

## SYSTEMS THINKING – SHIFTING THE BURDEN

Tackling Wicked Problems

January 28, 2014

*“When you are confronted by any complex social system...with things about it that you’re dissatisfied with and anxious to fix, you cannot just step in and set about fixing with much hope of helping. This is one of the sore discouragements of our time. If you want to fix something, you are first obliged to understand...the whole system.”*

*Lewis Thomas*

Systems thinking<sup>^</sup> is an approach used to develop a shared understanding of why chronic, complex problems exist – as well as where the structural leverage lies to solve such problems in powerful and sustainable ways. The tools allow groups to establish a shared picture of current reality that both honors different perspectives and explains their limitations. It also develops clarity about not only what is happening, but also why.

Without this picture, people often cannot agree on how to get where they want to go because they cannot agree on where they are. Furthermore, they resist acting differently because they do not feel responsible for current circumstances. They tend to blame others or forces beyond their control and believe that others must change first.

Certain types of systemic structures recur again and again. One of the systems thinking archetypes or templates that has broad relevance in the social sector is “shifting the burden.”

**Shifting the Burden.** A short-term “solution” is used to correct a problem, with seemingly happy immediate results. As this correction is used more and more, fundamental long-term corrective measures are used less. Over time the mechanisms of the fundamental system may atrophy or become disabled, leading to even greater reliance on the symptomatic solutions.

In the shifting the burden template, two balancing processes (*B*) compete for control of a problem symptom. Both solutions affect the symptom, but only the long-term solution treats the cause. The symptomatic “solution,” often referred to as the quick fix, creates a side effect (*R*) making the fundamental solution harder to achieve. Shifting the burden diagrams focusing on several symptoms found locally were created by leaders in attendance at *Tackling Wicked Problems* in Oshkosh on January 28, 2014:

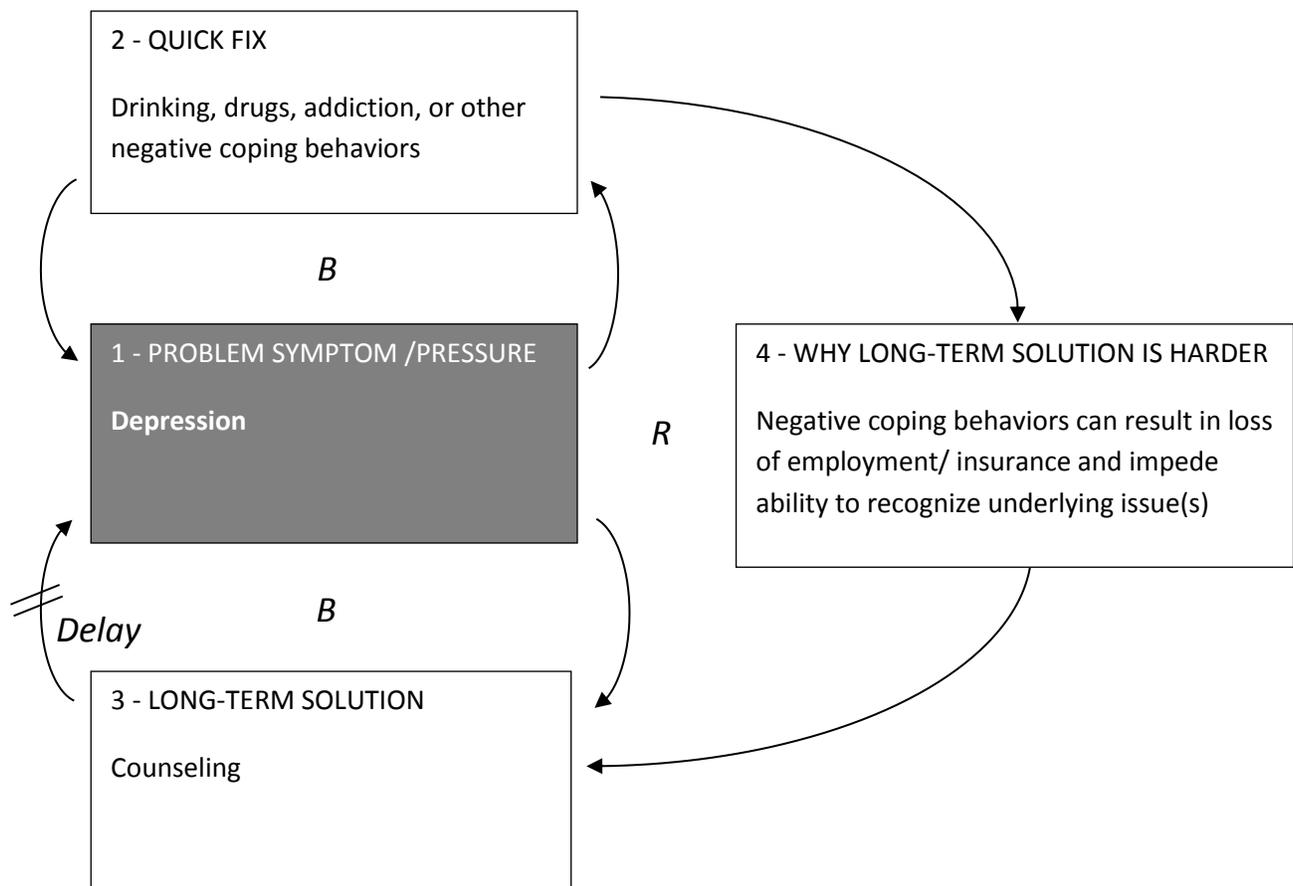
- Depression (page 2)
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- Limited regional transportation options to get to work (page 6)
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<sup>^</sup> While there are many approaches to systems thinking, this document refers to those made popular by Peter Senge. Excerpts taken from P. Senge, *The Leaders New Work: Building Learning Organizations* (MIT Sloan Management Review, Fall 1990) and D. Peter Stroh, *Leveraging Change: The Power of Systems Thinking in Action* (Organisational Learning for All Seasons).

**Problem Symptom – Depression**

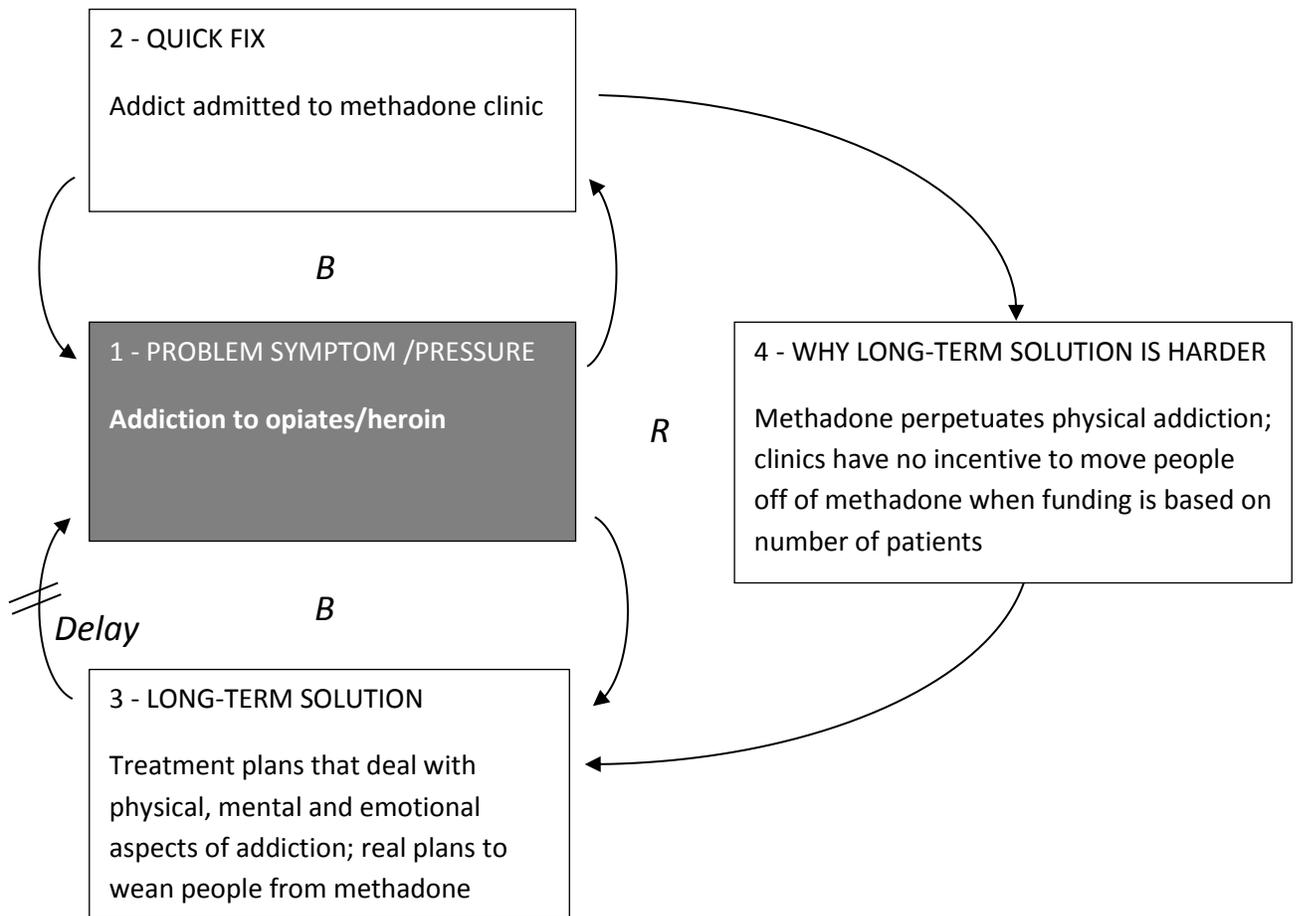
People suffering from depression often try to self-medicate by reaching for alcohol or drugs to relieve them of emotional pain. Rather than seek out help like counseling in managing their depression, they seek their own solution -- a solution which, while it seems to provide quick relief, eventually complicates the issues and leads to more pain. With time, self-medication can slip into a dependency, and the dependency slips into an addiction. This can lead to complications such as loss of employment and/or insurance, students not getting to class, and/or parents becoming unable to care for their children.

Also, as dependency deepens, the desire to hide it deepens, which feeds the need for alcohol or drugs to cope, creating a vicious cycle. The further a depressed person is away from self-honestly, the less likely he or she is to admit having a problem and turn to counseling.



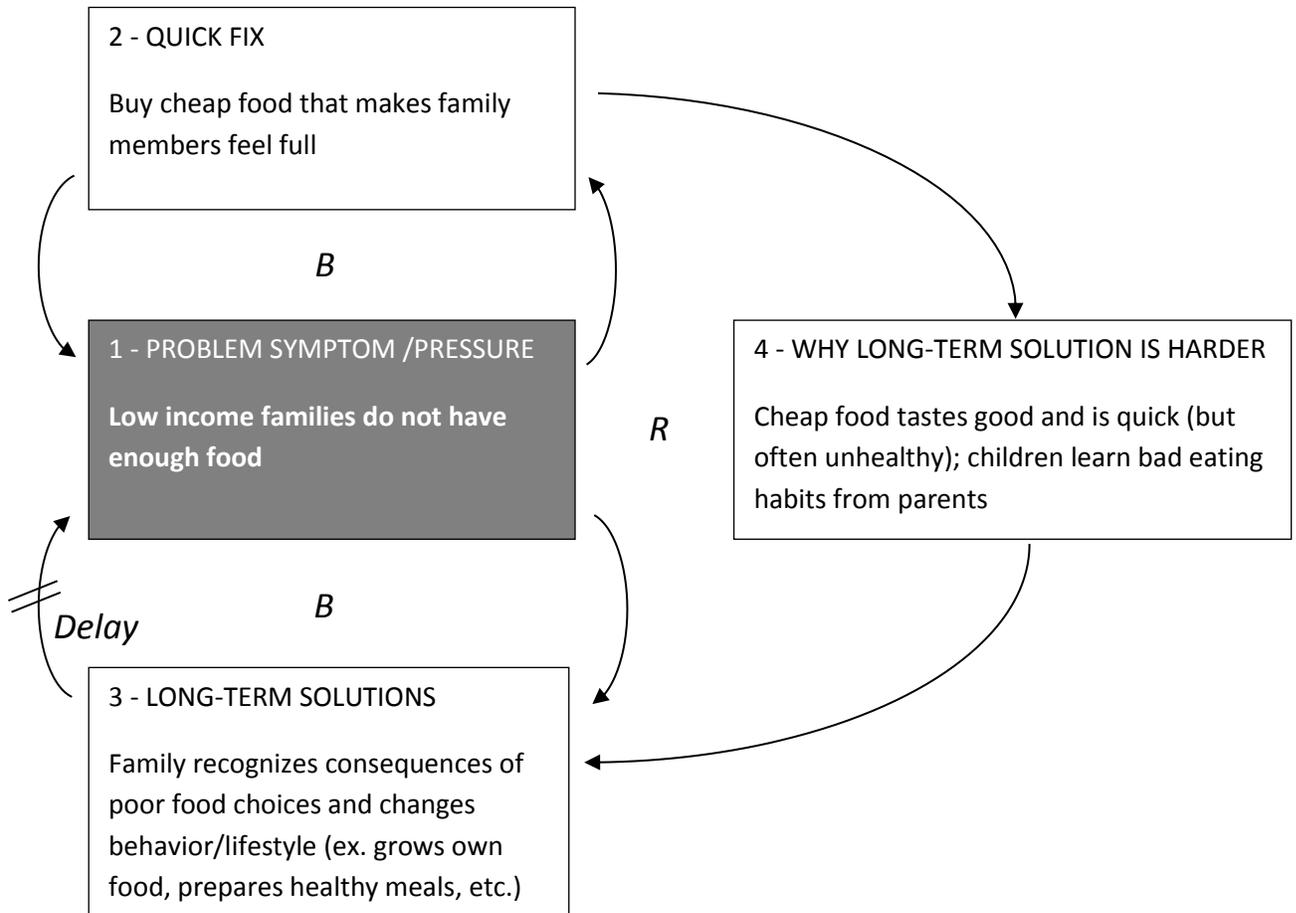
**Problem Symptom – Addiction to opiates/heroine**

Using methadone clinics to treat opiate/heroine addiction addresses a person’s physical addiction, shifting the dependency from opiates to methadone. Since methadone clinics are paid based on the number of patients being served, they have little incentive to move patients off of methadone. Consequently, many addicts stay on methadone for years with no real plans to wean off of it. More holistic treatment plans that truly address the mental and emotional roots of addiction and wean a person from methadone are a better long-term solution, but it is easier to focus just on the physical addiction.



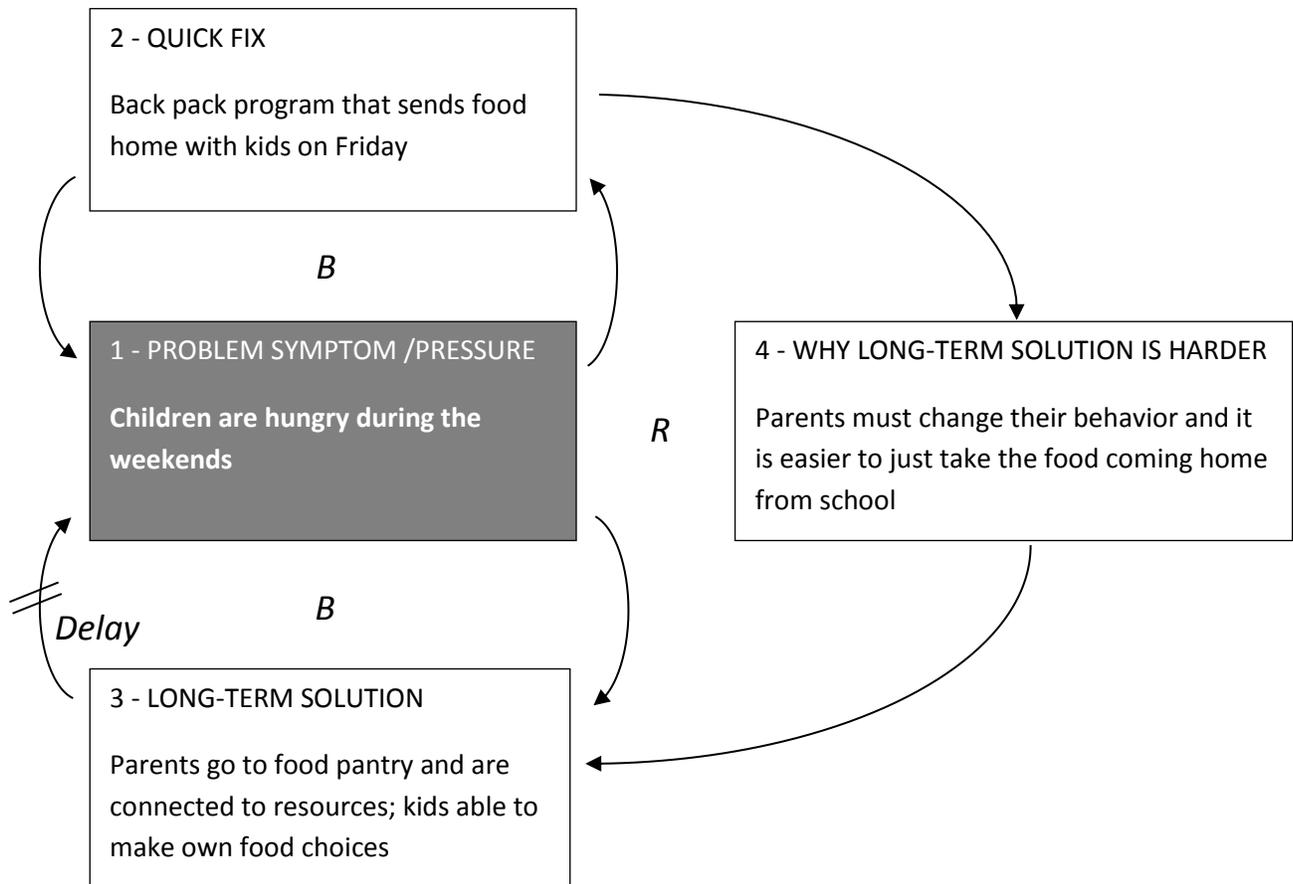
**Problem Symptom – Lack of food in low income families**

When a low income family is short on food, the quick solution is to buy cheap food that makes you feel full. While cheap food may taste good and be fast to prepare, it is often heavily processed and unhealthy. When a family’s diet centers on processed food, children learn poor eating habits. Getting families to focus on healthy calories over “empty calories” to feel full is difficult as it requires changes in behavior such as shopping habits and food preparation. When a child does not learn these behaviors at home, it can be even harder for him/her to make this change as an adult.



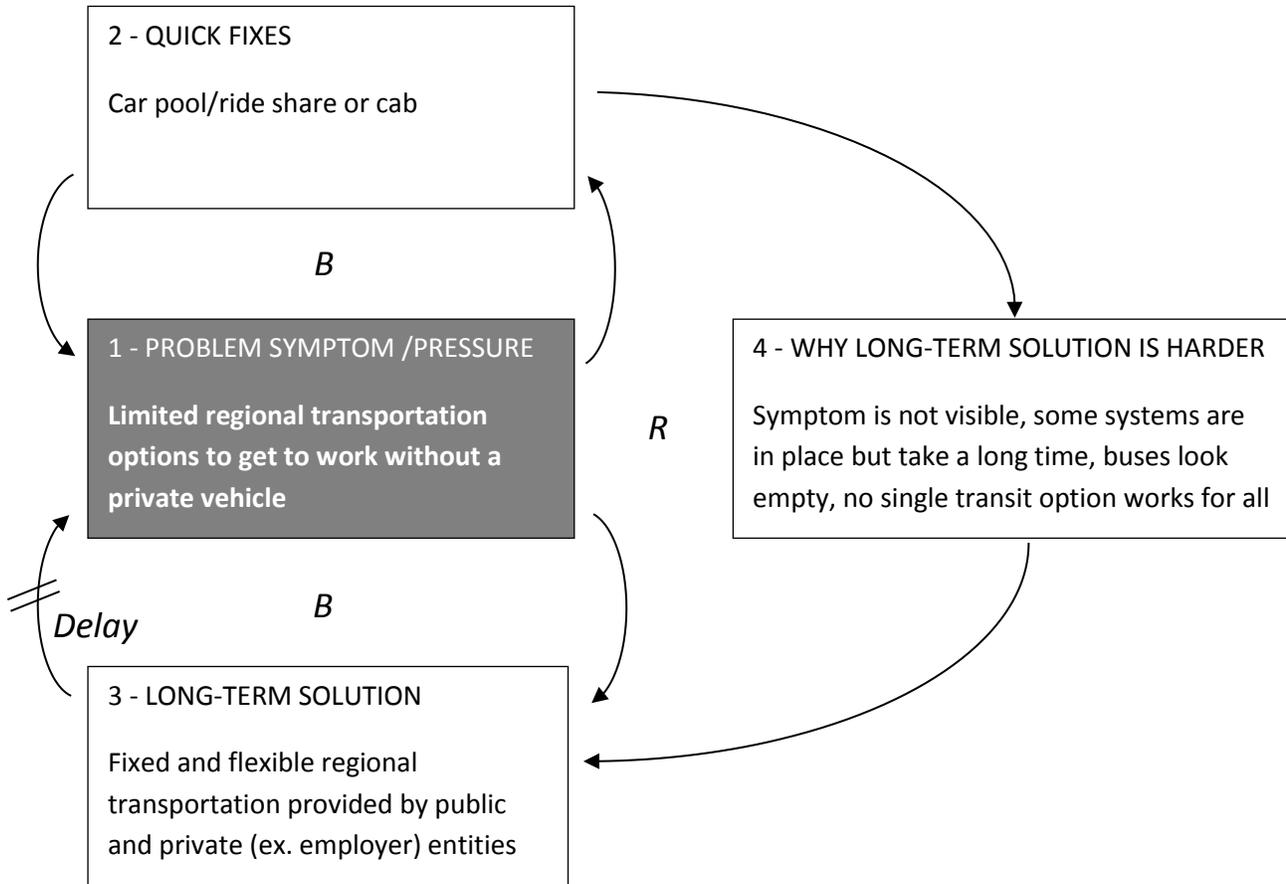
**Problem Symptom – Hungry children on weekend days**

Schools noticed that many children receiving free or reduced lunch were going hungry during the weekend. The food pantry created a back pack program, which sends these children home with a backpack full of food on Fridays, as a quick way to help. The pantry would rather have a family come to the pantry to choose its own food and be connected to other helpful community resources. As long as food is coming home from school for the family, there is less incentive to make a trip to the pantry.



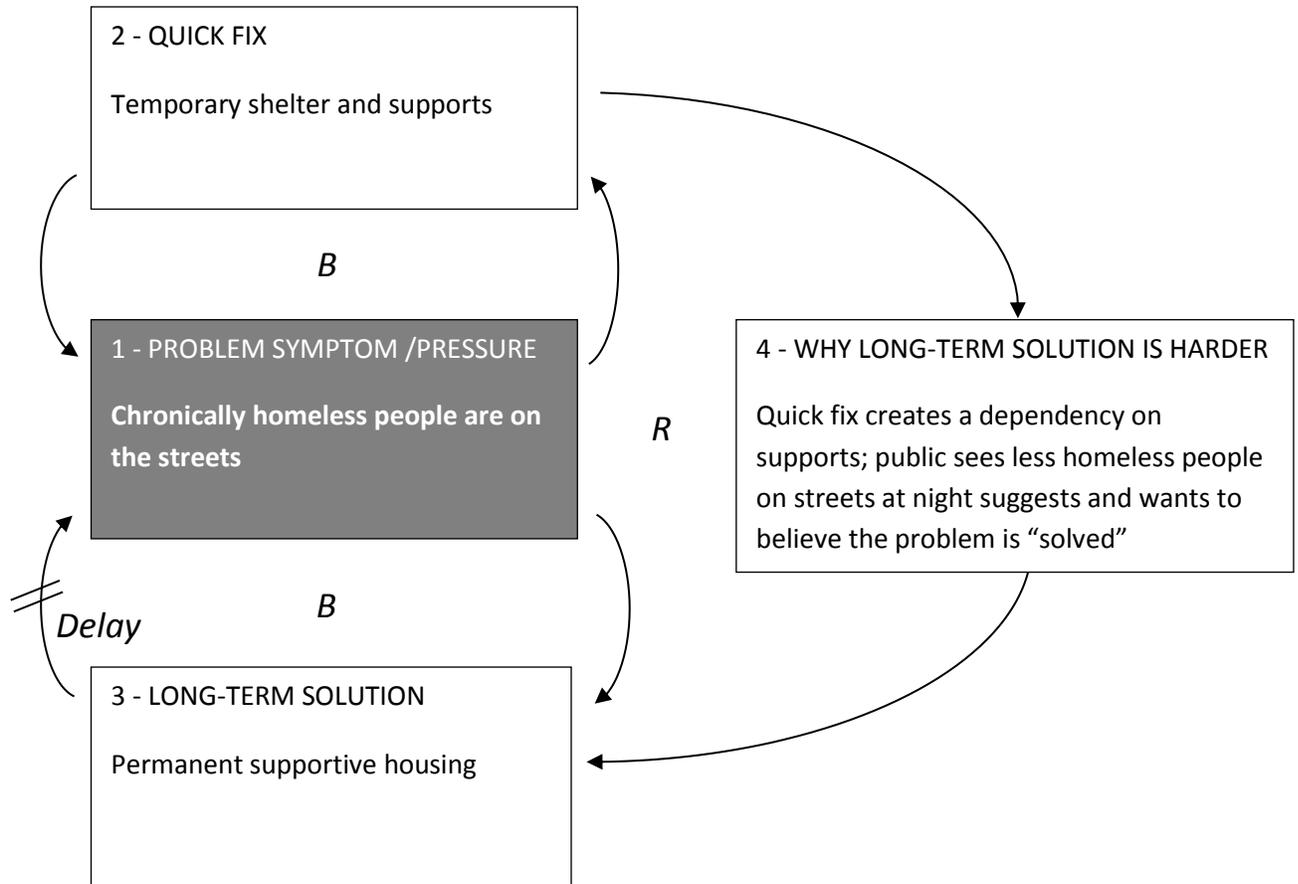
**Problem Symptom – Limited regional transportation option to get to work**

Transportation to and from work is difficult for those who do not have access to a private vehicle, especially when commuting to or from a rural area. Options are often limited to getting a ride through a car pool (if one exists) or paying for a cab. Relying on cab service is not a viable long-term solution due to cost. For example, for a worker living in Oshkosh to get to/from work at Rippin’ Good Cookie in Ripon, the discounted cab fare is \$40/day. Fixed and flexible regional transportation that is supported by a public/private partnership, including area employers, is a desirable long-term solution but difficult to get the community to rally behind. When buses look empty, people think that someone else is taking care of the problem.



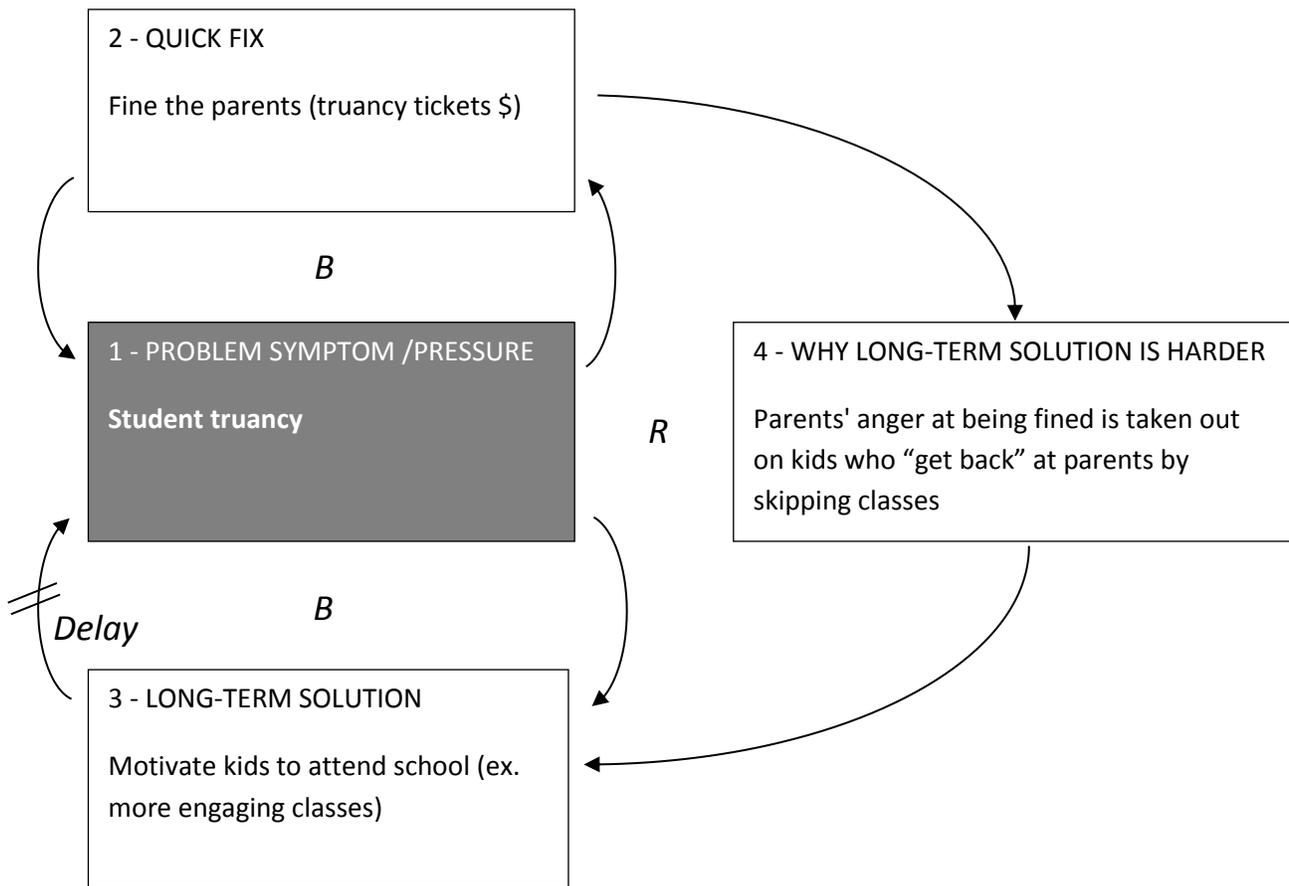
**Problem Symptom – Chronic homelessness**

The long-term solution for individuals experiencing homelessness is permanent, affordable housing and independent living. Income-based housing (section 8 vouchers) is one example of this type of solution. More temporary housing solutions that stop short of this long-term goal result in homeless individuals becoming dependent on public supports and ultimately questioning their ability to live independently. Temporary housing solutions can also reduce community support for permanent, affordable housing solutions as they create the perception that the homeless problem has been “solved.”



### **Problem Symptom – Student truancy**

When a student is truant from school, the child’s parents are fined. The fine is intended to motivate the parents to get their child to attend class. The unintended consequence is that the parents’ anger at their child for being truant results in the child rebelling and attempting to “get back” at his/her parents by skipping class. A more effective, long-term solution is to motivate students to attend class so that attending school is not viewed as a punishment.



**Lessons learned.** Participants in *Tackling Wicked Problems* shared how their increased knowledge of systems thinking concepts will influence their future actions.

- I will “seek to pull in many different players as resources before attempting to define and solve a problem.”
- I will “think beyond the crisis of the day...looking at the long-term effect of things before making quick decisions and thinking that a quick fix will work.”
- “Long-term change is hard. You have to have a vision for what you are trying to change the system to, and to persevere through the delays that are part of any systemic change.”
- “I was affirmed in the ideas that one cannot blame others, there are unintended consequences that should be expected. And unless you keep in mind the long-term problem while you work on the short-term, you are more likely to fail.”

**Summary.** Systems thinking challenges conventional wisdom that anything one does to improve a situation in the short-term will also improve conditions in the long-term. In fact, quick “fixes” to wicked problems often create unintended consequences that neutralize initial gains or actually make matters worse in the long run.

Short-term fixes are easy while long-term solutions are usually hard. If overall vision or goals are missing, a focus on the short-term usually takes over. Short-term solutions can erode long-term capability. When faced with a shifting the burden system, you can:

- Focus on the long-term solution in support of a compelling vision.
- Pay attention to dependency on the short-term fix as you strengthen long-term capability.
- Look for mental models that tend to perpetuate dependence on the quick fix and mental models that impede serious consideration of the fundamental, long-term solution.
- “Go cold turkey” to support only the long-term vision.