, a practice regulated by several rules at once, futures held open, imported technical standards, and the administrative capacity on which all of these depend. The findings are then discussed in relation to research on discretion, institutions, and Greenlandic municipal government, and the conclusion considers implications for education, institutional continuity, and the revision of planning instruments.

The analysis draws on public planning records from Qeqqata and Avannaata, read alongside my professional experience in Kalaallit Nunaat at intervals between 2014 and 2024, in private architectural practice in Nuuk and in municipal planning and land-allocation casework in both municipalities. This experience informs the reading of the documents but is not treated as a separate dataset; where a claim rests on it rather than on the documents, the text says so (cf. Brannick and Coghlan, 2007).

Plans, bylaws, and minutes are read both for their content and as instruments that act in administrative work (Prior, 2003; 2008; Hull, 2012), and plans are assessed less by whether development conforms to them than by how they inform later decisions (Faludi, 2000; see also Oliveira and Pinho, 2010). The documents are read against one another and against the conditions they are meant to regulate. They show the conditions and requirements officials face and the problems the instruments create or reveal, but not how individual officials reasoned in particular cases. They include local plans from the 1980s and 1990s that remain in force, municipal plan amendments, area-allocation rules, municipal bylaws, technical guidance, and public consultation material, selected where the record shows a mismatch between a rule and the conditions needed to apply it: changed land use, outdated boundaries, unstable terrain, unresolved infrastructure, or limited administrative capacity. Some of the plans discussed are ones I worked on; like the rest, they are analysed only as public documents, and internal working notes and application files are excluded. All are in Danish or in Danish and Kalaallisut and are read in the original; translations

[1]The Kalaallisut name Kalaallit Nunaat is used rather than Greenland, except in quoted material and in the formal titles of institutions and legislation.

are mine. The current municipal plans of Sermersooq, Qeqertalik, and Kujalleq were also examined to establish whether similar planning conditions are documented elsewhere in Kalaallit Nunaat, without treating the three municipalities as additional case studies.

The term planning administration is used here in a broad municipal sense. It covers the preparation and revision of planning instruments, the handling of area-use questions, the application of bylaws and technical requirements, and the administrative processes through which planning matters are prepared for political decision.

The planning record

The planning instruments examined from Maniitsoq, Sisimiut, Kangerlussuaq, and Ilulissat share one pattern: plans are revised repeatedly as inherited boundaries, actual use, terrain, infrastructure, heritage status, and administrative capacity diverge. Revision can be slow; one amendment for huts in open country in Qeqqata was adopted in 2019, adjusted in 2020, and corrected again in 2023–2024 (Qeqqata Kommunia, 2024a). The analysis below is organized by type of problem, because the same administrative work recurs across instruments with different subject matter, such as a dog bylaw, a town-centre plan, and a harbour amendment. In each case, the instrument must be fitted to conditions it does not itself determine.

Inherited instruments

Municipal planning in Kalaallit Nunaat predates Home Rule.[2] Colonial-era district affairs ran through local councils under two Landsråd (the provincial councils for North and South Greenland), answerable to the trade administration in Copenhagen, an arrangement documented in detail at the level of individual towns, notably Sisimiut (Thuesen, 1999; Thuesen et al., 2017), and recorded from the practitioner's side by a civil engineer and town planner who took part in the first Greenlandic town-planning work in 1950 (Lyager, 2002). Municipal planning continues to operate through an apparatus whose basic categories were formed under those earlier administrative conditions.

The older local plans illustrate how detailed this apparatus was. In Maniitsoq and Sisimiut, land was divided into centre areas, harbour functions, public-service areas, housing, roads, water and sewer connections, and technical facilities, with provisions extending to colour and material expression. The town plan for Sisimiut covering 1986 to 2001 was prepared around the planning reform that entered into force on 1 January 1987 and organized planning through national, municipal, and local levels (Sisimiut Kommune, 1986). These plans made towns legible to administration. The same instrument logic still organizes planning administration, although uses, boundaries, infrastructure, staffing, and local knowledge have changed. The current consolidated planning law, issued by the Government of Greenland (Naalakkersuisut), retains the same logic, defining planning and area use as an overall societal assessment spanning nature protection, the allocation of land between open country and built facilities, economic, social, and environmental development, public involvement, and the coordination of physical with economic planning (Naalakkersuisut, 2024).

[2]Kalaallit Nunaat gained Home Rule in 1979. Self-Government replaced it in 2009, transferring further areas of responsibility to Greenlandic institutions and recognizing the people of Kalaallit Nunaat as a people with the right to self-determination under international law; Kalaallit Nunaat remains part of the Kingdom of Denmark. Planning is regulated by Greenlandic law and administered by the municipalities (Naalakkersuisut, 2024).

Plans and the towns they describe

Planning is required not only for new development but also when existing plans no longer describe the town they are meant to regulate. Maniitsoq's town centre is a case in point. The centre is covered by a succession of local plans adopted between 1985 and 1994, one for the police and fire station area, one for the common-purpose area holding the municipal office, the seamen's home, the sports hall, and the old school, one for Brættet (Kalaaliaraq), the local fish and meat market where hunters and fishers sell their catch, and one for the bank block, each fixing uses, building fields, and detailed provisions for its own part of the town (Maniitsoq Sukkertoppen Kommune, 1985; 1987; 1988; 1994). These plans remain part of the valid planning basis, while functions have moved, buildings have been altered or sold, and the municipal plan's detail-area boundaries have been redrawn around them, so that a single allocated site stands under an old local plan and a newer detail area at once. The stated purpose of the amendment work is to restore the correspondence between plan and town, making clear which provisions apply to which site and removing those that no longer serve a function. Preparing a new planning basis for the centre is therefore a form of repair: old boundaries are reconciled with current uses, obsolete provisions removed, and future development is made legible to the people who must administer it and the people who must live with it (Qeqqata Kommunia, 2021).

The same problem applies to individual buildings. In Maniitsoq, the municipal plan listed the former school as worthy of preservation, but the status was lifted in 2020 after the national museum judged that extensions had transformed the building too much to justify it. The municipality had sold the building, and its new owner wished to convert it to housing, contrary to a local plan that still reserved it for public purposes (Qeqqata Kommunia, 2021). Heritage can thus be an unstable administrative category: a building can cease to fit the category meant to protect it while the plan continues to assign it a use its owner no longer intends, so the planning question is whether the category still corresponds to the building.

At the edge of the same town, a working quarry landscape holding municipal container storage, contractor depots, sand and gravel deposits, and an asphalt plant is brought into new formal plan categories where the municipality needs business areas sooner than its long-term expansion areas can provide (Qeqqata Kommunia, 2023). This is the conversion of an existing working landscape, constrained by terrain, road access, and a water protection zone, into administrable use. In each case planning revises an administrative description after conditions have already changed.

At this point, planning work becomes interpretive: planners must determine whether the inherited plan still provides a usable basis for decisions or whether the instrument must first be revised.

Practices that cross several rules

The sled-dog case introduced above illustrates a second type of problem: a practice regulated by several rule systems at once. The public record documents this overlap in detail. The municipal plan identifies dog areas and dog islands as planned spatial categories; the area-allocation rules state that dog keeping requires permission to use land and belongs, as a rule, among time-limited uses; and the municipal dog bylaw of 2015 added a third layer, requiring written permission, referring placement and distance requirements to the planning basis, and permitting dog keeping within the sled-dog districts only in areas described in the relevant planning instrument (Qeqqata Kommunia, n.d.a; n.d.b; 2015). Its 2025 replacement defines permitted dog areas on its own map annexes,

which do not apply to dog places already established (Qeqqata Kommunia, 2025). Three instruments address the same practice on different terms, and which of them governs a given dog place on a given slope in a given season is not stated in any of them; it is determined in planning administration. Above all three sits the national sled-dog law of 1998, consolidated in 2025, which requires dogs to be inspected at least once a day and requires each municipality to adopt a dog and cat bylaw (Naalakkersuisut, 2025, §§ 13, 15(3)). A draft law on dog and cat keeping, circulated for consultation in 2026, would repeal the municipal dog bylaws, which would remain in force until new ones are adopted (Avannaata Kommunia, 2026b).

Public records show why no single rule resolves the issue. When the replacement bylaw went to consultation in 2024, it received eleven responses and a petition with 482 signatures against dog keeping in Akia, the main expansion area for new housing in Sisimiut (Qeqqata Kommunia, 2022). Most objections concerned two proposed dog areas there: respondents pointed out that the area is used for outdoor recreation and sport, lies close to homes and is used by kindergartens, and that dog areas there would run against the wish to move dog keeping out of town. The administration removed the Akia areas because new places in the existing dog town were not yet fully used and the number of registered sled dogs had not risen. Other responses concerned matters regulated by the national sled-dog law, which the administration had no authority to change; there, it awaited the Self-Government's draft of new legislation (Qeqqata Kommunia, 2024b). The underlying requirements conflict with one another. A dog place must be reachable daily by an owner hauling feed and water, in winter as well as summer, which argues for proximity; the same proximity is what generates objections from nearby homes, kindergartens, and people using the terrain for recreation. In addition, the time-limited legal form of the allocations sits uneasily over areas that have functioned for years as fixed parts of the town, since a temporary permission may discourage investment in proper enclosures. The administrative task is to keep a culturally and spatially central practice workable as the town changes, using instruments none of which was designed for that purpose.

Similar conflicts appear elsewhere in the record. In Sisimiut, 1,078 dogs were registered by permit in 2018 for a town of about 5,500, a number described as stable or slightly rising since 2013 even as the national total has fallen (Qeqqata Kommunia, 2018; 2022). Where land is expected to serve other purposes, plans keep such uses provisional: a 2019 amendment for dog-cart and tourist tracks in Sisimiut grants all allocations as temporary because the areas are expected to be used differently in the long term (Qeqqata Kommunia, 2019b). In Ilulissat, the 2024 densification plan makes several building sites conditional on relocating dog places, one of them holding around 500 dogs, and records why this is difficult: building and dogs both need bedrock, and the only free land near town is bog, usable for dogs only if the boggy topsoil is replaced with blasted rock (Avannaata Kommunia, 2024a).

Unsettled futures

Ground conditions are more varied than generic accounts of the Arctic suggest. Most Greenlandic towns sit on bedrock outcrops, and permafrost becomes decisive chiefly where roads, pipelines, and runways cross sedimentary basins (Westerveld et al., 2023). Ilulissat's expansion illustrates the pattern. The new airport runway crosses sediments so ice-rich that the chosen solution was to excavate the frozen material entirely and replace it with rock fill, an option too costly for the access roads that must cross the same basins. Deeper saline layers can retain unfrozen pore water below

0°C, and municipal planning is now supported by a dedicated effort to map construction risk across the town's basins (Westerveld et al., 2023: 97; see also Hjort et al., 2018; 2022).

Under such conditions, planning sometimes holds possible futures in administrative form until infrastructure, financing, access, or political decisions can support them. Kangerlussuaq is the clearest case. The settlement exists because of its airport, which has lost most of its civilian significance as international traffic has moved to the new airports in Nuuk and, from October 2026, Ilulissat, and whose future may now rest on defence investments planned elsewhere (Forsvarsministeriet, 2025; Gad, 2026; Greenland Airports, 2026). Planning for the settlement therefore depends on decisions taken elsewhere, while harbour access, housing, water supply, and technical installations still require decisions on the ground. The amendments reflect an asymmetry. Reserving land and fixing road corridors keeps construction decisions open without committing the resources needed to build, while premature development risks investments the settlement may never be able to justify. The amendments therefore hold areas and corridors in administrative form so that whichever decision eventually arrives will find land and access available (Qeqqata Kommunia, 2017a; 2017b). In Ilulissat, where growth pressure from tourism and the new airport is most acute, a perspective plan reserves land for future housing but makes the reservation conditional: the area cannot be built before new overarching provisions are prepared, and part of the open land by the water reservoir is held for later recreational use rather than released now (Avannaata Kommunia, 2024b). The reservation secures the land against other claims while the conditions for building it, provisions, infrastructure, and protection of the water supply, are still unresolved, so that a future decision is neither pre-empted nor foreclosed. Harbour amendments in Sisimiut work in the same way, reserving land for a quay extension and requiring road access that has yet to be established (Qeqqata Kommunia, 2019a). In each instance, the instrument prepares for development before the material conditions for it exist.

Technical standards

National technical guidance acknowledges the same problem. The national guidance for year-round waterlines constitutes a minimum requirement for towns and partly for settlements, and records that Danish and European norms must be adapted in materials, construction, and dimensioning under Greenlandic conditions (Nukissiorfiit, 2005). Greenland's building regulation is based on the Danish regulation but adjusted to Greenland, and because few Greenland-specific guidelines exist, Danish guidelines are often used as inspiration (Møller and Lading, 2020). The 2024 industry response to the draft building regulation sets out what such adaptation costs in practice. Requirements written for a continental building industry meet an economy in which materials arrive by sea on a seasonal schedule, specialist certification is scarce, and the same structural or energy provision carries a different price where every component is freighted in; the response accordingly identifies consequences across structural requirements, energy calculations, construction methods, certification, procurement, freight, and execution (Brancheudvalgene, 2024). Much of this adaptation is settled in national technical regulation before municipal planning begins. Municipal plans contain the same kind of adaptation. Ilulissat's 2020 structure plan cites the Danish guideline under which housing should not, as a rule, be planned where night-time aircraft noise exceeds 80 dB, then reasons that with very few night departures a weighing could justify housing at 80 to 85 dB, with soundproof windows as mitigation, while also setting out an alternative that keeps the area free of housing (Avannaata Kommunia, 2020).

Administrative capacity

In the municipal administrations where I worked, planning matters followed a formal case procedure: a matter was registered, prepared as a written case presentation, assigned to a department, translated, placed on committee and council agendas, and followed up after the decision. The work described here takes place inside that procedure, through which cases become decidable.

The procedure depends on the people who operate it, so the training and retention of planning staff are themselves planning issues. Formal planning expertise in the municipalities is often short-term, externally trained, and organized through Danish planning and administrative paradigms (cf. Jakobsen, 2008), while long-term knowledge of place, politics, and consequence is held by local municipal workers and residents who are not formally recognized as planning professionals. During my work in the municipal administrations of Qeqqata and Avannaata, and earlier as an architect in Nuuk, formally trained Kalaallit planners and architects were largely absent from the planning offices encountered. The documented pattern is consistent with this observation. Imported workers with medium and long educations hold a large share of management positions in government, municipal administrations, and the consultancies that serve them, while elected politicians are predominantly Kalaallit (Hendriksen and Hoffmann, 2025). The 2009 municipal reform[3], modelled on the Danish reform of 2007, drew skilled staff away from the former municipal towns (Hendriksen and Hoffmann, 2025). The effect was uneven. In Kangaatsiaq, which ceased to be a municipal seat, the amalgamation brought marked out-migration, especially of people with longer education who had worked at the municipal office, while many former department heads of the small municipalities stayed on in new posts at the branch offices of the new municipalities (Hendriksen, 2013). Knowledge of local cases thus moved or stayed with individuals. Research on participation identifies a similar asymmetry: public participation processes in Kalaallit Nunaat tend to hear residents rather than listen to them (Skjervedal, 2018), and impact-assessment procedures designed elsewhere are applied to communities they were not written for (Hansen et al., 2016).

During my time in municipal administration, staff were commonly recruited on contracts of around two years. In small offices, departures could mean losing institutional knowledge, since much of the history of individual cases rested with particular employees rather than in files, and one official often carried functions that a larger administration would distribute across a department (Pollitt, 2009; Randma-Liiv, 2002). The record documents the consequences. When Avannaata was separated from Qaasuitsup in 2018, it inherited its predecessor's municipal plan; the administration compiled a 'white book' to reconstruct what had changed since 2014, and noted that the Kalaallisut text of the inherited plan had not been professionally reviewed, because it had been translated by an external interpreter and the municipal interpreting office lacked the resources to check it (Avannaata Kommunia, 2018). Professionals trained in Danish frameworks may arrive without the historical and political knowledge needed to anticipate the long-term consequences of the plans they draft, and short contracts mean that they often leave before those consequences appear. The consequences are carried by Greenlandic communities and by the municipal staff who remain. The mismatch affects both sides: the training of incoming professionals does not align with Greenlandic

[3]In 2009, eighteen municipalities were merged into four (Hendriksen, 2013). In 2018, Qaasuitsup was divided into Avannaata and Qeqertalik, giving the present five: Avannaata, Qeqertalik, Qeqqata, Sermersooq, and Kujalleq.

political reality, and the administrative categories they work through were developed in a Danish planning tradition and do not map cleanly onto Greenlandic municipal conditions.

The result is a recurring tension between formal procedure and working practice. Local adjustments may be necessary when planning instruments do not fully reflect conditions on the ground, but repeated reliance on them can also obscure the need to revise the instruments themselves. The public record does not establish how individual officials distinguish necessary adjustment from administrative drift in particular cases. It does, however, show why local knowledge, professional support, and institutional memory matter when deciding whether to apply a rule as written, interpret it in light of local conditions, or initiate its revision.

Education adds to the capacity problem. No degree in planning or architecture is offered in Kalaallit Nunaat, and the municipal staff who carry planning work have few supported pathways to obtain such training while employed, a pattern consistent with the documented distribution of educational levels across the public sector (Hendriksen and Hoffmann, 2025). The work is therefore carried out largely without formal training, without professional recognition, and without a career path, at considerable scale: Avannaata alone administers one of the world's largest municipalities by area, with four towns and over twenty settlements (Avannaata Kommunia, n.d.), through the ordinary machinery of council meetings, in units produced by a reform that drained the former municipal towns of skilled staff (Hendriksen and Hoffmann, 2025). Since 1 January 2011, the municipalities have also been responsible for planning the open country between towns and settlements. The national government transferred the task partly to strengthen municipal autonomy and partly because the open country was increasingly being built on while the central administration had limited means to supervise it (Naalakkersuisut, 2010; Qeqqata Kommunia, n.d.c). The task was thus transferred to municipalities that had been amalgamated two years earlier, and the offices responsible for it are small. In 2026, Avannaata's technical administration had twenty staff, architects, engineers, constructing architects, and other technicians, for planning, building, and land cases in Ilulissat, Uummannaq, Upernavik, Qaanaaq, and their settlements. Its advertisement for a town planner that year offered housing with the post, described command of Greenlandic and Danish as welcome but not required, and asked for readiness to take on tasks 'at times outside your normal field' (Avannaata Kommunia, 2026a). These terms anticipate an applicant from outside the municipality who is expected to cover a wide range of tasks from the outset. Conditions in Nuuk and Sisimiut differ sharply from those in smaller towns and settlements, where administrative presence, technical expertise, and follow-up capacity are more limited while planning decisions remain no less consequential. In Qaanaaq, when a sewage system had to be transferred to the municipality in 2015, the small local department lacked the expertise to take it over, because after the 2009 reform the municipality's key competences sat in Ilulissat; more generally, local knowledge has weakened as there are no longer local professionals who know a town's pipe network (Hendriksen and Hoffmann, 2018). The same instruments, and the same expectation of professional handling, apply across a settlement of several thousand and a settlement of a few dozen, but the administrative capacity available to work them does not increase with the size of the territory, so the gap between a rule and a workable decision is widest where administrative capacity is smallest. I encountered the same problem in digital planning. In the municipalities where I worked, the digital plans used a common template developed by a Danish consultancy, but the capacity to maintain them depended on local staffing and budgets.

Across the five municipalities

Kalaallit Nunaat has five municipalities. To see whether the conditions documented above are confined to Qeqqata and Avannaata, I read the current municipal plans of Sermersooq, Qeqertalik, and Kujalleq for the same five problem types (Table 1). The comparison is limited to what plans record. A provision shows that a plan anticipates a condition, for example by allowing dog keeping only on time-limited permits; it does not show how that condition is handled in practice. For Qeqqata and Avannaata, the amendments and decisions examined above show part of that handling.

Table 1. The five problem types in the planning records of the five municipalities

Problem	Qeqqata and Avannaata (analysed above)	Sermersooq (Kommuneplan 2036)	Qeqertalik (Kommuneplan 2025–2037)	Kujalleq (Kommuneplan 2017–2028)
Inherited instruments	Local plans of 1985–1994 still in force in Maniitsoq; Avannaata's plan inherited from Qaasuitsup in 2018	Adopted amendments, local plans, and allocations remain valid until replaced	Plan descends from Qaasuitsup's 2014 plan, which replaced eight plans made in different decades and ways; a 1979 local plan in Aasiaat, not complied with, to be repealed	Existing local plans attached to sub-area provisions; Narsarsuaq settlement plan within a zone set by the former Narsaq municipality
A practice crossing rules (sled dogs)	Dog places governed by plan, allocation rules, and bylaw at once; relocation limited by scarce bedrock	Dog keeping allowed on land reserved for future development until building starts; permits only time-limited; the dog bylaw supplements the plan	Permanent allocations in designated dog areas, time-limited elsewhere; plan refers to a supplementary dog bylaw; residents request clearer dog-area boundaries	Dog islands designated as an open-country land use
Futures held open	Land and corridors reserved at Kangerlussuaq; conditional reservation in Ilulissat; temporary dog-track allocations in Sisimiut	Areas with only a perspective plan cannot be allocated until framework provisions are adopted; empty buildings in centres may be used temporarily beyond the plan framework	Time-limited allocations for uses of a temporary character	Temporary allocation until detailed provisions exist; a disused quarry's use left to the next revision; building height capped until the heliport closes
Imported technical standards	Danish aircraft-noise guideline weighed for housing in Ilulissat	Higher plinths allowed in smaller settlements because snow clearance is difficult; at Nuuk airport, a 700-m noise zone closed to housing	Danish guidance on the 2008 building regulation cited; minimum distances between industrial and residential areas required but not yet set (currently 0 m)	Narsarsuaq: 300-m safety zone around the runway; no building without the airport authority's approval

Problem	Qeqqata and Avannaata (analysed above)	Sermersooq (Kommuneplan 2036)	Qeqertalik (Kommuneplan 2025–2037)	Kujalleq (Kommuneplan 2017–2028)
Capacity and memory	White book reconstructing the inherited plan; unchecked Kalaallisut text; sewage system in Qaanaaq beyond local expertise; twenty technical staff for four towns and their settlements	White book records all changes since the previous plan	White books accompany the 2018 and 2025 revisions	Restrictions from other legislation applied in casework even where the plan does not show them; the 2011–2022 plan adopted only in 2013

Sources: Qeqqata and Avannaata as cited in the text; Kommuneqarfik Sermersooq (2025); Kommune Qeqertalik (2025; n.d.a; n.d.b); Kommune Kujalleq (2015; n.d.).

Across the five records, each type of problem requires a different kind of administrative work. These are analytical categories derived from what the records require, not reconstructions of how individual officials performed the work. Inherited instruments call for repair: deciding which provisions still apply and removing those that do not, which depends on knowing why they were written. A practice that crosses rules calls for carrying: keeping it workable under several instruments at once, which depends on local knowledge of the practice and of those who keep it. Unsettled futures call for holding: securing land and access without committing them to a use, which depends on time and on someone remembering why the reservation was made. Imported standards call for translating requirements written for other conditions into ones that can be built, which depends on technical expertise. Remembering underlies all four, and it is the work the plans record least. The white books that accompany plan revisions in Avannaata, Qeqertalik, and Sermersooq are the closest they come, and Avannaata's was compiled because a reorganization had interrupted institutional continuity (Avannaata Kommunia, 2018). Kujalleq's digital plan states that restrictions based on other legislation, such as safety zones and protected areas, appear in the plan only where they exist in digital form, but are applied in casework whether shown or not (Kommune Kujalleq, n.d.).

Discretion and its limits

The cases reveal more than mismatches between planning rules and local conditions: they also show the administrative demands those mismatches create. Existing research on discretion, institutions, and Greenlandic municipalities helps explain different aspects of this work.

The literature on discretion comes closest. Policy is substantially made at the point of implementation, through front-line judgement exercised within and around formal rules (Lipsky, 1980); planning theory more broadly has long treated planning as negotiation rather than rule-application (Healey, 2003). Planning research treats discretion broadly, as the means by which complex and sometimes contradictory policy goals are translated into local contexts, with land-use planning as a paradigmatic case (Purkarthofer and Stead, 2023). Hupe (2013) further distinguishes discretion granted by rules from its exercise in administrative practice, emphasizing the institutional context in which both operate. Discretion and the operational margin overlap where deciding whether a rule's conditions hold itself requires judgement, but they concern different things. Planning provisions depend on environmental, material, and administrative states that shift independently of anyone's judgement. Discretion foregrounds the judgement exercised in

implementing rules; the operational margin foregrounds the work of establishing whether, and in what form, those rules can be applied when the conditions they presuppose are uncertain or absent.

Institutional theory examines how formal rules and informal constraints structure action (North, 1990), while institutionalist planning research considers the relationship between institutional arrangements, planning practice, and governance capacity (Healey, 1999). Research on resource regimes examines the rights, rules, and expectations governing resources (Young, 1982; 1992), while subsequent work on institutional fit considers how governing arrangements correspond to the systems they address (Young, 2002; Ekstrom and Young, 2009). Read through this literature, the record suggests that divergence between rule and condition is less an occasional failure than a recurring condition in the plans examined, and that the work of bridging it sits within ordinary planning administration. That work depends on local knowledge and institutional memory, which the formal system does not reliably train or retain.

Research on Greenlandic municipalities is more limited but addresses two relevant conditions. The first is municipal structure. Municipal government has been described in its development, administration, and finances since the Home Rule period (Benoit and Martens, 1992). Assessments of the 2009 amalgamation diverge: a comparative study of Arctic urban land use finds that concentrating and formalizing planning competence strengthened land-use planning (Weber et al., 2017), while local leaders report weaker access to administration and less influence for peripheral settlements (Eythórsson, 2020), and studies of infrastructure find competence concentrated in the new municipal centres and reduced elsewhere (Hendriksen and Hoffmann, 2018). The findings are compatible: the reform could strengthen planning where competence was concentrated and weaken it in the former municipal towns. The second is imported models. Denmark has been the principal, though not the only, source of ideas for the central administration, a pattern linked in part to its Danish-born and Danish-educated staff (Jakobsen, 2008), and Nuuk's growth rested on imported designs, materials, policies, and labour (Grydehøj, 2014), while residential urban design in Nuuk and Sisimiut has developed through the recontextualization of Danish and international design templates (Hemmersam and Harboe, 2026). These studies illuminate the structural and historical conditions of municipal planning, but give less attention to how those conditions affect the application of planning rules in individual cases. This article begins to address that gap.

The operational margin also reveals a tension between local administrative adaptation and institutional capacity. When local handling compensates for gaps in the formal system, those gaps may become less visible rather than less consequential. Research on community relocation in Alaska and on Swedish municipal land allocation draws the same line: ad hoc responses that compensate for missing institutional frameworks do not by themselves build capacity (Bronen and Chapin, 2013; van der Leer, 2026). At Kangerlussuaq, reserving land and road corridors allows future development options to remain open while major decisions are unresolved. The institutional question is whether such work is supported and retained, or left to whoever is in post.

Administrative judgement as Arctic intelligence

The record examined here has implications for what counts as intelligence in and about the Arctic. Discussions of Arctic knowledge range across Indigenous Knowledges, environmental observation, and scientific monitoring, with decision-making cast as the downstream use to which knowledge is put. Arctic intelligence also includes administrative judgement: the capacity to determine what a rule can require when ground, infrastructure, staffing, and local consequences do

not match the assumptions built into the rule. The expertise encoded in planning documents cannot be applied without it. Formal regulation depends on it but rarely records it, and this dependence is reported from the demand side as well, with subnational decision-makers, including in Avannaata, describing scientific data that arrives in forms administration must first render applicable (Tkach and Stepien, 2024).

This intelligence takes the forms set out above: repair, carrying, holding, translating, and remembering. Much of it is held by individuals rather than in files. The plans state the conditions that call for it but rarely why a provision was left in force, a dog place tolerated, or a reservation made, so the next official can inherit the rule without its reasons. It can be lost during reorganizations and in translation, as when Avannaata had to reconstruct what had changed in its inherited plan and could not check that plan's Kalaallisut text (Avannaata Kommunia, 2018). Often it is held by local staff whose knowledge of place and consequence is not counted as professional expertise. Treating administrative judgement as Arctic intelligence therefore means expecting it to be documented, trained, and recognized as other Arctic knowledge is, rather than assuming it will be available whenever a rule is applied.

The imbalance extends to research. Environmental monitoring and investigation in Kalaallit Nunaat are largely led from outside, much of the data being generated by international scientists conducting fieldwork (Tkach and Stepien, 2024). Research on Inuit-led community-based monitoring in Nunavut and Greenland draws a parallel distinction between producing knowledge and having the institutional conditions to act on it: such monitoring supports self-determination only under particular conditions, notably legal recognition of Indigenous rights and knowledge systems and Indigenous leadership of data governance (Wilson, 2025). Planning is one of the administrative sites where research, political direction, heritage concerns, environmental conditions, and construction requirements enter the same decision, and it remains among the least studied and least supported.

Conclusion: Judgement that can be trained, retained, and recognized

Municipal planning in Kalaallit Nunaat remains workable through repeated, ordinary acts: keeping plans current with the towns they describe, deciding practices that cross several rule systems, holding unsettled futures in administrative form, and translating imported standards into buildable provisions. Each is an act of administrative judgement. Planners exercise such judgement wherever rules meet ground; what distinguishes Kalaallit Nunaat is the condition under which it is exercised: instruments drafted within an administrative tradition formed elsewhere, carried by short-term external professionals whose knowledge leaves with their contracts, in municipalities where local staff bear the consequences while their knowledge is rarely recognized, developed, or retained, with no education pipeline to change this, and with environmental and heritage knowledge produced by researchers who do not stay. Existing literature explains discretion, governance, and administrative scale, but it rarely follows the municipal position where these must be resolved into a planning decision. This article has examined that position, which is where the operational margin is located.

The findings have practical implications. Administrative judgement already sustains municipal planning, but the arrangements through which it is developed, documented, and retained remain uneven and often dependent on individual staff. Addressing it involves more than training, because the record shows three different gaps: knowledge that is not formed locally, knowledge that does

not stay, and instruments that no longer fit the conditions they govern. The analysis does not evaluate specific reforms, but it indicates where each gap would need to be addressed.

Education addresses the first gap. No degree in planning or architecture is offered in Kalaallit Nunaat, and the municipal staff who carry planning work need recognized ways to qualify while employed, with curricula built on Greenlandic cases. Experience from engineering education partly taught in Sisimiut shows that such programmes must also address students' academic preparation and the language in which abstract content is taught (Hendriksen and Christensen, 2014).

Institutional continuity addresses the second. Fixed-term recruitment will continue, so what contracted staff learn has to be made to outlast their contracts, for example through overlapping handovers and by recording, in plans and decisions, the conditions on which they rest and why a given instrument was used.

Revising instruments addresses the third. Where the record shows a recurring mismatch, as with outdated local plans or long-standing uses held under temporary permissions, revising the underlying instrument may provide a more durable basis for decisions. Neither training nor revision suffices alone: revised rules must still be applied, and capacity cannot repair a rule that is wrong at source. The question this raises is whether the institutions responsible for planning develop the capacity to retain the knowledge that planning administration produces.

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