Roads and Bridges

Roads and bridges are protected under the doctrine of access rights; access created is only unilaterally revocable through class III legal actions. If the property owner with access agrees that access can be terminated, then access can be terminated.

If the trebler of a road wishes to terminate access, they must either treble the property having access or negotiate with the owner of that property to terminate access.

Generally, the trebling of roads and bridges is not to terminate access, but to collect the auto pass revenue. This revenue is increased by making the road more enticing, for instance by eliminating road and pedestrian crossings. This is where access problems occur.

Properties with frontage on the road must have accessible frontage with the new road as well. Bridges or tunnels must be built for crossroad traffic and pedestrian access. Negotiations are possible with the owner of crossroads, provided the crossroad has access in the other direction from the new road. Negotiations on pedestrian crossings must be done with the overarching cellular dominion's (the same dominion on both sides of the road) district with ratification by a 2/3 plurality of that dominion's direct democracy.

Utility access rights are generally easier to handle than frontage rights. Utility access rights to properties on both sides of the road and utility conduits beneath the road must not be interrupted.

In a dense urban area, trebling a road in order to create an expressway above the original road eliminates most access problems. However, the blocking of sunlight or additional noise could be considered a negative externality. The expressway developer should poll the community to get a sense of whether there is anywhere near a 2/3 plurality that wishes to block the project.

Additional access and egress can be sold by the developer. Once granted, the access rights remain in force forever (until surrendered by the property owner with access).

The expressway developer will install auto pass readers at all entrances. This is the primary source of revenue. Tolls might not be efficient, but are a potential source of revenue. The same is true for metered parking and parking permits which could send people to other roads.

However, large billboards and overhead advertising are not likely to dissuade people from using the road. Location monopolies, with no access and egress beyond the new road (an oasis), keep people on the road longer and bring in monopoly profits of their own.

Truck passes bring in several times the income of auto passes. Truck-only highways will create new efficiencies in transportation.

Using the road surface or ceiling to generate electricity for charging automobiles or automating transportation can generate road profits or increase road usage. Road owners can generally collect rents for hosting utility pipes and wires.

Roads are created in new communities by developers. Although the developer enjoys the auto pass money, particularly if the homes have on-street parking, they are not in the business of plowing snow and fixing potholes.

Developers will allow the rent to fall until the road is trebled. They might also negotiate a sale at less than the 33% premium over construction cost, just to be done with it. The level-3 dominion might treble the road into its repository, using Earth Dividend infrastructure money, and collect the auto pass revenue for plowing and maintenance.

How much are roads really worth? Consider an expressway with 8 lanes of traffic and a 24-hour average auto density of 1000 cars per mile. Auto pass revenue is the same as if those same 1000 automobiles were stationary on that road segment for the entire month. Auto pass revenue for that mile alone would be about
5 (weight) x 1000 (autos) x 96% (pass revenue) x $64 (pass cost) = $307,200/month!
Even local community roads should be able to break even.

Bridges have an auto pass weight of 13. A 200 ft. bridge holds an average of 10 cars at a time over the course of a day. Monthly auto pass revenue is 13 x 10 x 96% x $64 = $7,987/month. That might be enough to maintain the bridge and take in a small profit.