

Arbour - Transport

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How people move through Arbour tells you everything about who they are and what they're permitted to be. The transit system was not designed to reinforce the hierarchy. It simply does, because everything in Arbour does, because the hierarchy is load-bearing.

Overview

Arbour's transport infrastructure consists of three systems operating in parallel — the Mass Transit Rail network for horizontal movement, the Spine for vertical movement between tiers, and the maintenance tunnel network for movement that isn't supposed to happen at all.

Each system reflects the generation that built or inherited it. The rail network is original ark infrastructure extended badly over centuries. The Spine is deliberate post-crash construction, built specifically to control who can move where. The maintenance tunnels predate all of it — they are the ark's own service infrastructure, now vast, unmapped, and entirely outside official control.

The Mass Transit Rail — The Lines

Origin and Condition

The rail network began as ARBOUR|05's internal cargo and personnel transit system — pressurised corridors and tracked vehicles designed to move people and goods efficiently through a vessel the size of a small city. When the ark became a city, those corridors became the bones of Arbour's horizontal transport network.

The original lines are still running. Barely. Centuries of extension, patching, and improvised maintenance have produced a network that is simultaneously vast and fragile — covering most of Arbour's horizontal geography but doing so on infrastructure that ranges from reasonably

maintained in the upper tiers to actively dangerous in the lower ones.

New lines were built post-crash as the city expanded, constructed from whatever materials were available by whoever was building at the time. These sections are identifiable by their inconsistency — different gauge, different carriage compatibility, different failure modes. A rail worker who has spent their career on the lower lines can identify which decade a section of track was built in by the sound it makes.

The Carriage System

Every carriage in Arbour's rail fleet is coded to a tier designation. The coding is physical — embedded in the carriage's boarding verification system — and social, in that carriages for upper tiers are visibly different from carriages for lower ones.

The journey from bottom to top:

Trains depart from lower tier stations carrying all designation classes. As the train ascends through the network — moving from lower lines to connection points to upper lines — carriages detach. A carriage coded for the Nadir tier detaches at the first major junction. Sprawl carriages detach progressively. By the time the train reaches the Meridian Districts it is carrying Mid-tier carriages and above. By the Luminary, two or three carriages at most.

This is not presented as exclusion. It is presented as efficiency — each carriage proceeding to its designated depot, minimising unnecessary transit time for upper tier passengers. The effect is that upper tier residents never share a carriage with Sprawl residents. They simply board at a later point in a journey that has already shed everyone below them.

The experience by tier:

Lower Lines / Sprawl: Underground. Hot — the lower lines run through the structural core of Arbour where waste heat from the power infrastructure accumulates and the atmospheric processors are weakest. Smoggy — recycled air that has passed through too many people and too many systems before reaching the platform. Packed — the lower tier population is larger and the carriages older and smaller. Loud — original ark infrastructure transmits vibration directly into the carriage frame, producing a constant industrial roar that residents of the lower lines stop hearing consciously after childhood.

The platforms are lit by salvaged lighting rigs that shed unpredictably. The signage is a palimpsest of generations of additions and corrections, older designations half-visible beneath newer ones. The carriages smell of bodies and recycled air and something underneath that might be the ghost of whatever the original cargo was.

Upper Lines / Luminary: Elevated. The upper lines emerge from the city's structure and run along the exterior faces of Arbour's upper tier architecture — open to Cordis's sky, offering views across the city and out toward the horizon. On clear days, from the right carriage, you can see the Frames

on the horizon. Most upper tier residents have never been told what the Frames are.

The carriages are enclosed in transparent materials salvaged from the ark's observation systems. Climate controlled. Quiet — the upper line track was relaid within living memory by Azure Branch engineers following documented procedures correctly. The difference in ride quality between a lower line carriage and an upper line carriage is the difference between a place that is maintained and a place that is managed.

Tier Depots

Each tier has designated depots where its carriages are stored, maintained, and dispatched. Upper tier depots are staffed, maintained, and secure. Lower tier depots are understaffed, under-resourced, and the source of the rail network's most significant safety incidents.

Derelict carriages — when a carriage is pulled from service in the lower tiers, it goes to scrap. The Sprawl's salvage economy receives decommissioned carriages as raw material — metal, insulation, seating components, mechanical parts. Some decommissioned carriages are repurposed whole before they reach the scrap stage, appearing in the Sprawl as impromptu shelters, market stalls, or structural components in buildings that have incorporated them entirely.

A section of Veilan's eastern wall is the exterior face of a decommissioned Nadir-tier carriage from three generations ago. Residents have been painting it for decades.

Fare and Access

Rail travel requires Flux. The fare system is tiered — travel within your designation tier costs a standard rate, travel to a lower tier costs less, travel to an equal or higher tier requires both Flux and valid designation documentation.

In practice in the Sprawl, the fare system is the first of several informal systems layered over the official one. Gate attendants at lower tier stations operate on an understanding that is never written down — a small supplementary payment produces less scrutiny of documentation. This is not exceptional corruption. It is how the system functions. The official fare does not cover the actual cost of maintaining the lower line infrastructure, the attendants know this, the Branch knows this, and the supplementary payment is the difference.

The Spine — Vertical Transit

Structure

The Spine is a single structure, not five separate ones. One pentagonal architectural complex — five vertical shafts arranged around and within a shared central hub — sitting at the highest point of the hull-core's built-up arc, immediately adjacent to the Luminary. It is the single most recognisable silhouette in Arbour: visible from most of the city on a clear day, the one landmark every tier can see and name even if most residents of most tiers will never once set foot inside it.

This is deliberate, and it changes what the Spine actually is in most people's daily lives. **Most residents never use it.** The Mass Transit Rail network — horizontal by design, but doing real vertical work within a tier's own boundary through its carriage-detachment mechanic (see *The Lines*, above) — handles the overwhelming majority of how people actually move through Arbour day to day. A person can live an entire life on one or two tiers without ever needing the Spine, because rail already gets them everywhere within the boundary they're permitted to occupy. The Spine exists for the rare, specific case the rail network cannot solve: crossing a tier boundary itself. A doctor's appointment in a tier above your own. A work assignment. A family member relocated. For most people, most of the time, the Spine is not infrastructure — it's a landmark they orient by and almost never enter.

The Spine was not part of ARBOUR|05's original architecture. It was constructed in the second and third generations post-crash, built as a single deliberate chokepoint specifically to formalise and control the rare crossings that the emerging tier system could no longer afford to leave informal. Centralising vertical tier-crossing into one heavily controlled structure, rather than distributing it, was the entire point: a single gate is far easier to staff, verify, and surveil than five would ever be.

Distance to the Spine is still a tier hardship, but it works through the hull-core's own shape rather than through deliberate spacing. Luminary sits at the literal top of the hull-core's arc, immediately around the Spine's hub — Luminary residents live, structurally, on its doorstep, and Luminary living space is famously the most compressed of any tier, which only sharpens the proximity. Meridian wraps the flanks of that same arc, descending toward ground level. The Sprawl sits furthest out, at the base of the hull-core and beyond it into the surrounding built sprawl entirely — for a Sprawl resident, simply reaching the Spine means a real rail journey inward and upward through the hull-core's curve before they've even reached the gate where the actual scrutiny begins.

Each of the five shafts within the complex connects all tier levels from Nadir to Luminary. They are, structurally, redundant with one another — five lanes through the same chokepoint rather than five separate chokepoints — which exists mostly to prevent total citywide gridlock if any single shaft fails or is taken offline.

Access and Verification

Every Spine gate operates a verification system — designation documentation checked against the Flux registry, purpose of transit recorded, destination tier logged. Going down requires documentation but minimal scrutiny. Going up requires:

- Valid designation documentation for the destination tier, or
- A Branch authorisation pass for the destination tier, or
- An escort designation — travelling with someone of higher designation whose credentials cover both parties

The verification is automated at the primary level and staffed at secondary. Gate attendants have discretionary authority to request additional documentation, deny access, or flag individuals for Obsidian Branch follow-up. The exercise of this discretion follows patterns that residents of the lower tiers understand very well.

The experience of attempting to ascend: For a Sprawl resident with a genuine reason to reach a Mid-tier level — a doctor's appointment, a work assignment, a family member in a different tier — the day usually starts before the Spine itself ever comes into it: a rail journey inward and upward through the hull-core, watching the carriage thin out as Sprawl-coded cars detach behind them, before the Spine's pentagon silhouette is even close enough to read as a destination rather than a landmark on the skyline. By the time they reach the gate, the Spine itself is an exercise in being assessed. Every element of your presentation is read: dialect, fur condition, clothing, the specific smell of lower tier air that clings differently than upper tier recycled air. The verification system will clear you or it won't. The attendant's face will tell you what the system decided before the display does. For most Sprawl residents this is not a weekly indignity — it's rare enough, and significant enough when it happens, that the day itself gets remembered.

The Spine Gates — Named Locations

Each of the five shafts has an official designation — Gate One through Gate Five in the original construction records. Nobody calls them that.

Because all five sit within the same central complex rather than scattered across separate districts, the naming pattern is different from what a distributed system would produce. Sprawl residents don't generally have a personal relationship with "their" gate the way they might with a specific rail station near home — most will interact with the Spine rarely enough in a lifetime that the distinction between shafts barely registers. The names that do circulate tend to describe a shaft's specific use or reputation rather than the district it happens to serve: which shaft processes which kind of paperwork fastest, which attendants are known for which kind of scrutiny, which one the Branches use when they don't want to be seen using the public queues.

[PLACEHOLDER — the specific vernacular names for each of the five shafts to be determined through drafting and character development. Worth keeping the "named by use or reputation, not by district" principle in mind once these are decided, consistent with the single-hub revision above.]

Spoofing the System

Unauthorised ascent through the Spine is a significant criminal offence under Arbour law — classified as Designation Fraud, carrying consequences that escalate sharply for repeat offences. It is also routine.

Methods in common use:

Bribery — The most common method in the Sprawl. Gate attendants at lower Spine gates operate on the same informal economy as rail fare collectors. A supplementary payment — calibrated to the destination tier and the attendant's known rate — produces a documentation check that finds everything in order. The rate is known. The process is understood. It is not reliable — attendant turnover, Obsidian Branch spot audits, and individual attendant risk tolerance all create unpredictability.

Fabricated documentation — Forged designation badges, produced by a small number of specialists in the Sprawl who work from salvaged official materials and detailed knowledge of the verification system's tolerances. More reliable than bribery for a single ascent but significantly more expensive. The forged documentation is indistinguishable from official documentation unless checked against the central Flux registry — which gate verification does not always do for routine transit.

Deceased identification — Documentation taken from deceased residents whose tier registration has not yet been processed out of the system. The window between a death and the registry update varies from days to weeks depending on how the death was recorded and by whom. In the Sprawl, where deaths are not always officially reported promptly, this window can be longer. The documentation works until it doesn't. The risk of using a deceased person's identification that has already been flagged is significant and not always knowable in advance.

Escort designation — Travelling with someone of legitimate higher designation whose credentials cover the party. Requires either a genuine relationship with an upper tier resident willing to vouch, or a fabricated connection that survives scrutiny. Used for medical and official purposes legitimately; used for everything else unofficially.

Consequences of being caught: Designation Fraud at the Spine results in Obsidian Branch detention, documentation confiscation, and a flag on the individual's Flux registry that affects future legitimate transit applications. For repeat offences or for individuals already flagged for other reasons, the consequence escalates to extended detention and, in cases the Branch chooses to make examples of, public processing — the official term for what the Sprawl calls *being walked* — a detention that passes through the most visible sections of the transit hub before proceeding to the Branch facility.

Being walked is a message to everyone watching.

The Maintenance Tunnels

What They Are

The original service infrastructure of ARBOUR|05 — crawlways, maintenance corridors, access shafts, and utility passages built into every section of the ship to allow engineers to reach any system without disrupting occupied areas.

Centuries of city growth have buried, extended, collapsed, and rediscovered sections of this network continuously. No complete map exists. The Azure Branch holds partial maps covering the sections they actively maintain. Everything else is known only to the people who use it.

The warrens is the Sprawl's name for the sections they know. The Chronalum calls them the tunnels. Smugglers, unofficial traders, and people who move things or people without official documentation have their own section-specific names for routes they use regularly. There is no universal name because there is no universal map.

Who Uses Them

The maintenance tunnels are used by:

- Azure Branch maintenance crews — in designated sections, with documentation, following established procedures
- The Chronalum — for movement of people and information between cells, for access to archive sections of the Tabularium that are not accessible through official routes
- Black market logistics — goods moving between the Sprawl's unofficial economy nodes without passing through official transit checkpoints
- Individuals — people who need to move without being tracked, for reasons ranging from personal safety to active evasion of Obsidian Branch surveillance

The tunnels are also used by no one — vast sections that haven't been entered in decades or generations, where the original ark infrastructure is intact and silent and dark, where **Aetheris** accumulates in ways it doesn't in occupied sections because there are no atmospheric processors and no power draw to dilute it.

These sections are where things are sometimes found that shouldn't be there. Nobody discusses what specifically. The Sprawl has a general understanding that you don't go into sections you don't know, and if you find yourself somewhere you didn't intend to be, you leave the way you came and you don't go back.

The Tunnels and **Aetheris**

The unoccupied sections of the maintenance tunnel network are **Aetheris** hotspots. The same atomic bonding anomalies that affect the Sprawl's improvised infrastructure affect the tunnels' original materials — producing sections where the walls have changed texture, where metal has

become something between solid and liquid and stayed there, where the geometry doesn't resolve correctly when you try to map it.

Experienced tunnel users know these sections by feel — a particular quality of air, a change in the sound the tunnels make, a pressure that isn't quite the scratch but is adjacent to it. They navigate around them. New users don't always know to.

The Chronalum has lost people in the tunnels. Not to violence. To sections they went into and didn't come out of. The official position within the Chronalum is that these were navigation errors. The unofficial position is that some sections of the tunnel network are no longer entirely in this reality.

What This Means for the Story

The train as a class experience — Wren takes the train every day to the Tabularium. The specific carriage, the specific line, the quality of the air, the sound of the lower line track — these are the texture of their daily life. When Wren eventually takes the upper line for the first time on official business, the silence and the views and the quality of the air are disorienting in a way they don't fully acknowledge.

The Spine as threshold — every time a character ascends through the Spine, it is a threshold moment. The scrutiny at the gate, the assessment, the moment of being cleared or denied — this is Arbour's social contract expressed in a single interaction. Wren navigates it with their documentation in order, and their dialect is carefully managed. It still costs them something each time.

The tunnels as infrastructure of resistance — the Chronalum's use of the tunnels is not incidental to their survival. It is foundational. Without the tunnels, the Chronalum cannot move people or information without Obsidian Branch surveillance. The tunnels are the reason the Chronalum still exists.

The unoccupied sections — not plot-relevant in Book One, but their existence should be felt. Something in the walls of the tunnels that experienced users navigate around. A quality of wrongness that the Chronalum has learned to read. The suggestion that some sections of the infrastructure are no longer entirely here.