

Trebling Beyond Hard Land



Beyond the earth's hard surface, land, in the economic sense, includes the air we breathe, water and life in the rivers and oceans, and the surface of distant moons and planets. But location goes beyond the three dimensions of regular space into an n-dimensional abstract space, including location in an electromagnetic spectrum, bandwidth on a network, or a satellite communication channel.

Ecosystems have no exact locations but are nonetheless land in the economic sense. Within 3-space, the boundaries of land are not always 2-dimensional, with trebling value deep within the surface of the Earth. And properties are not always regularly bounded.

Wires and pipes that transport vital resources and remove waste have location value. So, too, are the highways and roads that connect properties, jet lanes, boat lanes, airport gates, boat docks, and parking spaces. Then, there is augmented land, artificial islands in the sea, and buildings that go deep underground and stretch high into the sky.

Not everything that could be [trebled](#) will be trebled, and the “locations” discussed in this module and other referenced modules are not intended to be complete. However, they provide a flavor of what and how certain n-space locations can be trebled. Some are discussed in their module and only summarized here.

Trebling the Grid

Whether owned by the community or private enterprise, trebling electric, water, sewage, cable, fiber, gas, and similar resources cannot be haphazard. [Access rights](#) of end users must be preserved. This new form of utility ownership is discussed in the module [Trebling the Grid](#).

Trebling the Roads and Highways

Like utilities, roads can be trebled. The primary revenue source is the [auto pass](#), although [location monopolies](#) along the roadside and advertisements are other revenue sources. The access rights of existing roads and driveways must be preserved. Details can be found in the module [Roads and Bridges](#).

Damaging the Planet

The module Protecting the Earth discusses trebling for rights to emit greenhouse gases, chop down forests, fish in the oceans, store radioactive waste, and commit other acts that could seriously harm the planet.

Augmented Land

In the module [Condominiums in Land-based Capitalism](#), details are discussed of how individual units within a building can be trebled. The trebling of augmented land is most appropriate for primary residences and mixed-use collectives. That way, common areas are managed by the [cellular democracy](#) of the residents. Otherwise, the [right of exclusive use](#) is compromised by unelected management.

Trebling the Electromagnetic Spectrum

The limited-band radio spectrum is found in the commons. The spectrum is in high demand by mobile carriers, radio stations, and other enterprises requiring exclusive frequency use.

Between 1994 and 2018, the U.S. Federal Communications Commission conducted [87 spectrum auctions, raising over \\$60 billion](#). Collusion is generally accepted in these auctions, which become negotiations between bidders. Today, some social policies take precedence over maximizing profit. Any such policy in a [cellular democracy](#) would require a [2/3 plurality](#) of a [dominion](#) located within range of the broadcast.

A [VSG](#) will determine how frequencies are apportioned to different [levels of dominion](#). These might alternate between neighboring dominions to prevent radio interference.

A free market in frequencies will likely produce far more revenue than the current auctions. Wireless companies might pay up to 50% of spectrum profit to protect their spectrum from [treblers](#). Like natural resource extraction, trebling of frequencies will generate ground rents not far below 100% of profits.

Fishing, Hunting, and Drinking

It is an [objective right](#) to fish any [untrebled commons stream](#) and hunt in any untrebled commons forest. Seemingly unrelated, it is an objective right to open a

business serving alcohol or drugs. However, [2/3 of a dominion](#) might decide to limit these rights rather than stop them altogether.

A [direct democracy](#) can raise revenue by creating a treble market for a limited number of rights or licenses. VIP Treasury and Land Management ([VTLM](#)) will manage the treble market for a 10% fee, with the remaining rents sent to the account(s) approved in the 2/3 vote.

Treble markets can be established by any [sovereign property owner](#) or collection of sovereign property owners. A conservation group owning wetlands might treble a limited number of duck hunting licenses to help pay the [ground rent](#). Airports might treble their gates and concession areas. The owner of a lake might treble fishing rights. The owner of a road could treble use of an express lane. The VTLM will manage all such treble markets for a 10% fee.