

# What is Our Responsibility for the Transportation Future?

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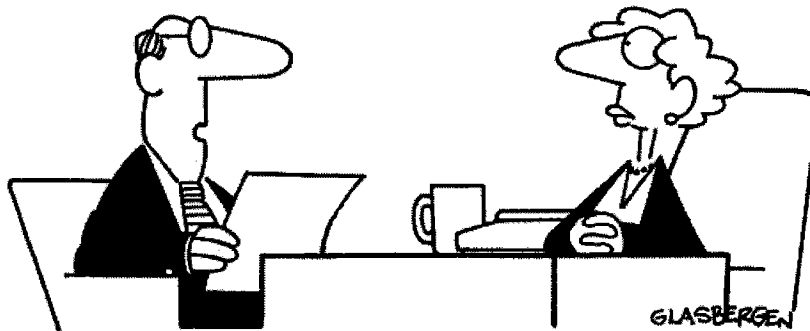
## Introduction

How will each one of us take responsibility to **prepare** for the transportation future? How will we **evaluate** a future 50 years from now that includes the effects of global climate change on our transportation system? What **innovative** thinking in transportation is needed from engineers and planners to **sustain** the future for both our communities and transportation systems? . . . Ultimately, how can we as Transportation Engineers and Planners help chart a better future for transportation?

“My team has created a very innovative solution, but we’re still looking for a problem to go with it.” (Glasbergen) (footnote 1)

Einstein said, “**We can’t solve problems by using the same kind of thinking we used when we created them.**” Our greatest strength as engineers and planners may not be creating solutions but rather the ability to help define the problem so clearly that the solution will simply emerge. We need to shift our thinking to defining the most important questions that we need to work on together.

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**“My team is having trouble thinking outside the box. We can’t agree on the size of the box, what materials the box should be constructed from, a reasonable budget for the box, or our first choice of box vendors.”**

## A Leadership Example: City of Redmond Transportation Master Plan

At the City of Redmond, staff initiated a process to create our first comprehensive Transportation Master Plan (TMP) in 2001<sup>(footnote 2)</sup>. After an important intermediate step to focus on our downtown transportation plan we later launched into a full city-wide

transportation master plan process that built on the earlier work. It was approved by City Council in November of 2005 and has become our guiding light for transportation decision making in Redmond. Prior to approval of the TMP we had a transportation facilities plan that extended 20 years into the future, a Six-Year Transportation Improvement Program (TIP), a sidewalk plan, a bike plan, a TDM program, and many other programs and policies. We did not have an integrated multi-modal transportation plan that also tied directly into our land use vision. The Redmond TMP provides policy guidance, ties directly with our land use plan, integrates goals and plans for all the major modes of travel, contains a measurement and evaluation system updated annually, created a specific 3-year action plan of the most important elements, and by policy will be updated every five years. In looking back on our process, the plan emerged from three important questions:

1. **What transportation system will best support and sustain our land use vision?**
2. **How do we create “real choices” for alternative travel to the automobile?**
3. **How do we create a “living transportation plan” that will take us into our preferred future?**

**What transportation system will best support and sustain our land use vision? . . .**

This question was the most important one for us to answer. A diverse staff of planners, engineers, and consultants went to work on defining what this question really means. We decided that the needs of the people who live and work the land use vision was most important. This meant that transportation has to serve the needs of connecting people together rather than just moving vehicles. This was an important distinction that set the tone for the document and the direction it would take us. The values that helped shape our plan became: supporting our land use vision, connections, two urban centers, and supporting concurrency. Concurrency (building transportation infrastructure concurrent with land use) transformed into a “plan-based” concurrency that builds infrastructure to serve all modes of travel that in turn supports the desired land use. Concurrency will be evaluated in person trips rather than vehicle trips.

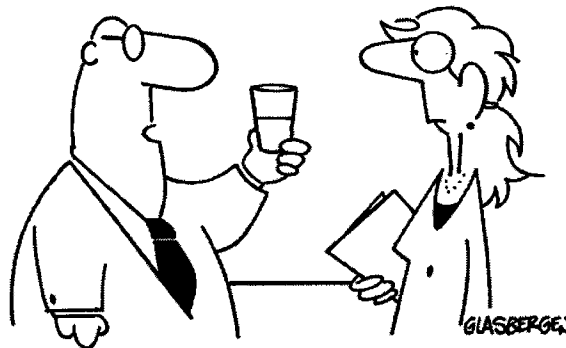
**How do we create “real choices” for alternative travel to the automobile?** The vision is simple: build it and they will come! Build out the pedestrian and bicycle facilities, offer a robust transit system, build more two-lane connections, encourage dense development in the centers, and encourage managed travel. The policies, plan, and list of projects in this first Transportation Master Plan is a shift away from the past emphasis on building wider roads and larger intersections. The process to create the plan took us as far as we were willing to stretch ourselves in a different direction. Now we will measure progress in preparation for the next update of the plan.

**How do we create a “living transportation plan” that will take us into our preferred future?** Is this TMP perfect? No. Is it where we want to be or need to be? No, but it is where we are at. Really, the document is a work in progress that will continue to get clearer and nudge us in the direction we say we want to move toward. In the next update of the plan we will “dream” bigger than we have before. We will push ourselves into

goals that are not easily attained by learning from our past successes and failures. We will create an action plan to move us toward that “dream” and measure how well we do. If we get off course we will make course corrections. We will be about something even bigger and more sustainable than the direction we are headed in today.

### **How can we as Transportation Engineers and Planners help chart a better future for transportation?**

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**“A pessimist would say the glass is half empty.  
An optimist would say something naive and annoying.”**

**The engineer would say that the glass was not designed correctly . . .**

So, how do we get out of our cynicism that the future for transportation will just get worse or our idealism that everything will turn out fine, and go to work on creating a better future for transportation? Well, if we can imagine the future we desire to have together then the possibility of creating it exists. And, if we can name the problems that get in the way of that future we can create solutions that will bring us closer to that future. First we need to imagine the possibilities and dream together. Then we need to shape that dream into a clear vision that can become our future.

A few of us are called to lead large organizations or groups of people. All of us have opportunities to influence and make a difference on teams, projects, and elsewhere in our lives. Whether you are a CEO of a 200 person engineering firm or leading a two-person team working on a specific project task, here are five principles of leadership <sup>(footnote 3)</sup> that apply to all the areas in our lives where we are called to be leaders:

- **Model the Way** – Know your own values and what is most important. Build credibility by aligning your words with your actions (integrity). Do what you say you are going to do (deliver). Modeling is the most important quality of an authentic leader and anyone who desires to make a

difference in the world . . . Don't take yourself too seriously but be serious about what is most important.

- **Inspire a Shared Vision** – Envision and articulate possibilities that enlist others into a shared vision by appealing to shared aspirations. In most cases this will not be your personal vision that you create. It will be a vision that you can align around and contribute into. You may have an opportunity to shape it in some way and may not agree with every element of it. Still, what is most important is that it can be envisioned and it is shared by enough people whom together have the possibility of creating it into reality. . . Be willing to “dream.”
- **Challenge the Process** – Intervene when things are not working or veering off course by looking to both what has worked well and whatever innovations are needed to change, grow, and develop. Our challenges need to come from accurate information rather than opinion or cynicism. Expect opposition when you are committed to something. Healthy challenging flows from intensive listening that allows us to discover what is not working and how to communicate in a way others can hear. . . Keep showing up, listening, and responding.
- **Enable Others to Act** – You cannot do anything really big all on your own: foster collaboration and teamwork by sharing recognition, power, and decision making. Find small ways that you can invite someone to make a contribution. . . Contribute what you have to offer on behalf of others.
- **Encourage the Heart** – Recognize individual contributions by showing appreciation for individual excellence. People need to be invited to participate. Acknowledging someone's strengths and offering encouragement for specific actions are powerful tools for creating a better future. . . Be in gratitude for life.

There are really only three questions we need to ask about how each one of us can influence the future of transportation:

1. **What will I do personally to help create a better transportation future?**
2. **What effort larger than myself will I commit to on behalf of our transportation future?**
3. **How “big” am I willing to dream when it comes to the transportation future?**

The first question involves me and my choices for creating a better transportation future. It requires naming what you believe is important and what you will do to make a difference in that area. So if a sustainable transportation future is important to you and includes a robust multi-modal system, then what are you going to do to support that? It could be riding your bike to work twice a week, taking transit three times a week,

forming a carpool, moving closer to work, asking your employer to subsidize bus passes, or a host of other choices that by your actions encourage “less car.” The most important leadership principle for making a difference in the world is to “Model the Way.” Gandhi put it very eloquently: **“Be the change you want to see in the world.”**

The second question is about us and what we will do together to create a better transportation future. This needs to be about more than just our work. It needs to be about our passion for what we believe in when it comes to the transportation future. This is a much harder question because it involves other people. The good news is that there is no single right answer, solution, or direction. What defines the question also defines the answer: what will we do together? We need to choose something that we can be about together with others who share the same dream and passion. We need to be part of something bigger than ourselves. . . We do not need to do everything, but we do need to do something. . . There needs to be leadership, followers, and people who will get out of the way. We need to be all three at different times, but as the cartoon suggests we need to choose wisely . . .

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**“Either lead, follow, or get out of the way.  
But never try to do all three at the same time!”**

The third question is the hardest and the most important for our future. “How big am I willing to dream?” Dreams are visions of how you would like your world to be. They are long shots and will not often be achieved in a lifetime. They will push you beyond where you could go without them. Dreams need to be big enough that you can see only a 20% chance of reaching it from where you are today. Dreams become reality by setting more specific goals that can help stretch you toward the dream. Still, these goals are not easy and may be reached only half the time. So to complete the goals that help realize the dream we need tasks that we can get done 100% of the time (footnote 4). We live in the day to day tasks or “todos,” but what is more important is our “higher purpose” of a dream and the goals that stretch us toward inspiration and greater clarity. As individuals, we

need our own dreams and to be part of dreams that are much bigger than ourself. What we imagine can happen . . . When Star Trek first came out in the late 1960's they used a communicator that could be flipped open like the cell phones we use today. Back then it was made of balsa wood because they didn't know how to make a cell phone. The creators of Star Trek envisioned a future where people could communicate with a small electronic device. Because they were able to imagine a different future, that balsa wood communicator became a cell phone 30 years later. . . Time to think outside the box!

### **Where do we go next?**

So, how can we as Transportation Engineers and Planners help chart a better future for transportation? Risk dreaming "big" dreams. . . The future can be whatever we want it to be and it is shaped by our values, questions, and dreams. Here are just a few possible transportation dreams:

- Intelligent vehicles linked to an intelligent street network. Plug in your destination, let your alternative fuel vehicle hook up with a "train" of other vehicles, and read a book until you arrive at your destination.
- Value pricing of all trip making to manage supply and demand (like paying the power utility for electricity).
- Centers connected with a transit system that outperforms the individual vehicle in terms of cost-effectiveness, reliability, environmental responsibility, and convenience.
- A completely new way to connect people – one that is sustainable, fast, reliable, environmentally responsible, and cost-effective . . .
- Your "dream" or "vision" here . . .

### **Footnotes:**

1. All images from Glasbergen are used with permission
2. Redmond Transportation Master Plan (TMP) web-site  
<http://www.redmond.gov/connectingredmond/policiesplans/tmpprojectdocs.asp>
3. "Leadership Challenge" by Kouzes and Posner
4. Seminar by David Rabiner: "Sailing on the Winds of Change."

### **Other Resources:**

- a. "Now Discover Your Strengths" by Buckingham and Clifton
- b. "Good to Great" by Jim Collins
- c. "Seven Habits of Highly Effective People" by Stephen Covey
- d. "The Art of Happiness" by the Dalai Lama

**Biography:** Don Cairns (P.E. and P.T.O.E.) is the Transportation Services Manager for the City of Redmond, Washington. Don is a fellow of ITE and has worked for the City for 24 years. He lives two miles from work and often uses transit or carools to work. On occasion, he walks. You can contact Don at 425-556-2834 or [dcairns@redmond.gov](mailto:dcairns@redmond.gov).

Don served as the City's official Traffic Engineer for nearly 20 years. He has managed development review, maintenance and operations, and construction services for transportation. He currently manages a division responsible for transportation planning, programming of funds, preliminary design, and transportation studies. Redmond has seen large employment growth and moderate housing growth during the last 20 years. The largest employer is Microsoft which is headquartered in Redmond with 25, 000 employees.