



## Environmental Work in the Transportation Sector

# CAREER PROFILE

**NAME:** Emily Nosse-Leirer

**TITLE:** Senior Planner, Land Use

**DEGREE:** Urban Geography

**COMPANY:** Chittenden County Regional Planning Commission

*The Chittenden County Regional Planning Commission assists local communities in planning and project design for critical transportation systems and infrastructure. Transportation plays a critical role in shaping an area's economic and community health and quality of life. Transportation Planning is a comprehensive and collaborative process that develops multimodal transportation solutions to address present and future transportation and land use needs. It promotes safety; supports local and regional economic development goals; respects the natural and built environment; improves social equity; and promotes a balanced, multimodal transportation system. It is a collaborative process that encourages participation of all relevant stakeholders including local governments, state and federal agencies, multi-jurisdictional partners, and the public at-large.*

**Q.** What is your current role at the organization?

**A.** I am a senior planner. Our work at CCRPC has a pretty clear split between transportation and non-transportation. I am not on the

transportation side of things, but the work that I do with land use is broad ranging. I work on things from municipal and town planning, energy planning and working to meet Vermont's energy goals, brownfields and economic development, and permit review. So, a lot of different things.

**Q.** How did you get to this point in your career?

**A.** I received my undergraduate and graduate degrees in Urban Geography from Ohio State University through a combined BA/MA program. At the time, I thought that I was going to be an academic. But during graduate school, I realized that this was just not what I wanted to do. So, I took a few city planning classes, got some internships and worked in an AmeriCorps position with the Central Vermont Regional Planning Commission. I was there for about one year when I applied for the position at the CCRPC. I had worked there for

about three years before I was promoted to senior planner—and that is where I am now. It was definitely a fast-track experience once I made the decision to do this kind of work.

**Q.** What does a day in the life of your position look like?

**A.** It really depends. I work with a lot of volunteer committees, like planning commissions or select boards. Some days are spent preparing for and attending meetings, which might be about a plan I am helping them write or a new state policy they want explained. Other days I am in the office all day to do research or prepare documents for others to review. I'm never "in the field" the way some of our transportation or water quality folks are.

**Q.** What do you enjoy most about your job?

**A.** I went to graduate school because I really love to read and write and talk about things with interesting people,

and it is so nice that this is a big component of the work that I do. As weird as it sounds, I actually like weeding through dense documents to find out exactly what they are saying—it's like a puzzle to find the most important pieces of information for a particular person, community, or situation. I also really like working with community groups. It is more fulfilling. It is also really nice to have a supportive office environment at the CCRPC.

**Q.** What is something that you want people to know about the work you do?

**A.** I want the general public to see us as a resource and a group that serves people in the community. I wish more people would reach out to us when they have questions because we have a lot of staff people who are experts on various issues and can usually answer their questions easily.

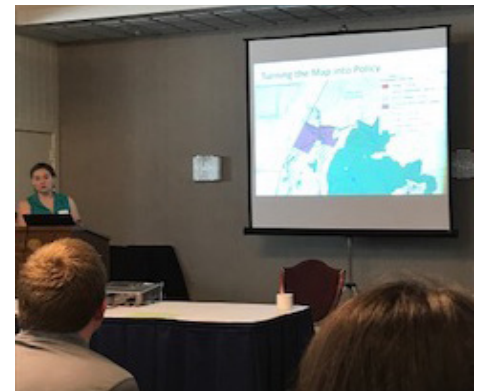
**Q.** What are some of the challenges that you have faced in the work and how did you overcome them?

**A.** Planning is all about making decisions on what's important for a

community and what's not, so we'll sometimes do a ton of research and writing on something explaining a potential policy and then the community might decide to move in a different direction. I try to remember that to make an informed decision, you have to have both sides of the story, so our work is useful even if it's the option the community doesn't move towards. But of course, it can be disappointing to see work not going forward. I really appreciate it when people tell us that we've been useful to their process. So, it's validating to know when this work does help people, and that helps get me through those challenging moments.

**Q.** What are some of the things that you don't love about the work that you do?

**A.** Working at the regional level instead of for a single community helps us to be an objective voice without personal politics interfering, but on the other hand, it can lead to a sense of removal from the communities that we help. We often don't get to stay involved for the end of a project when it



really starts to impact people.

**Q.** What are some of your own personal characteristics and values that have made you a good fit for this type of work?

**A.** From a personality standpoint, I love meeting new people, debating ideas and presenting on things, so planning is can be a great fit for all of that! I've also always been drawn to community building work. I do a fair amount of volunteering outside of work—I am the executive chair of the United Way of Northwest Vermont's Emerging Leaders United and I also volunteer with a Girl Scout troop in Winooski and with political campaigns. I like that my work at CCRPC advances many of the same goals as my volunteer opportunities. ↪



## About Chittenden County Regional Planning Commission

The CCRPC is one of eleven commissions serving municipalities in the state of Vermont. The CCRPC operates under the Vermont Municipal and Regional Planning Development Act and guided by Commissioners appointed by local City Councils, Village Trustees and boards of the municipalities under the designated Chittenden County region.

## Overview of Position as it Relates to Transportation

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Urban and regional planners develop land use plans and programs in order to create communities, accommodate population growth, and to revitalize existing structures (i.e. facilities in towns, cities, counties, and metropolitan areas). Additionally, urban and regional planners own analytical, communicative, decision making, and leadership skills that are vital to carrying out development work in communities. When Urban and regional planners choose to specialize in transportation, their role often becomes embedded in transportation planning.

The role of a transportation planner is best described as “the planner of the transportation system of tomorrow.” This requires work in the public and private sectors and/or engaging with government policy and the final details before the beginning of building work. This includes designing research methods and survey techniques for proposed transportation projects; assessing the impact of recent building developments on transportation systems; modeling traffic flows; recommending improvements for transportation systems; collaborate with engineers; and analyze information related to transportation such as policy, impact reports, or long-term planning needs.

In the public sector, transportation planners typically provide services for government bodies and contractors, examining current traffic and population trends and determining

the effectiveness of proposed and constructed roads. Transportation planners also plan new roads based on future predicted populations. Alongside transport engineers, developers, and environmental planners, transportation planners work to ensure that estates, commercial, and industrial zones have the correct transport infrastructure and also that they adhere to environmental legislation.

In the private sector, transportation planners work for public transport companies typically examining effectiveness of timings and schedules, as well as volume of transport services to ensure that these systems are working optimally. Transportation

planners will also work to and be involved in the decision making process to compose new routes when transportation service providers are not functioning optimally.

Source: [www.environmentalscience.org/career/transportation-planner](http://www.environmentalscience.org/career/transportation-planner)

### Urban and Regional Planning

*“It’s a hot day, and you wish your town would hurry up and build that pool everyone keeps talking about. But where should it be built? What land is available? How will people get there? How would building it affect the local wildlife? What do you say to neighbors who worry about noise and traffic? As an urban or regional planner, it would be your job to help the town answer all of these questions -- and many more. As the nation’s population grows, so do our cities and suburbs. Planners play a key role in managing that growth. They help keep communities safe, livable places and work to improve them.”*

—College Board

### Planners

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Land Use Planning is a career in the broader field of Urban and Regional Planning. Planners do work such as: managing assistance project, working extensively on

community engagement, outreach, and education and providing development review assistance. Planners might also write comprehensive strategies and coordinate for the commission.

As a senior planner at CCRPC, Emily has co-authored CCRPC’s energy plan and author of four local energy plans, completed in response to Vermont’s Act 174; Presented on and developed testimony/legislative committee comments regarding complex regulatory systems and processes, such as energy data modeling and

the Vermont NetMetering Rules, to legislators, community legislative bodies, volunteers, peers and members of the press; and managed energy permit review (Section 248) by developing review standards, submitting testimony to Vermont Public Utility Commission and participating in process-review.

## Overview of General Skills and Requirements

Urban and regional planners are required to have the skills to analyze information and data regarding market research, censuses, and environmental impact studies. They must also be able to determine the significance of the data that is analyzed. This is necessary for the purposes of decision-making around planning options and choosing an appropriate action plans regarding community development projects. In addition to analytical skills, urban and regional planners must also have clear and effective communication skills as they interact with colleagues, stakeholders, and investors, as well as prepare and present reports to a wide variety of audiences. Finally, planners must be able to manage projects, oversee tasks, and plan assignments for themselves and others.

Urban or regional planners require certain credentials. Most require a Master's degree from an accredited urban or regional planning program. People who hold a Bachelor's degree in Urban and Regional Planning can qualify for a small number of jobs as assistants or junior planners. Additionally some entry-level positions require 1 to 2 years of work experience in a related field (i.e. architecture, public policy, or economic development). Acceptable experience can also be attained through internships related to Urban and Regional Planning either while enrolled in school or post-graduation. It is not uncommon for people to seek internships post-graduation to gain experience in the field of urban and regional planning before being hired full time.

Looking into the future, urban planners will be needed to develop revitalization projects and addressed issues regarding population growth,

environmental degradation, movement, and resource scarcity. Common challenges are predicted to be: population change, affordable housing needs and transportation systems; all of which can address high and low density populations. As communities emerge and grow they will require development and improved infrastructure regarding housing, roads, sewer systems, parks and schools. As a result, the employment of urban and regional planners is projected to grow 13 percent from 2016-2026. This employment growth is driven by demographic, transportation, and environmental changes.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Urban and Regional Planners, at [www.bls.gov/ooh/life-physical-and-social-science/urban-and-regional-planners.htm](http://www.bls.gov/ooh/life-physical-and-social-science/urban-and-regional-planners.htm)

## Types of Projects Carried Out at CCRPC

### Brownfield Assessment

Projects through CCRPC's environmental protection agency Targeted Brownfields Assessment Grant

### Long Range Policy

Author and researcher of complex, long range policy documents, including the Chittenden County Comprehensive Economic Development Strategy and the 2017 Bolton Town Plan

## GLOSSARY

- ▶ **Brownfield** – a former industrial or commercial site where future use is affected by real or perceived environmental contamination.
- ▶ **Transportation Planning** – the process of defining future policies, investments, designs, and goals to prepare for future needs to move people and goods to destinations.
- ▶ **RPC** – regional planning commission.

## Key Skills

- ▶ **Reading Comprehension** – Reading work-related information.
- ▶ **Complex Problem Solving** – Noticing a problem and figuring out the best way to solve it.
- ▶ **Critical Thinking** – Thinking about the pros and cons of different ways to solve a problem.
- ▶ **Active Listening** – Listening to others, not interrupting, and asking good questions.
- ▶ **Judgment and Decision Making** – Thinking about the pros and cons of different options and picking the best one.
- ▶ **Coordination** – Changing what is done based on other people’s actions.
- ▶ **Active Learning** – Figuring out how to use new ideas or things.
- ▶ **Systems Evaluation** – Measuring how well a system is working and how to improve it.
- ▶ **Systems Analysis** – Figuring out how a system should work and how changes in the future will affect it.
- ▶ **Time Management** – Managing your time and the time of other people.
- ▶ **Monitoring** – Keeping track of how well people and/or groups are doing in order to make improvements.

## Abilities Needed for Success

- ▶ **Written Comprehension** – Reading and understanding what is written.
- ▶ **Oral Expression** – Effective spoken communication.
- ▶ **Written Expression** – Effective communication in written form.
- ▶ **Deductive Reasoning** – Using rules to solve problems.
- ▶ **Inductive Reasoning** – Making general rules or coming up with answers from lots of detailed information.
- ▶ **Oral Comprehension** – Listening and understanding what people say.
- ▶ **Problem Sensitivity** – Noticing when problems happen.
- ▶ **Fluency of Ideas** – Coming up with lots of ideas.
- ▶ **Near Vision** – Seeing details up close.
- ▶ **Originality** – Creating new and original ideas.
- ▶ **Information Ordering** – Ordering or arranging things.
- ▶ **Visualization** – Imagining how something will look after it is moved around or changed.



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*Communities Planning Together*

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