Back to nonlinear kinematic waves and wave-breaking:
After wave breaking, need more physics to fix the problem.
Explain: why does the model fail there? (quasi-equilibrium).
Fix to the problem is NOT in the mathematics. Need NEW physics!
Will study traffic flow to learn how to fix it.

Back to traffic flow, and example problems there.
Red light turns green.
Gap in characteristic field. Argue nice dependence on perturbations to data. Fill gap by taking limit of smeared discontinuity. Obtain expansion fan solution $c = x/t$.
Explicitly solve for $\rho$ in the case: $q = q(\rho)$ is quadratic.

Alternative: use the "sliding-slab evolution" picture to get the solution
Physical meaning of the various waves observed:

- Path of the first car in line behind the red light. A characteristic, and also a car path, since $u(0) = c(0)$.
- Location where cars start moving behind the light.
- Light wave: locus where brake lights turn off.

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