

From Horizontal to Vertical – Building the Future of Industry

/ Eric Aderneck RPP, MCIP

Industrial lands accommodate functions that serve the wider economy and community, yet don't always get the attention they deserve. Furthermore, they are one of the more stable and resilient sectors of the economy, and are an important part of the province's economic recovery and growth during these pivotal times.

Industrial land uses range from conventional distribution, warehousing, and manufacturing in large single-user buildings, to small-scale businesses such as parts suppliers, equipment maintenance, food processing, and fabrication/assembly in industrial flex space, as well as emerging e-commerce, advanced technology, and creative/media/design.

The definitions of industrial activities are evolving and becoming more diverse, with different types of increasingly lighter and less impactful industrial uses, often with a high proportion of commercial uses, requiring new and different types of spaces. Modern industrial business models may not neatly fit within the traditional paradigm of 'heavy' or 'light' industrial.

Benefits of Industrial Intensification / Density

Industrial market trends are driving new opportunities for industrial lands intensification and densification while challenging old planning regulations. In East Asia there are already industrial buildings with tens of storeys where, out of necessity, they have had to build up to fulfil their space needs. In North America there are a small but increasing number of multi-level industrial buildings, with notable new projects in Vancouver, Seattle, San Francisco and New York, all places with very high land values.

There are many potential benefits of industrial densification to both industry and the community, especially in jurisdictions with a constrained land base:

- More efficient use of land
- Increased industrial space and capacity
- Reduced development pressures on other lands in the region, such as agricultural lands experiencing pressure to rezone
- Clustering together or co-locating operations to support eco-industrial networks and circular economy systems, where companies collaborate (material loops) and share resources (peer-to-peer lending) to increase overall efficiencies

Functional features for industrial tenants include: loading bays, high ceilings, cargo elevators, truck ramps, wide corridors, and load-bearing floors. To address these requirements, multi-level industrial buildings can be considerably more complex to design and more expensive to construct than conventional single-level structures.

Consequently, higher rents are required to support these additional development costs. In some cases, this results in developments with industrial use at-grade, and upper levels that are office space, sometimes sold as strata tenure, that can cross-subsidize the cost of the industrial building.

Industrial lands can allow for some accessory and commercial activities that are related or supportive of the primary industrial use, and which may also provide local-employee serving amenities. However, allowing excessive additional office or retail space may lead to unintended consequences. Substantial commercial development in an industrial district can displace industrial uses by increasing land values and introducing use conflicts. Accordingly plans should consider the local context and community objectives.

Policy Initiatives in the Metro Vancouver Region

With a population of 2.6 million and home of the largest port in Canada, Metro Vancouver is experiencing strong demand and a severe shortage of industrial land, manifesting in increasing land prices, low vacancy rates, and rising rental rates -- amongst the tightest markets in North America.

Responding to the pressures of a limited land base and need for coordinated industrial planning, Metro Vancouver is advancing a Regional Industrial Lands Strategy to explore policy solutions, including industrial intensification and densification.

At the municipal level, the City of Richmond, home to significant port and logistics related lands, completed an Industrial Land Intensification Initiative to explore the potential for industrial intensification and supportive policy actions.

Over the past few years the City of Vancouver has made amendments to their industrial zoning to facilitate greater amounts of office and accessory uses. In the Mount Pleasant area, located close to the downtown core and transit, the I-1 zoning allows up to 3.0 floor area ratio (FAR), requiring the ground floor and mezzanine be designed for 1.0 FAR of industrial space with minimum ceiling heights and loading facilities, with office space on upper floors.

In other parts of Vancouver, the I-2 Zone, intended for "industrial and other uses that are generally incompatible with residential land use ..." also allows for General Office, including Digital Entertainment and Information Communication Technology. The industrial (1.0 FAR minimum) and commercial uses (2.0 FAR maximum) can total up to 3.0 FAR of density.

Two notable projects designed with light industrial units at grade, underground parking, and office space on the upper levels, both within the City of Vancouver's I-2 Zone:

Ironworks by Conwest is a centrally located 188,000 sq ft strata project that provides mixed industrial, warehouse, showroom, and office spaces, in a two- and three-level complex plus mezzanines (total 1.83 FAR). The innovative and functional layouts feature freight and passenger elevators, modern design with end-of-trip bike facilities, and a common roof top deck with views.



IntraUrban Evolution by PC Urban offers quick access to Vancouver's downtown core, major commuter and transportation routes, as well as the Port of Vancouver. The project has 105,000 sq ft of strata industrial and office space over four levels (total 3.0 FAR). Efficient floor plates with a variety of unit demising options and abundant glazing mean open and flexible workspaces. Dock and grade loading doors are served by a freight elevator system to provide access throughout the building.



Eric Aderneck RPP, MCIP, is a senior planner with Metro Vancouver, and an industrial lands planning consultant in other jurisdictions. His website includes a range of resources about industrial lands planning and development matters: www.MVindustrialands.com. He can be reached at eric.aderneck@gmail.com