# DEVELOP A RESEARCH QUESTION

A research question guides your research. It provides boundaries, so that when you gather resources you focus only on information that helps to answer your question. Without this guide, you would simply gather a collection of facts, not knowing when and where to end your search for information.

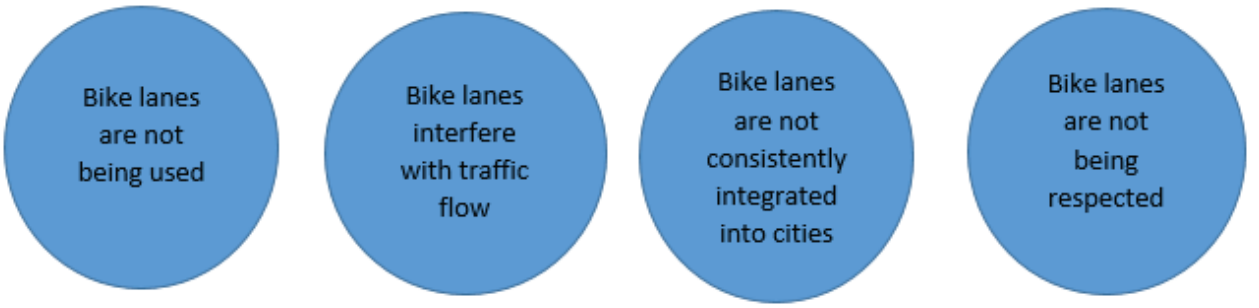
## Where Do I Begin?

Good research questions come from solid research topics. For more information, see our resource **Developing and Narrowing a Topic**.

## From a Topic to a Problem

Once you narrow your topic, you need to think about related problems. The goal of research is to answer questions that help to solve one of these larger problems. Using bicycle lanes in urban areas as our topic, we can start to generate some potential problems:

**bicycle lanes in urban areas**

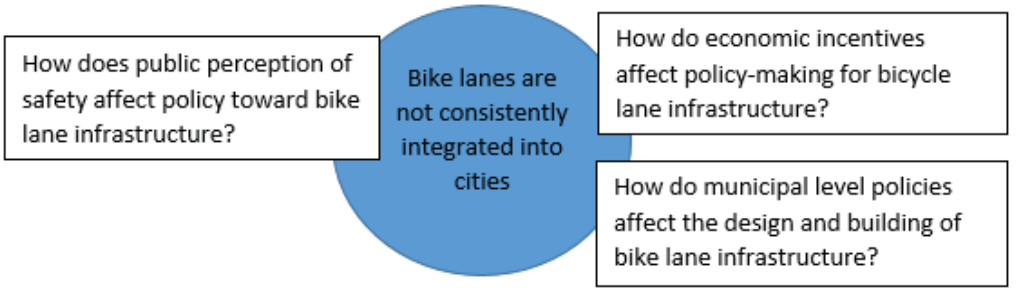



### Where do I find problems?

Look at current research on your topic in academic articles or reliable web sources. The motivation (or problem) behind others' research is often discussed in the abstract or introduction.

## From a Problem to a Question

Once you find a current problem that can help to motivate your research, you need to develop a question that helps to answer the problem. Let's use one of the problems above as an example:



The mistake that most novice researchers make is to attempt to answer a question that's too big to answer through a single research project. Keep it narrow.

| Characteristic | What this means? | Examples | |
|---|---|---|---|
| **Relevant and interesting** | The question is interesting to the researchers and others. It seeks to provide some answers to a larger problem in society that has not been fully addressed. | **Good** | What is the relationship between bicycle lanes in urban commercial zones and business revenue? |
| | | **Poor** | Why is cycling good for your health? |
| **Focused and precise** | The question specifies a research target and the variables that will be investigated. | **Good** | To what degree do bike parks encourage cycling in mid-size metropolitan areas? |
| | | **Poor** | Can good design encourage cycling? |
| **Novel** | The question builds upon previous research on the subject – confirming past research or adding new information. | **Good** | What is the effect of urban bike lanes on suburban communities? |
| | | **Poor** | What effect do bicycle lanes have on surrounding neighborhoods? |
| **Arguable** | The question is open-ended with more than one possible answer; however, research is required to provide answers to the question. | **Good** | How much do dedicated bicycle lanes contribute to lower CO2 emissions and other air pollutants in urban areas in Canada? |
| | | **Poor** | Do dedicated bicycle lanes lower CO2 emissions? |
| **Feasible** | The research required to answer the question is available and accessible. Data can be collected and analyzed in the time frame of the project. | **Good** | How much do dedicated bicycle lanes contribute to lower CO2 emissions and other air pollutants in Vancouver, Montreal, and Toronto? |
| | | **Poor** | How much do dedicated bicycle lanes contribute to lower CO2 emissions in major world cities? |

To better understand disciplinary requirements for your research, talk to your professors and look for resources in your discipline.