NORTHEAST TRANSPORTATION WORKFORCE



Environmental Work in the Transportation Sector

CENTER

CAREER PROFILE

NAME: Eleni Churchill

TITLE: Transportation Program Manager

DEGREE: Civil Engineering

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

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.

• What is your current role and how did you get to this point in your career?

• I am currently serving
• as the Transportation
Program Manager at the CCRPC.
This work involves managing

transportation planning projects and initiatives in Chittenden County that are funded through the CCRPC as well as supervising transportation planners and engineers in the organization. My educational background is in engineering with a Bachelor's and Master's degree in Civil Engineering. I moved to Vermont in the mid-1990s to begin my first job at the Vermont Agency of Transportation (VTrans) as a traffic engineer. I worked for VTrans for about twelve years and while there I moved from the Engineering/Technical

Services to the Planning and Policy Division within the agency. While at Policy and Planning I managed numerous statewide modal and policy plans (Highways, Public Transit, Freight, Corridor Management, and others). In 2007 I got a job as a Senior Transportation Planner & Engineer with the Chittenden County Metropolitan Planning Organization (CCMPO) to manage regional transportation corridor studies and local scoping studies among other projects. The CCMPO merged with the CCRPC in 2011. In 2015, the CCRPC created two



new manager positions, one in transportation (managing the MPO program) and the other in planning (land use, energy, etc.). I applied and was hired as the CCRPC Transportation Manager in the spring of 2015.

• What do you enjoy the most about your job?

. This is a fulfilling and interesting job. I like helping communities in Chittenden County address transportation issues and plan for the future to achieve their goals and realize their vision. This job requires collaboration with diverse groups and partners and I really enjoy working with them to address issues, develop solutions and plan for the future of our county. There is also a big variety in the projects we do and initiatives we are engaged in as every community is unique with very diverse transportation needs. I work and interact with different people across diverse fields such as professional planners and engineers at cities and

towns in the county; volunteer committee and Board members at the CCRPC as well as at various municipal commissions/ committees; local and state elected officials; and staff from state and federal agencies such as VTrans and the Federal Highway Administration (FHWA).

• What are some of the challenges that you have faced in this work and how did you overcome them?

 When I was first hired as a traffic engineer at VTrans, I knew very little about the field as traffic engineering was not the focus of my education. I needed to get up to speed fast so I could perform my duties that included supervising a number of technicians that gathered and analyzed a variety of traffic data and also conducted traffic studies in support of VTrans projects. As a supervisor, I needed to learn fast so that I could provide guidance and gain the trust of my staff. I spent a fair amount of time studying at home after work and pursuing

various trainings, which was time consuming and challenging but absolutely essential.

Some of the toughest challenges that I face at the CCRPC are meetings where stakeholders and/or members of the public who are upset or outright hostile for various reasons. These could include objections to a specific transportation facility planned in their community, usually close to their homes and businesses, or objecting to the overall community transportation vision. In my experience, the only way to overcome this specific challenge is to be prepared, know your subject well, listen respectfully to all comments, try not to judge, and base your answers on objective information and data to the degree possible.

• What are some of • your own personal characteristics and values that make you a good fit for this type of work?

 Work ethic; ability • to collaborate with colleagues and interested parties as well as communicate with the general public; attention to detail; and capacity to embrace new challenges and opportunities along the way. I am in the public sector because I want to help my communities and my current job provides me the opportunity to work with partners to effect positive change in terms of livability and quality of life for residents and visitors in our county &









Overview of Position as it Relates to Transportation

Urban and regional planners develop land use plans and programs in order to create communities, accommodate population growth, and to revitalize existing structures (ie: 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: <u>www.environmentalscience.org/career/transportation-planner</u>

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."

—College Board

Transportation Program Manager

Transportation Program
Management is a position
within the broader field of
Urban and Regional Planning.
This job includes duties
such as: assisting executive
director in managing
and implementing the
commission's transportation
program and congruent
activities. This also includes
serving as a program leader
and supervising other
transportation team members.

Managers work with municipalities, state and federal agencies, and other organizations to address local & regional transportation.

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 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. This is necessary for the purposes of decision-making around planning options and choosing an appropriate action plans regarding community development projects. 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

GLOSSARY

- Corridor a linear area that is defined by one or more modes of transportation like highways, railroads, or public transit which share a common course.
- MPO metropolitan planning organization.
- Multimodal utilizing two or more modes of movement of goods or people (e.g. vehicle, rail, bicycle).
- TDM transportation demand management.

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.

Sources: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Urban and Regional Planners. U.S. Department of Labor CareerOneStop: Transportation Planners Occupation Profile

Type of Planning Projects Carried Out at the CCRPC

CORRIDORS & CIRCULATION

Corridor & Circulation Studies review and analyze current and future corridor conditions. The CCRPC conducts Circulation Studies which address critical congestion and safety needs for all modes along a segment of a regional corridor. Visit the Corridor & Circulation Studies page for examples of projects and more information.

ITS

Intelligent Transportation Systems (ITS) is the application of technology to improve the operations of our transportation system. Visit the ITS page for more information.

SCOPING & PROJECT DEVELOPMENT

Project "Scoping" is the phase in the Project Development process that moves a recognized problem from an idea through the development of alternatives and environmental screening. Visit the Scoping & Project Development page for examples of projects and studies.







Key Skills

- ► Reading Comprehension Reading workrelated 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 guestions.
- ▶
- ▶ 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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