START WITH THE STREETS:
HOW ANYONE CAN MAKE THEIR CITY SAFER AND WEALTHIER, ONE BLOCK AT A TIME
This book—created by leaders in the Strong Towns movement—will show you why slower streets create more prosperous and safe communities for everyone. In the stories that follow, you’ll learn why walkable, people-oriented streets are the most economically productive form of development we can choose for our communities and why better design—not ticketing or speed limits—is the only way to truly achieve that goal. Then we’ll send you off with 5 things you can do right now to slow the cars in your community.

You have the power to build a strong town. We can’t wait to see what you’ll accomplish.
We design our streets like roads, as if their primary—and sometimes sole—function is the movement of automobiles.

Many people don’t grasp the difference between a street and a road. They think the terms are interchangeable, and for good reason. In the United States, we’ve spent decades and trillions of dollars blurring the distinctions.

STREETS AND ROADS

To make our cities financially strong and successful, we need to reclaim the lost art of building great streets, and we must empower our transportation professionals to build high-performance roadways. There is a serious difference between those two pursuits.

**Streets:** The function of a street is to serve as a platform for building wealth. On a street, we’re attempting to grow the complex ecosystem of businesses and homes that produces community wealth. In these environments, people (outside of their automobiles) are the indicator species of success. Successful streets are environments where humans and human interaction flourish.

**Roads:** In contrast, the function of a road is to connect productive places to one another. You can think of a road as a refinement of the railroad—a road on rails—where people board in one place, depart in another and have a high-speed connection between the two.
With a street, we’re trying to build a place. With a road, we’re trying to get from one place to another. Streets emphasize wealth creation. Roads are about movement.

**WHY IS THIS DISTINCTION IMPORTANT?**

Designing our streets as if they were roads creates three fundamental and interrelated problems.

First, it’s really expensive. We spend a lot more money on everything from engineering to asphalt when we overbuild our streets. And because poorly designed streets suppress demand for biking and walking—two lower cost alternatives to driving—they actually induce even more demand for transportation spending.

Second, poorly designed streets drive down the taxpayers’ return on investment. In general, the more auto-oriented a development pattern is, the higher the cost to provide public services and the lower the value per acre.

The kind of streets that are typically located in auto-centric areas are not only less financially productive, they also tend to be less adaptable, less flexible, and thus, more financially fragile. The financial struggles our cities face are directly related to the poor financial productivity of our auto-based development pattern.

Third, designing our streets as if they were roads is not safe. These environments combine fast speeds with randomness and complexity, a condition unsafe for drivers and particularly unsafe for anyone outside of a vehicle.

**STROADS: THE FUTON OF TRANSPORTATION**

A stroad is a hybrid of a street and a road. Much like a futon, it tries to do two things at once and is forced to compromise on both. A stroad tries to move cars kind of quickly along a corridor that also builds some wealth. The result is expensive infrastructure serving low-returning properties that fails to move traffic quickly while being particularly dangerous.

A stroad is the worst kind of transportation investment we can make, yet we build them all the time. If you are driving between 25 and 50 miles per hour, you are probably on a stroad. They are everywhere.
That's because of the way in which transportation professionals approach street construction. As they do with roads, they start the process by selecting a design speed. They then establish the volume of traffic they are designing to accommodate. Given the speed and volume, they then reference a road design manual to provide recommended dimensions for safe automobile travel. Finally, they calculate the cost of the project.

The order of these values—speed, volume, safety, then cost—works well for roads, but it is nearly the complete inverse of what is needed to build a productive and safe street. Successful streets emphasize safety first—and that’s safety for everyone, not just drivers and their passengers—and then focus on cost, volume and, finally, speed.

If we want a place to be successful, automobile speed can’t be the top priority of street designers. It actually needs to be their lowest priority.

#SLOWTHECARS

The most compelling thing we can do today to make our cities wealthier and more successful is to substantially slow automobile speeds on our streets.

We need to incrementally shift each of our streets to become either a street or a road, distinguishing the parts of our existing transportation network over time to emphasize either a street function (wealth creation/complexity) or a road function (traffic movement/simplicity).

And while the fragile financial condition of our local governments is what compels us to make this change, it is clear that building lower cost, higher returning streets will also save lives and improve the quality of life for our citizens.

That is why #slowthecars is such a critical part of implementing a Strong Towns approach.
What Does a Walkable Street Look Like?

By Rachel Quednau

You know those games you usually find on the back of a cereal box or in a kids’ magazine that present you with two seemingly identical pictures and ask you to spot the six things that are different in each? Well, here’s a much easier version of that:

![People-Oriented Street vs. Auto-Oriented Street](image-url)

What differences can you spot in the pictures above? (Hint: There are more than six.)

We’re going to talk a little about those differences today and why understanding them is so crucial if we wish to build financially successful cities and towns.

**WHAT DOES “AUTO-ORIENTED” MEAN?**

An auto-oriented street is, quite simply, one built primarily for cars. Highways are obviously auto-oriented, but so are most of the streets and stroads in our cities.

Here’s a handy checklist to help you tell whether a street is built mostly for cars:

1. Are there multiple lanes of traffic in each direction?
2. Are the lanes of traffic considerably wider than the average car?
3. Do most of the businesses along the street provide their own parking lots?
4. Is there a large distance between the street and the businesses or homes lining the street (because of parking, landscaping, etc.)?
5. Are the intersections controlled with traffic signals?
6. Does the street lack sidewalks?

If you answered yes to one or more of the above questions, you’re looking at an auto-oriented street.

The good news is that there are plenty of fairly simple, affordable ways to begin to move an auto-oriented street in the direction of becoming a people-oriented street.

WHAT DOES “WALKABLE” OR “PEOPLE-ORIENTED” MEAN?

A people-oriented street is welcoming, safe and accessible for people in all forms of transportation but especially on foot. The buildings, sidewalks and other features are all scaled to people, not cars.

Here’s a checklist that will help you identify a people-oriented street:

1. Does the street have no more than one lane of traffic in each direction?
2. Are the lanes narrow (not much wider than the average car)?
3. Is parking either directly on the street or behind the buildings?
4. Are the homes and businesses close to the street with amenities (like signage and windows) sized for people?
5. Would it be relatively safe and feasible for a person to cross the street at any point, including the middle of the block?
6. Are there sufficient sidewalks?
7. Are there people out on the street? (No, seriously; is there even a single human being?)

If you can answer yes to several (and ideally all) of the questions above, you’re likely on a people-oriented street. The last question is perhaps the most telling indication of a people-oriented street. If you were to visit this street on a nice day, you should see a ton of people walking its sidewalks, visiting its businesses on foot, etc.

The good news about designing people-oriented streets is that they work better for everyone—not just people walking. First, they make life safer for everyone because they require everyone to be more attentive to their surroundings and to travel at slower speeds. Second, despite concerns that narrowing a street will reduce its car capacity and make a car trip through it take a lot longer, this is often not the reality. In fact, many streets, when narrowed, allow for the same amount of traffic to pass through and trav-
El times may even end up being similar—especially if signalized intersections are eliminated in favor of slower speed options like roundabouts, stop signs and uncontrolled intersections. That’s because, on a typical stroad, you drive 40+ mph for a few seconds and then you’re forced to come to stop after stop at massive, multi-way intersections. On a narrow, slow street, you can maintain a more consistent speed.

A people-oriented street is not anti-car. Quite the contrary. A people-oriented street is pro-people—whether the people are walking, biking or driving.

**A WORD OF CAUTION**

If there’s one thing you should take away from this discussion of walkable streets, it’s the necessity of narrowing many of our roadways (items 1 and 2 on our checklists). The other features mentioned above—on-street parking, sufficient sidewalks etc.—are all fairly meaningless if you don’t have narrow streets. It can actually be harmful to invest in these sorts of features if you don’t also narrow the streets around them, because you’re sending the mixed message to people that a) they should walk there, but b) it won’t actually be safe for them to do so because cars will be driving too fast. Not to mention it’s a waste of municipal funding to build a beautiful new sidewalk that no one is actually going to use because it’s dangerous and unpleasant.

**WHY DOES IT MATTER?**

So why does building people-oriented streets instead of only car-oriented streets matter? It’s not only because they’re safer or because they enable people to get around affordably without a car. It’s also—and chiefly—because they are more economically productive. They encourage local business activity, produce more tax value per acre and offer a better return on infrastructure investment.
WHY WALKABLE STREETS ARE MORE ECONOMICALLY PRODUCTIVE

By Rachel Quednau

What is the value of a street where people can walk safely? Why build streets that are constructed with the needs of people in mind, not just the needs of cars?

Many people concerned with pedestrian safety and “walkability” care about these issues because they feel that walking is good exercise, or that walkable places are more attractive, or that walking is better for the environment than driving. These are all valid arguments and may convince some of the people reading this that walkability is important. But what I want to talk about today isn’t an argument based on values or aesthetics. It’s an argument based on pure dollars and cents—one that should convince people with a myriad of values and political leanings that people-oriented places must be a priority if we want our communities to be economically prosperous.

Again and again, when we look at streets oriented toward people—that is, streets where walking is safe and enjoyable, where people are drawn to visit on foot, and where fast and extensive car traffic is not the #1 priority—we find that they are more economically productive than any other style of development. This is particularly true when we compare people-oriented places to car-oriented places; think of that stretch of your town that effectively does everything possible to discourage walking and biking, including a street with multiple wide lanes to ensure fast car movement, acres of parking, and minimal (if any) sidewalks, bike lanes or crosswalks.

Walkable streets, on the other hand, encourage business activity, generate greater tax revenue per acre and offer a higher return on investment than auto-oriented streets.

PEOPLE-ORIENTED STREETS ENCOURAGE BUSINESS ACTIVITY

Streets where walking is safe and easy are streets where businesses usually thrive. A number of studies have confirmed this over the last several years.

For instance, in a 2011 report for Australia’s Heart Foundation¹, Dr. Rodney Tolley concludes:

*Streetscape enhancements add value to an area and are associated with higher rents and the attraction of new businesses. In addition there is good evidence to show that improving walking and cycling environments raises private property values by significant amounts.*
Indeed, in 2009, our friend Joe Cortright conducted a study\(^2\) that revealed: “In the typical market, an additional one point increase in Walk Score was associated with between a $500 and $3,000 increase in home values.” (*Walk Score is an online system that ranks how walk-friendly a particular location is.*)

Furthermore, a pivotal report\(^3\) by Elizabeth Bent and Krute Singha of the San Francisco County Transportation Authority uncovered that “travelers using [transit or walking] spend more per month than those traveling by car.” Interestingly, while the amount that transit users and walkers spent at area businesses on each trip was less than the average car driver’s spending, the transit users and walkers made more trips per month, which added up to higher spending overall.

In truth, you don’t really need a study to tell you these things. Visit the most thriving commercial district in any city—the one full of shops and restaurants and people—and I would bet that it’s an area where walking is prioritized.

A walkable street ensures that people can safely cross from a clothing store to a coffee shop and spend money at both. It means that people who live in the neighborhood can grab groceries and other necessities easily, so they’ll probably visit nearby establishments more often. Perhaps most importantly, a walkable street is one in which many businesses occupy the bulk of the land, meaning that dozens of destinations can be accessed in a matter of minutes on foot, and that every inch of land is put to economically productive use—not squandered in empty parking lots or unnecessary landscaping.

**PEOPLE-ORIENTED STREETS ARE MORE FINANCIALLY PRODUCTIVE PER ACRE**

We’ve got data unequivocally showing that people-oriented streets are more economically productive than auto-oriented streets—from big cities to small towns, from the heartland to the South. Our friends at Urban3 spend much of their time visiting cities and towns across the nation to analyze their tax productivity, comparing how much tax revenue is produced per acre in different areas. What they’ve consistently found is that compact, walkable places produce far more tax value per acre than auto-oriented places—and that holds true in communities across America.

The following images created by Urban3 visually illustrate the tax value per acre of every plot of land in four geographically diverse communities and this pattern is evident in all of them. In these maps, a tall plot means a high tax value per acre while a low plot indicates a low tax value. (*In the case of the Lafayette map, taller green plots are revenue positive for the city while taller red plots are revenue negative.*)
In every single image, the people-oriented, historic city centers are the ones that rise far above the surrounding auto-oriented land in terms of tax value per acre.

Here’s what those city center spikes look like for the average person walking...
What do these places all have in common?

- **Streets are fairly narrow with no more than two lanes of traffic and parking on either side—all of which means cars must drive slowly.**

- **Sidewalks are present in every image and bump-outs, crosswalks and signals make it easy for people to cross the street.**

- **Trees offer shade to people walking (especially important in warmer climates like Louisiana and southern California).**

- **Businesses open right onto the sidewalk, easily accessible to passersby on foot and attracting the attention of people driving slowly as well.**

- **Residences and offices occupy the second (and in some cases, third, fourth and fifth) floors of these buildings, providing additional tax revenue and putting more people within walking distance of the local businesses below.**

Meanwhile, here’s what the auto-oriented areas on the edge of each town look like...
In these images, everything is built around the car:

- *We see wide roads with multiples lanes of traffic and no on-street parking—all of which induces fast driving.*
- *While most of these images do contain a sidewalk (if you look very closely), none of them appear to be inviting places to walk, what with cars whipping by quickly right next to anyone walking.*
- *Crosswalks are spaced far apart, if there are any at all. Anyone who wanted to cross the street in these places would have to walk a long way to the nearest stoplight and then sprint across several lanes of traffic in order to get to the other side.*
- *The only greenery in the images is empty lawns that serve no purpose. No trees shade the sidewalk.*
- *Businesses on the edge of town require large signage that can be seen from inside a fast-moving vehicle.*
- *Every single business has a large parking lot in front of it, rather than more buildings that could house economically productive businesses.*
- *Buildings are only one story tall, which means that destinations are more spread out and tax revenue for each plot of land can only come from one business.*

This pattern repeats itself in towns and cities across America. When we build for people, we get economically prosperous places. When we build for cars, we get low-value developments. The result is that the urban core is almost always financially propping up the entire city.

**PEOPLE-ORIENTED STREETS PROVIDE A BETTER RETURN ON INVESTMENT**

But streets where walking is easy and safe are not just economically significant because of their impact on retail sales or tax values, they are also economically significant because of their incredibly high return on public investment.

The cost of paving sidewalks for people is minuscule compared with the cost of paving wide roads for cars, installing traffic signals, paying the salaries of traffic cops, etc. Even the cost of providing enhancements to pedestrian space such as trees and benches pales in comparison to what we spend when we build around cars.

Furthermore, the wear and tear caused by foot traffic is also negligible compared with the wear and tear caused by car and truck traffic, meaning that long-term maintenance
costs for walk-friendly areas are also much lower than for auto-oriented places. (Ironically, most cities spend exponentially more on their roads while utterly neglecting their sidewalks.)

In short, a simple sidewalk could serve millions of people traveling on foot for decades, even centuries, with only a small amount of up-front investment and minimal maintenance costs for the city—yet it would support dozens or hundreds of local businesses. The same length of street designed primarily for cars would cost exponentially more to build and keep up, and would only serve a handful of businesses.

If that’s not enough to convince you, remember that it’s not just walking infrastructure that’s more affordable to build and maintain in and of itself. The businesses and homes that exist in walkable areas also provide a better return on investment than the buildings in auto-oriented areas. The two streets below—one people-oriented and one auto-oriented—illustrate this clearly.

In the first photo, we see that just one side of this walkable block is occupied by more than a dozen businesses, most of which have apartments or offices above them. Most of the buildings are 100+ years old and have been home to countless businesses and residences since they were constructed. Those initial investments we made a century ago are paying amazing dividends today.

In the second photo, we see a similar length of auto-oriented street whose buildings were constructed much more recently and will likely only ever serve one purpose: to house a Perkins restaurant.

The businesses in the first photo get to use all of their space for actually conducting business—serving food, selling products, and so on. Meanwhile, the lone Perkins in the second photo has to reserve most of its space for a parking lot and a large sign.

Invest in an auto-oriented street and you are temporarily filling a space that will likely be empty in a decade, draining life and tax value from your town. Invest in a people-oriented street and you have created value that will continue to benefit your town for decades and even centuries to come.
If you wanted to take on a healthy habit like drinking less beer or eating fewer desserts, it would be much easier to stick to your goal if the temptation to indulge was completely eliminated. You’re going to have a really hard time kicking your Mountain Dew habit if you’ve got cans of it sitting next to your desk at work. Even if you were to, say, put a sign on the cans that read, “Don’t drink me,” they would still be taunting you every time you looked at them. Even if you were to ask your spouse to remind you not to drink the soda, she wouldn’t be near you every single moment with that prompt at the ready. No, you’d be far more successful in your goal to give up Mountain Dew if you got rid of the cans altogether.

This is even more obvious in children. If you left your four-year-old to play alone in the kitchen and said, “Don’t eat any of the brownies sitting out on the counter,” there’s no way that kid isn’t taking at least one brownie. It’s human nature. Any parent who doesn’t want their child eating the brownies would remove the temptation completely.

We face the same situation when we look at the streets in our cities. If every street we drive down is replete with wide lanes and large curving intersections, no amount of signage or even the threat of getting a speeding ticket is going to remove the temptation to drive fast at least some of the time. It’s basic psychology.

This is why, when people respond to car crashes by saying that we need to lower the speed limit or get more police officers out there handing out tickets, it makes me incredibly angry. If we don’t address the root cause of this problem—dangerously designed streets that induce speeding—then we’re going to keep seeing headlines every day about yet another pedestrian killed and yet another car crash claiming the lives of innocent kids.

There is no amount of signage or cops patrolling that will eliminate the problem of people speeding and it is offensive to those who have died and lost loved ones to suggest it. Furthermore, adding additional police patrols isn’t feasible for most cities’ already strained budgets—and it’s certainly not attainable in the amount that would be required to even begin to cut down on dangerous driving (which would probably be a cop posted at every other block, 24 hours a day).

We have to design our neighborhoods in a way that completely eliminates the temptation to speed (and we have to design our high-speed roads in a way that keeps them separated from the activities of pedestrians).
The fix is simple: We must narrow our streets. On a narrow street, you are required to pay close attention to your surroundings and to drive more slowly and carefully so as not to hit anything. Don’t believe me? Just imagine how you’d respond if you were driving down this baby:

How fast would you be comfortable driving? 20 mph? What about if there were people entering and exiting the shops on either side, and walking down the street. 15? Great. That’s safe!

By designing our streets to account for the maximum amount of driver error—with wide lanes, large setbacks, curved turns, etc.—we have created more dangerous communities, because we have left no room for anyone else’s errors. There’s no room for the kid who chases a ball into the street. There’s no room for the senior citizen who walks a little slower, the dad who’s pushing a heavy double stroller, the mail carrier wheeling a cart full of packages across the street...

We can achieve the goal of narrower, safer streets in a very simple and affordable way. It’s been done in cities across the country using nothing but paint and traffic cones.

But by clamoring for more enforcement or different signage every time someone is killed in a car crash, we’re doing nothing but putting a band-aid on the situation—one that will fall off and leave the wound to get infected in a matter of days. We have to solve this problem at its root by designing streets that are safe for everyone.

If you need a sign to tell people to slow down, you designed the street wrong.

#slowthecars
By now, I hope we’ve persuaded you that slowing down stroads and other high-speed thoroughfares through the places we live is one of the smartest things we can do if we want to make our cities safer, wealthier, better places to live.

So, what do you do now? You get the big picture. But what can you do to slow the cars in your specific town—especially if you’re not a planner or an elected official? What if you’re just an average person who wants to do one, small thing to make your place better?

Here at Strong Towns, we believe that even the most powerful person needs to think and act small if they want to make meaningful, lasting change. Here are five simple things you can do to #slowthecars in your unique community right now.

1. **TAKE STOCK.**

   One of the most important things you can do in your quest to #slowthecars is to slow yourself down first and really ask how accessible your streets are—not just for the most dangerous modes of transportation, but for the most vulnerable (and incidentally, cutest) people on the road. I’m a huge fan of the Strong Towns Strength Test in general, but one of my favorite items on it is #6, which challenges you to ask not just how easily an adult might navigate your streets, but whether a child could possibly hope to make their way to school safely on bike or foot. Strong Towns member and urban planner Spencer Gardner’s guide for how to take the test asks powerful questions about your city that extend far beyond the standard walkability audit, from evaluating road speeds to figuring out the nearest place to buy a popsicle.

2. **SHAPE THE STREETS.**

   You might think you need an engineering license, a cement mixer, and the blessing of your local government to slow down the cars outside your home. But that’s not the case.

   We, here at Strong Towns, are huge fans of tactical urbanism, which uses inexpensive, temporary objects to make a big impact on the built environment—and often, demonstrate the need for a permanent solution in a compelling, provable way.

   Anyone can learn how to do a pop-up traffic calming demonstration in your town, or,
if you happen to be a local leader yourself, you can even empower your citizens to work together with you to find traffic solutions you all want to see. A lot of these projects can be done without permits, using materials as simple as fallen leaves or even toilet plungers (seriously).

3. THROW A PARTY (EVEN IF YOU’RE THE ONLY ONE WHO’S INVITED.)

Sometimes, the best way to show that the streets aren’t just for cars is simple: just get some people out in them.

Plan your own Open Streets event to temporarily close a few blocks off to cars, and invite your neighbors to see just how many amazing things you can do in the streets when you’re not terrified by fast-moving vehicles. Gather your friends for a Critical Mass bike ride and demonstrate how fun life can be when vehicles with pedals are the dominant mode of transportation rather than vehicles with engines, even if just for a few hours.

Or maybe slap on a Zebra suit and get out there and play crossing guard for a while—while demonstrating the incredible power of funny diversions to calm traffic.

4. TAKE THE NEXT STEP TOWARDS PERMANENTLY SLOW STREETS.

Zebra costumes and toilet plunger bike lanes might all sound like fun. But what’s the next step if we want real pavement on the ground, not just cute experiments that come and go in a day?

If you’re truly starting from zero, you’re going to want to start with temporary, experimental measures before you commit to permanent solutions; if not, you’re leaving the amazing power of incremental development on the table. But once you’ve had a chance to analyze and iterate which solutions make most sense for your unique place, Spencer Gardner’s guide to building a permanent bike network on a budget will be an asset to you as you make the case for better facilities for bikers and citizens on foot. And if you’re not a city leader yourself, Strong Towns board member and former city councilman John Reuter’s guide to persuading an elected official will definitely come in handy.

5. SPREAD THE WORD

Just talking about why we need to #slowthecars might not seem like a meaningful step to actually getting dangerous motorists off of your neighborhood streets. But get smart about it, and it could be the most important step you can take.
Those questions you asked yourself about your town’s walkability, way back in step one? That would make a great op-ed for your local paper. And when you take on a tactical urbanism project or throw a street party, you also have an opportunity to grab a few friends to collect data on what you’re doing. Downloading a speed radar app onto your phone or even just doing a simple pedestrian count is a cheap, easy way to get an unscientific read on how your experiment is impacting walkability—and if you share your results with local leaders, it could help change a culture that has yet to learn that fast cars are bad for cities and towns.
Resources

- Use tactical urbanism to cheaply and creatively try out slow streets tactics with this excellent set of guides: [http://tacticalurbanismguide.com/](http://tacticalurbanismguide.com/)
- These resources will help you host a pop-up traffic calming demonstration in your town: [https://www.strongtowns.org/journal/2017/4/10/use-these-resources-to-host-a-pop-up-traffic-calming-demonstration](https://www.strongtowns.org/journal/2017/4/10/use-these-resources-to-host-a-pop-up-traffic-calming-demonstration)
- Learn how to throw an “open streets” event in your neighborhood: [http://open-streetsproject.org/](http://open-streetsproject.org/)
- Visit [StrongTowns.org/slowthecars](https://www.strongtowns.org/slowthecars) for more ideas.
The mission of Strong Towns is to support a model of development that allows America’s cities, towns and neighborhoods to become financially strong and resilient. For the United States to be a prosperous country, it must have strong cities, towns and neighborhoods. Enduring prosperity for our communities cannot be artificially created from the outside but must be built from within, incrementally over time. For the latest on slowing the cars from Strong Towns, visit www.strongtowns.org/slowthecars.