



Public Engagement Final Report

reported by the
**Citizens League &
Students Speak Out**
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Executive Summary

From March through November, 2011, the Citizens League worked in partnership with the Minnesota Department of Transportation (MnDOT) and the University of Minnesota on MnDOT's *Minnesota GO* initiative—a 50-year, transportation visioning process.

The Citizens League used its expertise and experience, as well as its Students Speak Out project, to engage Minnesotans of all ages, from throughout the state, in a discussion about the future of transportation.

Minnesotans provided thoughtful and constructive comments that helped to shape and refine the final Minnesota GO vision, prepared by MnDOT, which will help to guide transportation decisions for generations to come.

Project Summary and Activities

The Citizens League contracted through the University of Minnesota to work with MnDOT on Phase I of its *Minnesota GO* initiative from March through November, 2011. The goal of the work was to craft a long-range (50-year) vision for all types of transportation in the state. This vision aspires to better align the transportation system with what Minnesotans expect for their quality of life, economy and natural environment. The Citizens League's role was to act as an advisor and consultant during the public engagement planning process, and to then lead the implementation of public engagement activities.

The Citizens League engaged both a general audience of Minnesotans as well as teens through its Student Speak Out project. Both initiatives utilized in-person workshops as well as online activities.

Outreach aimed at the general public included statewide public workshops and interactive online activities. The statewide workshops were held in nine locations throughout May and June. A virtual workshop was held online via Adobe Connect. Outreach through Students Speak out targeted a diverse audience of Minnesota teens both online and in-person.

Public Workshops

For its general audience outreach, the Citizens League worked with MnDOT and the University of Minnesota to conduct in-person workshops throughout the state. (Further details on locations and participation can be found in the following section, “workshop participants”.)

The workshops used a scenario exercise to provide participants three very different versions of the future. Participants worked in small groups through one scenario per group, as well as through a set of questions and exercises common between scenarios. Facilitators provided text of a scenario, a scale rating various implications of that future, and a vignette with a map and pictures. The three scenarios can be summarized as follows. (Note: the scenarios did not attempt to predict the future, but rather, highlight the great differences between possible paths.)

Uffda

In a world rocked by massive oil shortages, a diaspora from rural areas has resulted in a boom in the urban areas. Infrastructure and resources are unable to support this growth, resulting in unprecedented governmental regulation and rationing. While the road was long and hard, by 2061 Minnesota's economy is beginning to recover, in large part due to growth in innovative technologies, like wind energy, by Minnesota business.

You Betcha

Due to unpredictability in markets as a result of major and frequent natural disasters worldwide, Minnesota adopts an all-things-local approach and the vast majority of goods are produced and consumed within 350 miles. Technological innovations – like videoconferencing and telecommuting – make geographic location less important. Urban areas are bulldozed, small rural communities flourish, and Minnesotans live simply with much less “stuff”.

Lake Wobegon

True to its name, Minnesota is a land of all that is good and perfect in the world. The economy thrives, public education is among the best in world and businesses are numerous and successful. Residents live long, healthful lives and both urban and rural environments thrive.

After spending time with the provided materials, participants provided written answers to a series of questions about what they imagined their lives would be like in the given scenario. Facilitators then engaged the small group in discussion. Detailed notes of these conversations were taken either by the facilitator, a note taker, or both.

Participants then engaged in large group discussion where all scenarios were summarized. Small groups each reported key findings, and all participants used individual response devices to vote instantly on a series of questions. Answers were projected on a screen and results were used to guide and foster discussion. Participants' answers to the common set of questions between scenarios demonstrated the differences and similarities in transportation needs depending on the future.

Students Speak Out activities followed a similar format, but asked teens generally to think about what they thought life would be like in 2061 rather than using a scenario exercise. Students Speak Out utilized written responses, instant voting / polling and discussion to gather feedback and information.

Participant views were collected in 3 ways:

**Written
Responses**

- For general audience workshops, participants recorded thoughts to several short-answer questions on a provided handout, as well as identified high and low priorities for transportation from a given list.
- For *Students Speak Out* the participants were given a handout with questions that helped them envision life in 2061, and to think through potential impacts on transportation networks.

**Instant
Voting /
Polling**

- Instant voting / polling was conducted throughout the workshops via individual response devices. Participants were asked their thoughts on a series of questions and voted with a handheld keypad (individual response devices). The results were then projected instantaneously on a screen to help foster large-group discussion.

Discussion

- Participants in the general audience workshops first explored and discussed their given scenario in small groups, guided by a MnDOT or Citizens League facilitator.
- Large-group discussions in all of the workshops provided the opportunity to dive into potential futures and explore the differences and commonalities between transportation needs and priorities in different futures.

Workshop Participants

Attendance at the in-person public workshops was varied.

General Workshop Participants	
22	Saint Cloud
8	Fergus Falls
11	Bemidji
18	Duluth
46	Saint Paul
39	Mankato
24	Wilmar
40	Rochester
25	Mall of America (Bloomington)
3	Virtual / Online
236	TOTAL

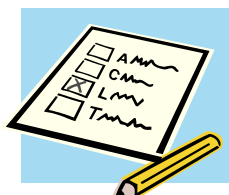
Students Speak Out Participants		
6	Century College, White Bear Lake	<i>first year students in a public policy course</i>
10	Parkview Center School, Roseville	<i>Minnesota Future Problem Solvers group</i>
11	High School for the Recording Arts, Saint Paul	
2	Wasburn Public Library, Minneapolis	
12	Wilder Foundation	
41¹	TOTAL	

¹ Note that this total includes additional participants who were accidentally omitted during initial workshop reporting.

Online Activities

Online activities were conducted on the Citizens League online engagement platform, CitiZing (www.citizing.org). The activities were interactive and varied with aim to reach a wide audience. A host of tools were used to engage participants.

Surveys



Comments & Short Answer Questions

Ratings



The activities included:

- Transportation trivia (surveys)
- Feedback on expert interview videos (survey, short answer)
- Envision what the future holds (survey, comments)
- Advisory group findings feedback (survey, comments)
- Scenario exercise (survey, comment)
- Feedback on thematic findings to date (ratings, comments)
- Feedback on the draft vision (comments)

All the activities on CitiZing were designed to create a low-barrier of entry for participants, while encouraging free-flowing feedback and ideas.

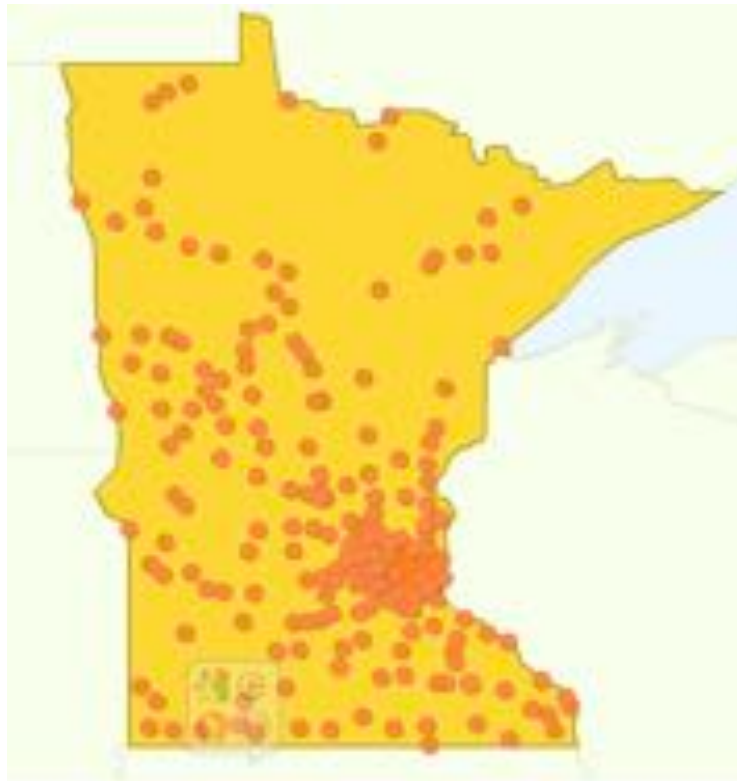
Online Participation

Online participation can be measured in several ways. The general project had 235 “joined-the-project” participants, Students Speak Out had 48; and together hosted many, many more visitors from throughout the state. The following website statistics chronicle participation in both the traditional and Students Speak Out CitiZing project sites from inception through November 12, after the release of the final vision.

11,306 visits
6,249 unique visitors
45,905 page views
4.06 pages/visit
4:53 average time on site
54.13% new visits

Participant Locations

based on IP address



In addition to visiting and/or joining, many Minnesotans participated in activities directly. Students Speak Out participants submitted 224 comments and took 49 surveys; participants in the general project submitted 65 comments and took 367 surveys. Additionally, around a half dozen Minnesotans contacted Citizens League staff directly via a general CitiZing email box.

Key Themes: General Public

Throughout the work several key themes emerged. Citizens League representatives synthesized these themes using all public input, both online and in-person. While there was not unanimous agreement, the themes do outline the key broad messages that the vast majority of participants conveyed. These themes were chronicled over the life of the project and presented to MnDOT and associated partners to help guide the vision. (Copies of reports detailing these findings can be found in Appendixes A-E)

1) Focus on innovative mass transportation

With resources growing increasingly scarce and the population aging, participants emphasized the importance of sustainable community design. Communities should contain higher-density housing and retail so that people can walk and/or easily and efficiently access mass transit to go everywhere they need and want to go. In addition to walk-ability and bike-ability, participants emphasized the need for mass transit to increase in efficiency and use. Mass transit was seen as the major way to overcome many of the hurdles coming our way in transportation: high energy prices, gridlocked roads, aging population, and changing community design, to name a few. Workshop participants also favored newer, more innovative types of mass transit that placed a premium on efficiency, ease of use, reliability, speed and predictability.

2) We need a major culture shift to be successful in the future

Participants recognized that things need to change significantly in order to be successful in the future. Climate change will make great impact on Minnesota's environment and resources; traditional energy sources will be unstable or unattainable; the population will be aging; technology will revolutionize how we communicate. In order to rise to, and successfully meet, the demands of the new world we must maximize our limited resources and adopt new ways of thinking. This culture shift includes how we think about transportation.

First, our identity around transportation must change. Cars have been cultural icons for years; if we are to move to a more mass-transit focused system, we must move away from one's identity being tied to transit options like the car.

Second, transportation needs to be more social. This will help our communities grow and prosper while helping us meet or overcome other challenges, like high energy prices or gridlocked roads. As one participant put it, “We could carpool today, but we don’t.”

Third, transportation can help us to achieve other goals, like personal fitness and community- building. Transportation options could be fun and change how we think about getting from point A to point B. For instance, one Duluth participant wanted to use zip lines to get to work, and another participant wanted to have access to giant people movers, like those found at airports.

Finally, we need to learn to live with less “stuff.” As we increasingly value locally produced goods and food, and overcome the struggles of our current economic climate and changing world order, Americans will need to live without as many cheaply-produced goods from overseas. This will require a massive cultural shift.

3) We need big breakthroughs to achieve success; therefore Minnesota should focus on innovation

While participants generally liked options that are new but existing (bullet trains, etc.), they also recognized that we need major breakthroughs to be successful. With the world changing and our need to maximize resources high, participants stressed the need to focus on discovering and promoting innovative solutions to our current and future challenges. We’re a state that prides ourselves in education and other quality of life factors, and innovation is necessary to retain (or reclaim) those same accolades. We don’t have all of the answers now, and innovation is the answer to moving successfully into the future.

Key Themes: Students Speak Out

The online activities and in-person workshops began by asking participants to envision life in 2061. Across the various conversations, a number of common themes emerged. It would be inaccurate to conclude that there was unanimity around these themes; indeed many viewpoints were represented. The appropriate interpretation is that these themes were voiced repeatedly online and in the workshops.

1) Teens are extremely concerned about the environment and the impact our current and future activities will have on the planet. Energy efficiency was of primary concern.

Some findings and comments that support this theme:

- The top transportation value for teens was “alignment with other systems.” Many participants cited “environmental stewardship” as the primary element to this. (See Appendix X, Transportation Values, Page 8, for more details.)
- Workshop participant – “We need energy efficiency within public transportation.”
- Louise E. – “Because gas prices have risen drastically, it is a good opportunity to change transportation systems so they depend on more environmentally friendly fuels/resources.”
- Jesse B. – “... a great way to become more efficient as a state, nation and planet would be to lessen the amount of resources that we put toward transportation and travel.”
- Ann D. – “I also think that towns and communities will become more eco-friendly. I simply don’t see how our civilization can continue if we don’t.”
- Kate G. – “I hope that these changes being to occur now, as we don’t have time to wait 50 years to move away from large vehicles with one person in them for most of the day or busses or trains that only transport to hubs, but are otherwise inaccessible.”
- Teens are optimistic about our transition to alternative energy sources. Sixty-three percent of teens surveyed (n=30) agreed or strongly agreed with the statement that in 2061, “Alternative energies, such as wind and solar, flourish.”

2) Except for the environment and energy, teens are somewhat pessimistic about life in 2061, particularly the future state of our health.

Some findings and comments that support this theme:

- 63% of teens polled (n=30) said that they agreed or strongly agreed that in 2061, “The incidences of obesity, diabetes, and Alzheimer’s reach crisis proportions.”
- Teens agreed or strongly agreed with the more pessimistic statement in five of eight questions about life in 2061. The more pessimistic outlooks were in education (40%), health (63%), the economy (47%), finance (57%), and community (50%.) (See the Appendix for additional detail on this survey.)
- Hannah O. – “You would think with all the breakthroughs in technology and the medical field in general, the life expectancy would be a sure shot to improve, however, until the other problems are fixed, I can’t see it going anywhere but down.”
- Joey L. – “The climate as we know it would no longer exist, because the sheer damage done to the environment in the past 200 years would have critically damaged the weather patterns leaving weather erratic...”

3) Teens place an emphasis on public transportation and consistently cited public transportation as a valuable component of future transportation networks.

Some findings and comments that support this theme:

- Teens frequently mentioned the importance of mass transportation in ensuring both strong communities and strong economies in their scenarios.
- Louise E. – “...public transportation will become much more popular for people commuting to work because this is more environmentally friendly.”
- Joey L. – “Most mass transportation (airplanes, buses, subways, etc.) will have to use alternative energy sources and will likely become the primary means of transportation for people both in the city and far out like to St. Cloud.”
- Hannah O. – “Pushing the use of the public transportation system to help combat climate change will be effective...”
- Workshop participant – “I think mass transportation would be necessary [for a strong economy] to keep prices cheap.”

4) Teens described a future built around close-knit communities in many aspects of future life – including mass transportation – increasing our sense of connectedness.

Some findings and comments that support this theme:

- Many teens felt energy restrictions would require more public transportation and also decrease time spent with technology, which would bring communities together for more “unplugged” social interactions.
- In more “severe” scenarios, many teens described close-knit communities brought together through the sharing of goods and services and a desire to be more self-sustaining communities.
- Workshop participant – “Mass transit and car pooling would allow people to get to know one another...”
- Hannah O. – “A strong mass transportation system would be needed, impressive light rail systems that allow families to connect on weekends and for neighbors to greet each other on the commute home from the office. Children [could] form bonds with the kids they ride the mass transit system with...”
- Nafiso M. – “Gas will increase and the need for public transportation will also. Transportation will unite people.”

5) Teens believe technology will play a big role in 2061, but said electronic or virtual communication cannot replace in person interactions.

Some comments that support this theme:

- Joey L. – “... it feels better to talk to someone in person than over a computer...”
- Hannah O. – “I definitely agree that programs such as Skype will get to be even more stronger, but I don’t see them replacing a real relationship either.”
- Louise E. – “...the idea that people can so easily lose touch with the physical, real world is scary. I think it is imperative that, as new communication tools are invented in the future, we remember that there is so much to be gained from face to face communication. If we were to lose daily, personal interactions with each other, I think we would lose, in a sense, our humanity. We would lose the ability to interact with each other in the real world and therefore lose the ability to understand each other.”

Additional findings from the SSO work can be found in the Final SSO report in Appendix E.

Reports

Copies of all reports by the Citizens League and Students Speak Out have been included in the appendixes of this report. These include:

Appendix A: Visioning Findings (June)

Appendix B: Students Speak Out: Summary of Teen Commentary (March – April,)

Appendix C: Students Speak Out: Updated Summary of Teen Commentary (June)

Appendix D: Charts of live voting from workshops (June– created by MnDOT)

Appendix E: Students Speak Out: Final Report (November)

Appendix F: Citizens League staff/contractors for Minnesota GO

Appendix G: Citizens League Minnesota GO budget (estimated)

Appendix A: Visioning Findings



Citizens League **Findings from the Public Workshops & CitiZing** ***Visioning***

Introduction

This report provides an overview of what the Citizens League has learned to date on the Minnesota GO project. It provides high-level themes from the public workshops, and greater detail on the online work at CitiZing.

The Citizens League worked with the University of Minnesota and Mn/DOT to craft public engagement activities asking Minnesotans about their vision for transportation for the next 50 years. The Citizens League took the lead on implementing online activities at CitiZing and the analysis of that work is included here; we also served as the facilitator for the public meetings, whose information is being analyzed and reported on by the University.

Background

The Citizens League was part of the team that conducted 10 meetings throughout the state; 9 in-person and 1 virtual. An introduction was given by local staff, which was followed by a welcome video from Commissioner Sorrel. Mn/DOT staff gave a brief presentation that outlined the purposes and background for the project, and a Citizens League representative walked participants through the process and interactive portions of the evening. Using a scenario-planning exercise, participants explored one of three scenarios in small groups, and reported back findings to the large group using individual voting devices (“clickers”) and discussion.

Using CitiZing, we offered a robust array of activities covering a wide variety of topics. These activities included:

- Transportation trivia (surveys)
- Feedback on expert videos (survey, short answer)
- Envision what the future holds (survey, comments)
- Advisory group findings feedback (survey, comments)
- Scenario exercise (survey, comment)

All the activities on CitiZing were designed to create a low-barrier of entry for participants while still encouraging free-flowing feedback and ideas.

Participants

Attendance in the in-person public workshops was varied.

Workshop #'s

22	<i>St. Cloud</i>
8	<i>Fergus Falls</i>
11	<i>Bemidji</i>
18	<i>Duluth</i>
46	<i>St. Paul</i>
39	<i>Mankato</i>
24	<i>Willmar</i>
40	<i>Rochester</i>
25	<i>MOA</i>

233 Total

Online participation can be measured in several ways. The project has 201 “joined” project participants, and many, many more visitors from throughout the state. Site analytics (general and SSO):

6,922 visits

3,490 unique visitors

31,379 pageviews

4.5 pages/visit

5:53 average time on site

49% new visits



Overall themes and findings: Workshops

The University of Minnesota is the lead on analyzing what was heard at the workshops. However, a high-level account of some general themes that emerged is included here.

1) Focus on innovative mass transportation

Participants emphasized the need for mass transit to increase in efficiency and use. Mass transit was seen as the major way to overcome many of the barriers coming our way in transportation: high energy prices, gridlocked roads, aging population, and changing community design to name a few.

Workshop participants favored newer, more innovative types of mass transit that placed a premium on efficiency, ease of use, reliability, speed and predictability. Options like bullet trains, light rail, personal rapid transit, were desired, along with out-of-the-box ideas like pneumatic and sophisticated beast-of-burden options. Walking, biking and other forms of self-powered transit were also favored by participants; modes that could be used to connect users with mass transit and their destinations.

2) We need a major culture shift to be successful in the future

Participants recognized that things need to change significantly in order to be successful in the future. Traditional energy sources will be unstable or unattainable; the population will be aging; technology will revolution how we communicate; the climate will be changing. In order to rise to and meet the demands of the new world we must adopt a new way of thinking if we are to be successful. This culture shift includes transportation.

First, our identity around transportation must change. Cars have been culture icons for years; if we are to move to a more mass transit focused system we must move away from one's identity being tied to transit option like the car.

Second, transportation needs to be more social. This will help our communities grow and prosper while helping us meet or overcome other challenges (like high energy prices or gridlocked roads). As one participant put it, "We could carpool today, but we don't."

Third, transportation can help us to achieve other goals, like personal fitness and community-building. Transportation options could be fun and change how we think about getting from point A to point B. For instance, one Duluth participant wanted to use zip lines to get to work, and another participant wanted to have access to giant people movers like are found at airports.

Finally, we need to learn to live with less stuff. As we increasingly value locally produced goods and food, and overcome the struggles of our current economic climate and changing world order, Americans will need to live without as much cheaply-produced goods from overseas. This will require massive a culture shift.

3) We need big breakthroughs to achieve success

While participants generally liked options that are new but existing (bullet trains, etc.), but they also recognized that we need to make some major breakthroughs to be successful. We don't have all of the answers now, and innovation and trying new things will be a necessity for our future.

Overall themes and findings: CitiZing

Drawing from the results of the “this or that” and “future scenarios” surveys, combined with comments and responses from throughout the site, the following themes emerged. These have great crossover with what was heard during the public workshops.

66 “this or that” surveys submitted

30 “future scenarios” surveys submitted

1) The future will look very different than today, particularly in work and education.

Daily life is going to change. The status quo will not hold. Participants noted changes in everything from work to healthcare to America’s decline as a world superpower. Technology will play an increasingly large role, changing how we communicate and live our daily lives: work and play. Participants also noted how great changes will need to be made in other areas, like healthcare, in order to accommodate changing trends and demographics.

Work and learning will be extremely different than today. Participants believe that those who can will telecommute to school and work. And, beyond sheer changes in our communications and physical location, expectations for how work is done will change. They believe that work will move towards ROWE (Results Only Work Environment), and that students will learn and be assessed much more independently than today.

2) Technology is the way of the future

Participants agreed handily that technology is the way of the future. Everyone will have their own, individual electronic device that will be their source for all things communication and information sharing. Workplaces will be replaced by home offices and telecommuting, schools won’t hold daily classes, and for some, social and community life will increasingly take place online (social networking sites, e-libraries, etc.). The Internet will continue to be the driving force, and there are few worries about the integrity and safety of its future.

In addition to communications, technology will permeate other parts of our lives, too, like in transportation. Automated transit options, like self-driving cars and high-tech mass transit, will be and should be how we get around in the future.

3) Need to shift focus to sustainable community design with a focus on mass transit

With resources growing increasingly scarce and the population aging, participants emphasized the importance of sustainable community design. Communities should contain higher-density housing and retail so that people can walk and/or easily and efficiently access mass transit to go everywhere they need and want to go. Walk-ability and bike-ability were major themes throughout CitiZing activities. Participants also noted their increasing desire to adopt a local approach, desiring for more of their goods and food to be produced nearby.

Throughout the CitiZing activities, participants overwhelmingly stated their belief that mass transit must grow to accommodate the changing needs and demands of society and its (energy) resources. Preferences coalesced around existing but new transit options, like light rail and bullet trains. Participants also emphasized the need for mass transit to be accessible, quick and reliable.

4) We must maximize our limited resources.

We have a finite number of resources, so we must be creative and innovative to get the most out of what we have. We should spend only on projects that are likely to make the biggest impact. For instance, with regards to permeable pavement, participants suggested limiting its use only to flood-prone areas, thereby getting the biggest impact for our investment. This investment is not just limited to transportation or modifications of existing infrastructure; for example, also on the issue of flooding, participants believe that we should encourage development outside of flood-prone areas so that we can avoid the many problems related to flooding in the first place.

5) Climate change will make great impacts on Minnesota's environment and resources

Climate change is happening and it will impact Minnesota, particularly in terms of resources and agriculture. Participants believe that the state will begin to trend warmer which will lengthen the growing season and result in more food produced locally. Due to the availability of other resources, like water, participants predict that Minnesota and other water-rich states will experience mass migration as those resources are limited elsewhere.

Given the magnitude of impact that climate change will make on daily life, participants favored pricing products according to their environmental impact.

6) Minnesota should focus on innovation

With the world changing and our need to maximize resources high, participants stressed the need to focus on discovering and promoting innovative solutions to our current and future challenges. We're a state that prides ourselves in education and other quality of life factors, and innovation is necessary to retain (or reclaim) those same accolades. Innovation is the answer to moving successfully into the future.

7) *Minnesota has great potential*

Participants believe that Minnesota has great potential to hold its own in the future. We should prioritize research and development of technologies of the future to both to ensure our self-sustainability, as well as to promote ourselves as a national leader. Some of these industries include biofuels, alternative energy sources, high tech and medical/biomedical.

Expert Videos: Topic-Specific Themes

Using the expert videos produced by the U as a starter, we conducted activities on various themes.

Changing Demographics

23 survey submitted

- Question: How will communities and transportation need to change to accommodate change in demographics?
 - “We must keep our elderly residents independent for as long as possible. That means providing transportation that works for that demographic. Public transit and walking are two of the primary modes used by this group. We will need policies like Complete Streets and much more bus and rail infrastructure to keep our community healthy.”
 - “I think its mostly about transit meeting new types of trips. Right now, transit is focused mostly on commute trips but serving the elderly will be much different types of trips; to the grocery store, doctor, etc.”
 - “No such technology exists yet but the concept would be to allow Privately Owned Vehicles (POV'S) to hook up to a trans system that controls traffic/speed/ flow and reduces impact of individuals driving habits. Similar to a conveyor or train idea.”
 - “We're going to need aging populations living within walking distance of the services they require. Sorry, suburbs.”
 - “Use of communications technology and forms or transit that we may not consider much today will need to expand. A big part of that may be deliveries and drivers, but it will ultimately mean less solo driving.”
 - “Public transportation will also need to be warm- most elderly people simply won't be able to wait at a bus stop during a Minnesota winter. We need underground public transport.”

Health

18 surveys submitted

- Increase and improve trails and paths for bikers and pedestrians. Make them a priority, safe, away from motorized traffic, and easy to get from point A to B (i.e. pedestrian bridges, not having to cross busy roads, etc.)
- More local support for sidewalks – building and maintenance
- Don't overreach. Transportation should focus first on how to best move people and things from point A to point B before trying to achieve other goals, like health.

“Living in a rural area this is a significant issue. I believe the best way to encourage people in rural areas to walk and bike more, and bike commute to their jobs, is by providing paved trails separate from roadways where people feel safe to walk and bike.”

Minimize negative transportation impacts

8 surveys submitted

- Have less areas for run-off
- Natural vegetation in the ditches
- Use less salt or chemicals for snow removal (sited 2X by participants)
- Locate snow piles in areas that will allow for maximum infiltration
- Permeable pavement

“...With a little creative thinking there are a lot of things that can be done remotely and outside of the typical 8-5 workday.”

Workplace environment

8 surveys submitted

- More flexible work environment
- ROWE seems to be the future
- Increased telecommuting
- Workspace will be much different due to technological advances

Climate

No surveys submitted

Environmental impact of shipping

7 surveys submitted

- Depends on type of good, prioritize from perishable to hard goods, like furniture
- Reliability of delivery is more important than speed
- Don't rely so much on imported goods. Buy local.
- Consider more externalities, like environmental impact, to price goods
- Look at the whole picture: how much diesel fuel is used during loading/unloading and transport of ships vs. the same for air travel

"I thought the quality [of my online class] was high, however, it was as much up to me to get a lot out of it as it was the instructor or classroom environment."

Learning

6 surveys submitted

- Concerns for quality with online learning. "It seems difficult to enforce standards and the universities risk becoming diploma factories."
- Should offer a mix of both in-person and online classes: "The real improvement here is at universities like the U that offer online classes in addition to their normal classes."
- More accessible education options, especially for working students

Freight Movement

7 surveys submitted

- Mixed feedback, though focus on rail.
- "I don't believe goods and freight cause enough congestion to justify a large investment into tunnels, skyways, or other complex means to ship goods/freight"
- "Invest in Rail: to move goods and freight but separate from passenger rail facilities. In the short- and mid-term maybe thinking of laws or regulations that might limit the hours of the good/freight movement by commercial trucks on urban transportation systems, such as not being allow during peak hour traffic;"

Economic Competitiveness

7 survey submitted

- Question: Minnesota should invest in _____ to be competitive in the future.
 - Research and development, #1 choice with 6 votes
 - K-12 education, Higher education, Infrastructure all tied for #2 with 2 votes each
- Medical and biomedical, High tech, and food processing industries were the top three “best bets” for state to compete globally
- Good government is crucial for resiliency and innovation, 71%
- 71% said we should be somewhat worried about the rising energy costs impact on our economy, believing we will adapt over time. 29% responded “very worried” – rising energy costs threaten our way of life.
- Question: What will need to change in Minnesota’s economy to adopt to dramatically higher energy costs?
 - “We must have much greater access to public transit. We need robust systems in all of our metro areas and statewide access to transit. People will not be able to afford to drive cars 50 miles to work. We are quickly heading toward a future of \$5-\$10/gallon gas. Electric cars will not save us as our road network is already overbuilt, overburdened and unmaintainable.”
 - “The adjustment is to use alternative, sustainable types of energy instead of relying on the higher cost energies.”
 - “We need to look at other means to transport product around and through the state. If gas prices are at \$10-20 gallon in 25-50 years, we need to modify the trucks that move goods, such as decreasing loads to gain higher miles per gallon, create alternative fuel vehicles or utilize some new technology. We should also build more rail lines and make the existing rail lines much more efficient. Minnesota should also invest in the current system (i.e. I-90, I-94, TH 10, 35W and all the other major roads) to make them smoother/better to help reduce on fuel consumption and make it less of a burden on freight haulers.”

Global Trade

5 surveys submitted

- Reliability of the transportation system is key for economic competitiveness.
- Transportation characteristic most needed?
 - Predictability of travel time, 80%
 - Speed of travel, 20%
 - Safety, 0%
- Economic growth in China and India could become markets for MN products. In what ways?
 - “They will need a lot of food. ”
 - “We could be the next third world country, we'll be making junk for them cheaply.”
 - “I think there are huge potentials for Minnesota to be able to export large quantities of the agriculture product, be it livestock (hogs, chickens, turkeys, etc.), dairy products or corn, sugar beets, oats, etc. to these developing nations as their populations continue to grow and become accustom to western culture. Minnesota is also a leader in the use of alternative energies... Other opportunities include the high quality ore and taconite in northern MN for export and Minnesota's healthcare system.

Fuels

3 surveys submitted

- We will not solve transportation issues with any new wonder fuel
- Conservation, biofuels, and electrification will be key
- Electric or hybrid cars was option favored most 67%; conservation, including more mass transit options was second favored 33% (biofuels, hydrogen, renewable energy, greater automobile efficiency, all 0%)
- “Your electric car will work regardless of how the electricity is generated. I daresay the electrical grid isn't going to become obsolete in the near or medium term future.”

Safety

2 surveys submitted

- To further improve traffic safety, will need to focus more on changing driver behavior
- Personal freedom, balanced with improvements to infrastructure and to vehicles

- Participants were evenly split on the need to cease all distracted driving and finding a balance between safety and personal freedom.
- One participant noted that, “There should be no repeat DUI offenders on the roads. Penalties should escalate substantially after the first offense.”

Governance

1 survey submitted

- Skeptical that a tsunami of cooperation is coming between various levels of government
- Collaboration is easier said than done, forcing people to the table doesn’t mean they’ll work toward a common goal
- Need better alignment of government (work better together) than realignment
- As citizens, feel more comfortable engaging on lower levels of government (neighborhood and city levels) than higher levels (state and federal)
- “If we are to resolve the multitude of problems facing our complex society we will need to make sure the electorate is fully informed about all issues and have a systemic viewpoint and a deeply held commitment towards the common good.”

Robot Cars

4 surveys submitted

- Participants don’t like the idea of fully-automated robot cars; rather, they like the ideas of better safety and being able to get around into old age
 - Given the video of the Google car example, most said that they’d make another choice for commuting, and no one reported being comfortable enough to kick back, eat breakfast or do work while “driving” the car.
- Pollution will change with battery operated robot cars; electricity needed will be generated away from cities, maybe even renewable resources
- Question: What do you hope changes or doesn’t change in transportation?
 - “I hope we don’t use robot cars to encourage longer commutes. I hope we increase safety and reduce accidents and deaths, especially from drunk driving. I hope we find ways to accommodate the likely mix of robot and human controlled cars since so many people will not give up driving.”
 - “Transportation costs as a percentage of net income need to come down but not by more technology, just common sense. Live close to

work or places that have effective mass transit. Walk and bike ride if possible. All of these futuristic plans for robot cars just encourage people not to think and make their transportation needs even more dependent on yet another collection of international mega corporations. Designing more expensive solutions to an already too expensive luxury is not the answer.”

Energy

1 survey submitted

- Climate change: significant de-carbonization means by 80%, not 10-20%: What will it take?
- Technological advancements (ex: renewable energy replacing fossil fuels) and political will to scale existing technology were chosen by participant (higher fuel prices, consumer behavior, and availability of different energy sources were *not* chosen)
- “Benign neglect” of our transportation system, ultimately consumer pays the cost in many ways, including high fuel cost and road congestions

Community Design

1 survey submitted

- Sustainable urban development
 - need to alter land use and transportation patterns
 - need to better accommodate natural systems into our communities
- Accessibility for all ages
- Good design means we can age in place and stay active in community.
- Kids can be physically active, explore
- What age-friendly features will we need in future?
- “Transportation systems will be designed to efficiently allow people to travel to the new mall equivalents where they can access multiple resources with fewer trips. Integration of business, retail, production and transportation. More emphasis on walking and biking (when weather permits) as well as mass transit options.”
- “Urban centers will need clustered resources for aging baby boomers over the next 30 years so that they can walk and take transit to meet their needs. children will need green space, safe streets and access to healthy food and activities. Integration of housing with green space will be important, as will a reduction in employment and income gaps.”

Advisory Group Reactions

Only a few CitiZing participants took part in the Advisory Group exercise to view and respond to the groups' findings. All of the responses are listed here, and in direct quotations.

- I don't disagree with any of these broad themes. I want to add specific suggestions regarding bicycling as one of those modal options. There is a perception that bicycling is only relevant in urban settings where things are very close, whereas I know many cyclists who are using their bicycles for daily commutes of 10 miles (each way) and more. Those distances mean cycling is relevant in all communities throughout the state. Unfortunately, investments in cycling infrastructure (to make it safer and culturally "normal") have not been made evenly throughout Minnesota.
- Cycling as a practical transportation mode is also an incredibly wise (cost-effective) way to make transportation investments. The infrastructure requires limited rights of way, is inexpensive to install per mile, and can get very heavy use when installed in ways that build connections between desirable destinations and built properly.
- Cycling also gets at most of the other themes identified above.
- Thank you for the video series. Some very interesting presentations.

What would it take for every community in Minnesota to be a safe place for people to grow up, go to school, work, own and run a business, and retire in 2037?

- Well integrated, multi-modal transportation system for automobiles, buses, light rail, regional rail and air ports. Full life cycle housing so people can move into age appropriate housing in the community without having to leave the community. A well balanced economic base of manufacturing, high tech businesses, retail, educational institutions and government employers to minimize the worst effects of economic recessions. A vibrant arts and recreational environment in the community including parks, theaters, sports venues, etc.
- Transit systems that provide equal share for all modes of transportation. And Development that provides a good mix allowing for business and residential to be close in proximity with good access to mass transit for regional destinations. Unrelated I would like to go hang gliding.

What would it take for everyone to have access to the resources and amenities they need to have a high quality of life in 2043?

- Don't steal, show up on time and keep yourself clean. And work hard.

What does it take to ensure that Minnesota is a healthy place to live, work, and play?

- A variety of open space options from developed parks like soccer fields, to natural areas that allow for peace and quiet. Employers who are accountable for their employees well being. And a food system that is sustainable and has proper regulations to prevent contamination.

What would it take to maintain and enhance Minnesota's natural environment through 2049 and beyond?

- Don't let private special interests be the ones dictating what the environmental regulations will be. Educate people on what they can do to improve the environment.

What would it take for Minnesota's future economic prosperity to be broadly shared across workplaces, businesses and schools by 2058?

- Provide incentives for small businesses that are actively engaged in issues in their communities. Also policies that encourage small businesses to start and grow in the state. Larger corporate companies are great but provide less distribution of prosperity within MN

What would it take for Minnesota to maintain and sharpen our competitive edge?

- Protect our environment which is the greatest quality of life asset we have in this state. Invest in education and encourage graduates to stay in state. Invest in mass transit, which helps lower the cost of living therefore reducing the comparative wage that MN businesses would need to pay. ND, SD, WI, and IA can have all the tax incentives they want they are god awful boring places relative to MN.

Appendix B: Students Speak Out: Summary of Teen Commentary (March – April)

Students Speak Out: Summary of Teen Commentary March 30 – April 17, 2011

Students Speak Out Minnesota GO! asked teens to broadly imagine what their life might look like in 2061. Six key topic areas have emerged in teens' responses to date:

1. Transportation
2. Population growth
3. The role and impact of technology/internet
4. School/work
5. Climate change
6. Development

1. Transportation

Teens envision great change in the way we travel - from restrictions on car use to more purposeful use of transportation. They spoke of the development and incorporation of smart technology into vehicles and the elimination of gas-powered engines.

Some comments related to this finding:

- Louise E. – “I think banning traditional emission cars in cities where there is easy access to public transportation would be a great way to reduce greenhouse gases. This could easily be implemented in cities with extensive public transportation systems such as the subway systems in New York, Boston, etc. If St. Paul/Minneapolis were to consider this, our public transportation system would probably have to be improved. However, work on the light rail system seems to be progressing and it does not seem implausible that in fifty years we could be living in a city that is car-free.”
- Kate G. – “I think that people will be more purposeful about traveling, and do so when there is a need to meet with others, but not just for “seat time” either in an office or at a school.”
- Kate G. – “Perhaps... people will have different means of efficient transportation available to them that is more aligned with the purpose, for example, independent transportation options for people younger than 16. I hope that these changes being to occur now, as we don't have time to wait 50 years to move away from large vehicles with one person in them for most of the day or busses or trains that only transport to hubs, but are otherwise inaccessible.”

- Louise E. – “...public transportation will become much more popular for people commuting to work because this is more environmentally friendly. Also in cities like London, permits must be bought in order to drive into the city because of limited space for driving and parking cars. Cars will also become more energy efficient and environmentally friendly. Everyone will have hybrid cars or even cars powered by electricity or water.”
- Brady S. – “Transportation will probably be different too. More electric cars, light rails, freeways, and possibly electric airplanes. Oil will probably be scarce or used up, and we will rely on wind, solar, geothermal, and hydroelectric energy.”
- Joey L. – “...traditional cars will probably be out of function, replaced by some sort of smart transportation. Vehicles of the future will be able to do anything ordered. So, basically, you'd talk into a microphone and the car/plane/segway would automatically go where you needed it to go. Most mass transportation (airplanes, buses, subways, etc.) will have to use alternative energy sources and will likely become the primary means of transportation for people both in the city and far out like to St. Cloud.”
- Jesse B. – “... a great way to become more efficient as a state, nation and planet would be to lessen the amount of resources that we put toward transportation and travel. While I am not suggesting that we altogether stop traveling and shipping goods, a lot of energy could be saved by cutting down on transportation... cutting back would also reduce the fossil fuels emitted.”

2. Population growth

Teens envision a future where people live longer lives. While there was disagreement over the extent of population growth (some thought it would explode, others felt it would level off), teens discussed the repercussions of population growth, such as resource allocation, overcrowding and government regulation.

Some comments related to this finding:

- Brady S. – “There will be many medical advances, hopefully a cure for cancer, diabetes, and the common cold. People will live much longer, probably well over 100.”
- Louise E. “The human population has already exceed its carrying capacity ... usually when a population does this the population levels off or decreases because there are no longer enough resources to support the population. Do you think the human population is an exception to this rule or will the population decrease?”
- Louise E. – “... the average life span has been rising. This would likely lead to overpopulation, causing numerous problems such as more pollution, cramped living conditions and lack of resources for everyone to live at a

high standard of living. This poses questions such as: 'How do we regulate pollution? How should resources be distributed?' "

- Joey L. "When the immigrants were coming over during the Industrial Revolution, they were crowded into small areas with insufficient waste. It'll probably happen again, as conditions get worse."

3. The role and impact of technology/internet

Teens believe technology will play a big role in 2061. A big area of discussion involved the impact technology might have on how we relate to each other, particularly a concern over virtual communication replacing "in person" interactions. Teens said they value technology that improves their life; they found it strange and "weird" to think about how the use of emerging technology that hasn't been well-defined (like avatars).

Some comments related to this finding:

- Ann D. – "I think people will notice a greater separation between income classes. People in poverty will find themselves greater and greater behind as the new unaffordable technology comes out, and keeping their current appliances running becomes more expensive."
- Joey L. – "... it feels better to talk to someone in person than over a computer..."
- Louise E. – "...the idea that people can so easily lose touch with the physical, real work is scary. I think it is imperative that, as new communication tools are invented in the future, we remember that there is so much to be gained from face to face communication. If we were to lose daily, personal interactions with each other, I think we would lose, in a sense our humanity. We would lose the ability to interact with each other in the real world and therefore lose the ability to understand each other."
- Hannah O. – "I definitely agree that programs such as Skype will get to be even more stronger, but I don't see them replacing a real relationship either."
- Joey L. – "[In 2060, I envision], face to face social interactions probably will have fallen in importance. Connecting with people becomes less important when surrounded by endless distractions of things to do and see without leaving your home. However, we people need each other regardless of the tech level."

4. School & work

Teens said schools will move away from today's traditional model of physical buildings and classroom lectures, to online spaces and experiential learning. School and work schedules will become more flexible.

Some comments related to this finding:

- Wyatt J. – “I think that ... [we] will be working in ways that are flexible when it comes to time and place. Advances in technology may allow us to use computers and communication devices to do almost any job remotely. Working from really anywhere at anytime will be the norm. That could completely change the nature of our cities and homes as we become less ‘settled’ or tied to one place.”
- Hannah O. – “I really want to see a push in education too, and I don’t just mean laptops in schools. I mean, experiential learning – sending kids out there to figure out the world, because I think the strongest education systems are those that get the kid out of the classroom and out of the lecture halls.”
- Joey L. – “My grandchildren won’t be learning at schools because most learning will be done via computer.”
- “And if I don’t see a push in education I swear I’ll go crazy!”
- Liz F. – “My grandchildren are being education through online courses and robots teaching us instead of hiring teachers, because the school budget problem can’t be solved yet.”

5. Climate change

Nearly all participants said climate change will impact life in 2061. However, students are split on the degree to which it will impact daily life. Some said the changes in the next fifty years will be drastic (i.e., contributing to WWII), while others said the impact would be smaller in scale (i.e., wet areas wetter, dry areas drier).

Some comments related to this finding:

- Daniel B. – “It is the year of 2061 and the world is gradually growing back from world war three. The war started when our governments couldn’t decide whether or not to go green ... People [will be] constructing water turbines and windmills all around me.”
- Wyatt J. – “I could imagine a future where we will be able to predict with more accuracy how the changing climate will affect weather patterns like extreme temperature and precipitation swings, or catastrophic events like hurricanes and earthquakes ... People will be able to migrate or relocate temporarily to avoid disaster or simply to be more comfortable.”
- Nafiso M. – “... if Minnesota’s climate changes, the economy will change.”
- Joey L. – “The climate as we know it would no longer really exist, because the sheer damage done to the environment in the past 200 years would have critically damaged the weather patterns leaving weather erratic and basically unpredictable.”

- Brady S. – “The climate will have changed. I'm assuming the temperature will be the main change. Most of the world will be warmer, which will cause more thunderstorms and severe weather.”

6. Development

Teens said development patterns will change because of population growth and climate change. They said living sustainably, preserving “natural beauty” and agricultural land should be valued in development decisions.

Some comments related to this finding:

- Louise E. – “We must work to preserve natural beauty. Already there are so few places where we can escape from noisy traffic, perfectly manicured lawns and polluting factories. As we work to preserve natural beauty we must also remember that there is value in preserving historically significant people, places and objects. Both nature and history are equally important and should both be saved for future generations.”
- Hannah O. – “I see a major shift in architecture... to be more “green” and eco-friendly... becoming “one with nature” while maintaining the beauty and preserving they ecosystem and causing as little harm as possible... living more sustainably.”
- Ann D. – “The population ... is estimated to grow to 9 billion [in 2050]. This means compact living.”
- Brady S. – “The world's population will be much higher, and we will run out of room for farming and developing. Taller buildings will be built even in small towns, because we will need as much space for agriculture as possible.”

Other comments to consider:

On growing local economies – “The way to reduce transport would be to focus on more local economies and attempt to make more of a shift from macro-economies to micro-economies. If instead of the strawberry you eat coming from a plantation in Georgia... that strawberry was grown on a local farm and brought in by the farmer just a short distance... than that strawberry would be fresher and have taken less energy/fossil fuel to get it there.” (Jesse B.)

On meeting the needs of the elderly: “Much technology is not set up well for the needs of the elderly. [We need] simpler technological products that meet the needs of the elderly.” (Louise E.)

Appendix C: Students Speak Out: Updated Summary of Teen Commentary

Students Speak Out: Summary of Teen Commentary April 17– May 5

Since the first briefing document, teens across the state have continued to envision life in 2061. A few additional findings:

Teens think online classes will become more popular, but the traditional model (with a physical building and in person interaction with teachers and peers) will continue. They emphasized the importance of connecting with peers and teachers in person.

Some comments related to this finding –

- Hannah O. – “In fifty years, high schools will have a more integrated focus (in my opinion).. schools will be focused more towards real-world learning experiences with more opportunities to get outside and learn by doing not be hearing.”
- Jackqueline G. – “Although i do believe that the internet is a wonderful tool when combined with other learning techniques i do not believe that the internet alone should be what we teach our next generation with.”

Most teens are pessimistic about the future state of our health. They believe life expectancy will continue to decrease due to, among other factors, pollution, climate change and obesity. They see a direct link between transportation and public health (less pollution, more walking = better health)

Some comments related to this finding –

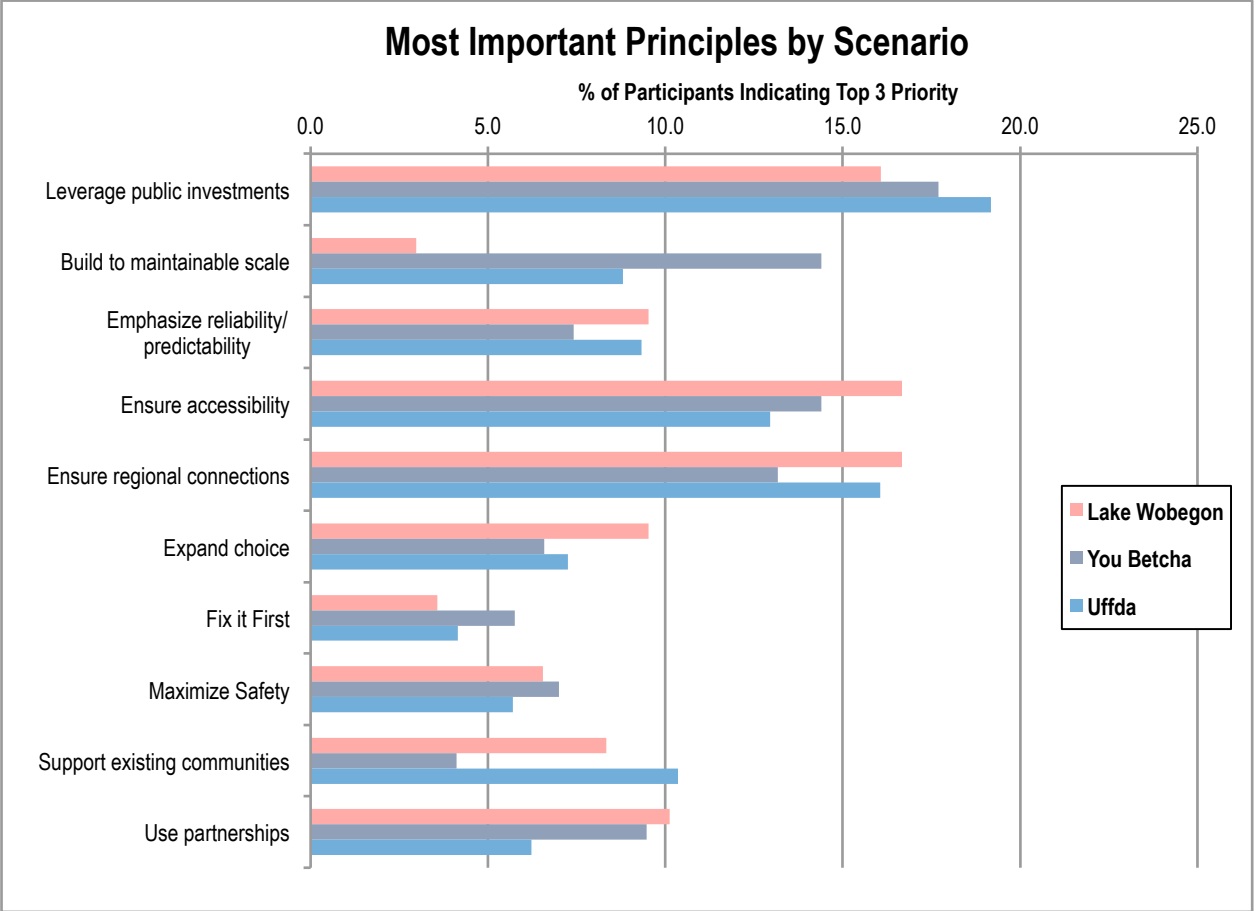
- Hannah O. – “You would think with all the breakthroughs in technology and the medical field in general, the life expectancy would be a sure shot to improve, however, until the other problems are fixed, I can't see it going anywhere but down.”
- Louise E. – “I [like the idea of] increasing walking and biking as modes of transportation in order to reduce obesity.”
- Liz F. – “Could it be possible, although a bit silly, to have a rule that you have to carpool with someone? Well, not everyday, but at least once every few days? Make it into everyone's minds that if they want to go somewhere, they'll either have to walk or carpool. Walking is exercise, and carpool saves energy... couldn't we build from there?”

Teens are split on whether or not rural areas will decline and cities will grow in population. However, they envision more self-sustaining communities and describe a future where transportation networks allow for efficient and inexpensive travel.

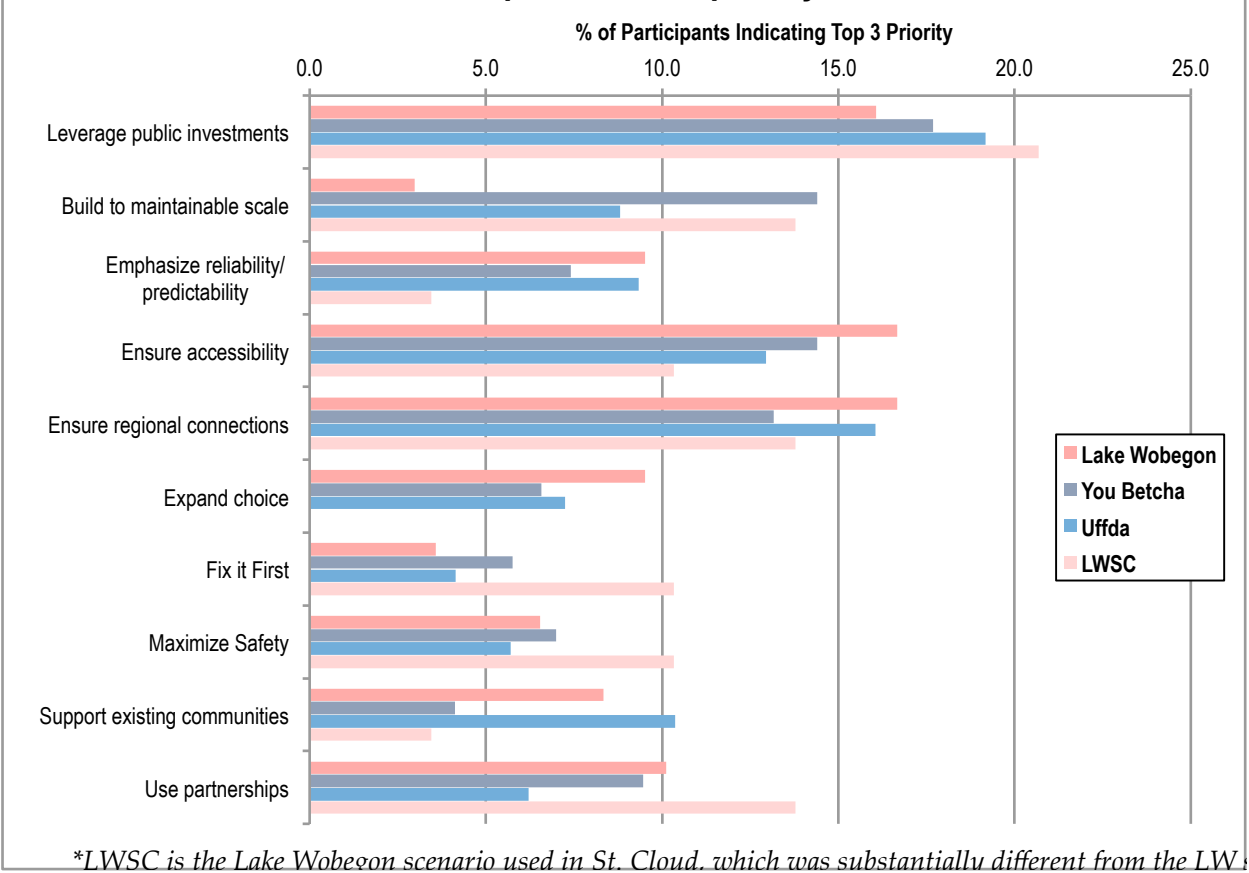
Some comments related to this finding –

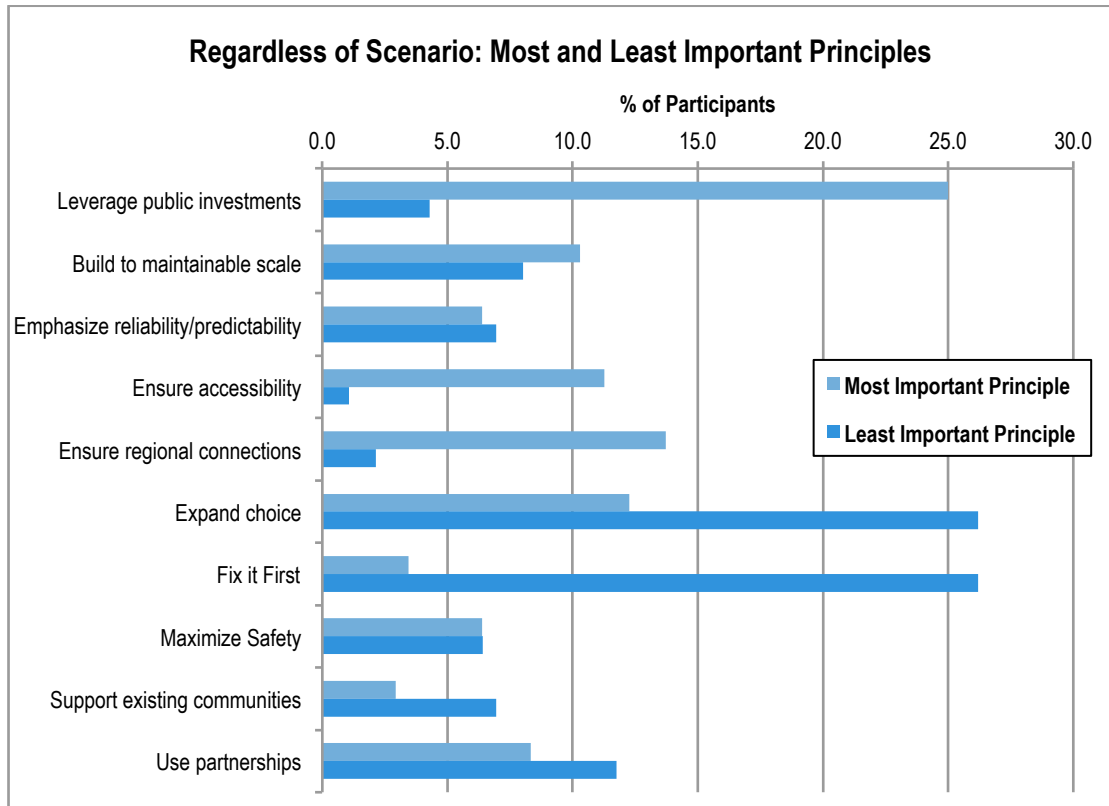
- Joey L. – “I believe that trains and extended lightrail such as the one being discussed from St. Cloud to Minneapolis will begin to replace cars for intra-travel. Passenger rails such as Amtrak, are cleaner than cars and are comfortable transportation, and I feel they are going to make a comeback.”
- Louise E. – “I definitely think that communities will at least try to move toward being self-sustainable. Growing and depending on local food would reduce the cost of transportation and be healthier because fewer preservatives would need to be used.”
- Hannah O. – “I think transport of good through the market is going to become more efficient as cities become more sustainable... thinking along the lines that it’s far more efficient (sic.) and logical to produce goods close to home so the prices don’t skyrocket because it was expensive to ship it in.”

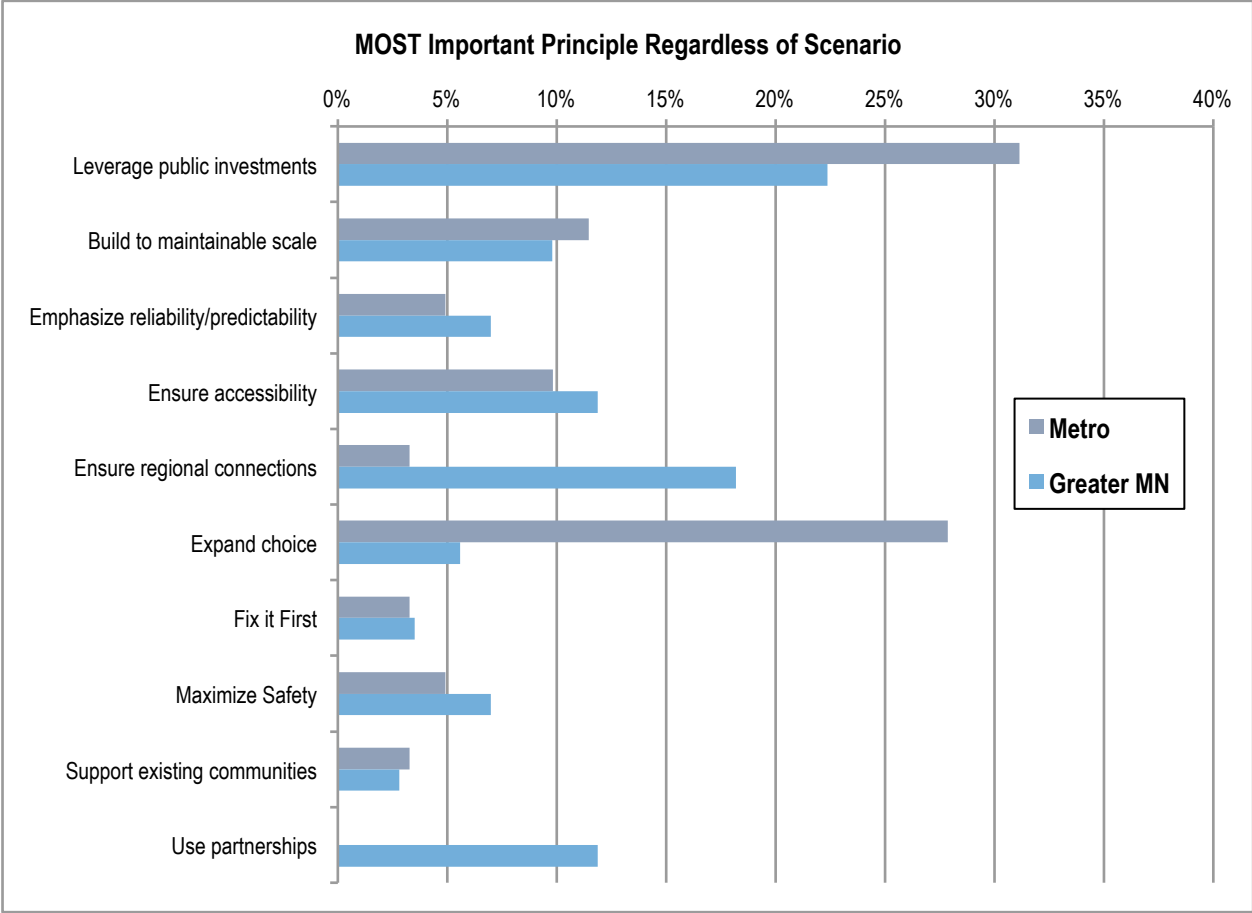
**Appendix D: Charts of live voting from workshops
(created by MnDOT)**

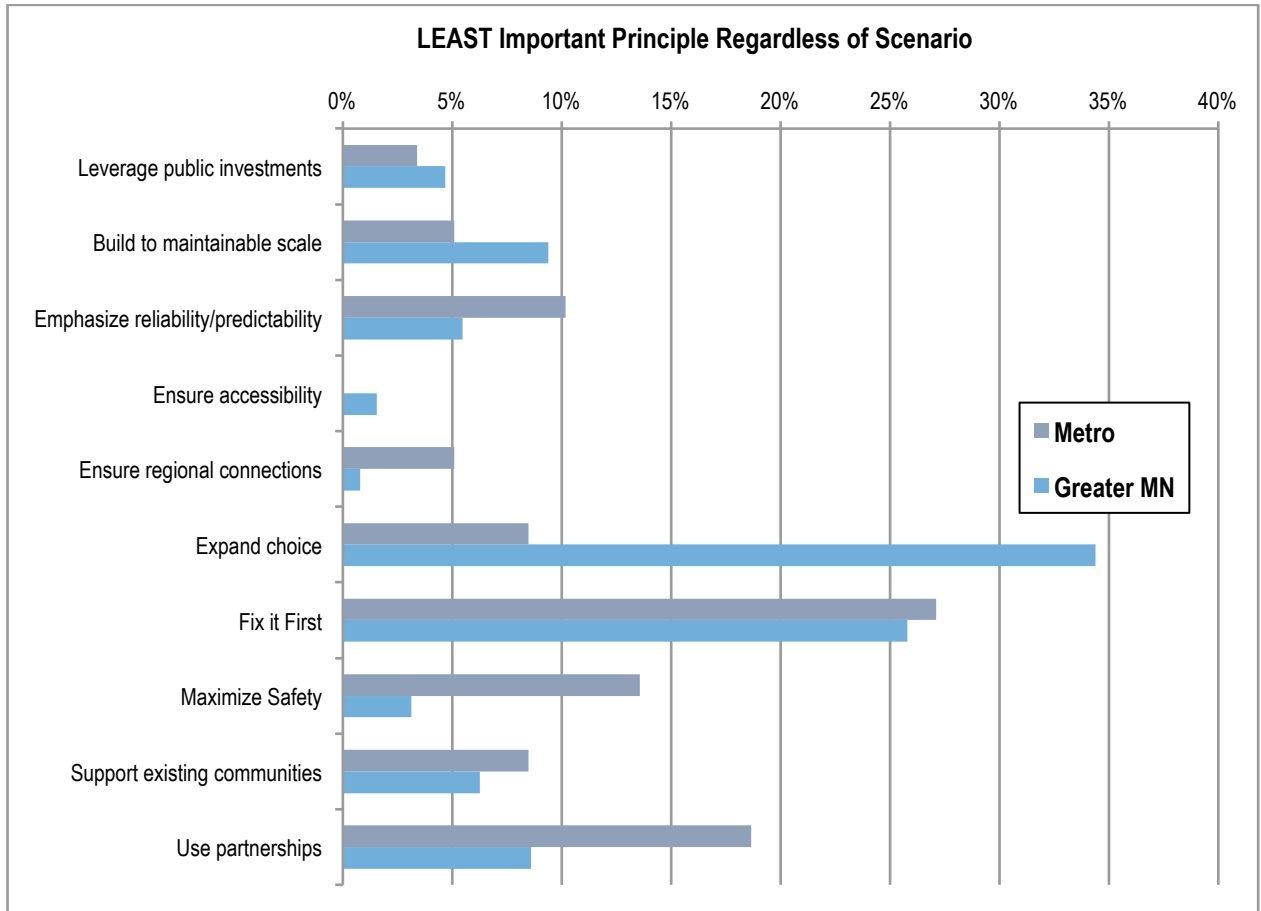


Most Important Principles by Scenario









Appendix E: Students Speak Out: Final Report

Students Speak Out Minnesota GO! Findings August 9, 2011



Reported by Students Speak Out and the Citizens League



Executive Summary

From March–June 2011, *Students Speak Out Minnesota GO!* asked teens across the state to envision life in 2061 and then map transportation needs to fit that vision. Teens responded with interesting and insightful perspectives.

Key Themes (Page 5)

As teens discussed their vision of Minnesota's future five key themes emerged. Teens:

- (1) are extremely concerned about the environment and energy efficiency,
- (2) are somewhat pessimistic about the life in 2061,
- (3) place an emphasis on public transportation,
- (4) described a future with closer community connections, and
- (5) emphasized the importance of preserving in person, face-to-face interactions.

Key Transportation Values (Page 7)

Teen participants believe that the three most important values in transportation planning are:

- aligning the system with other public purposes, particularly environmental stewardship (26%),
- expanding choice, with an emphasis on public transportation options (20%), and
- maintaining existing infrastructure before building new (16%).

Overview of the Process

Students Speak Out Minnesota GO! involved two primary components – online engagement via CitiZing and in person workshops.

CitiZing. Teens engaged online through the Student Speak Out’s online civic platform, www.citizing.org/studentsspeakout. Seven teens were selected to serve as Teen Commentators for the project; five of these teens were paid a small stipend for their time and contributions (two of the original seven did not participate for the duration of the project and, as a result, did not receive compensation).

The online component ran from late March through June 2011. Approximately 50 individuals participated online by joining the project.

Online participants shared their views through:

- *Introductions* in which people were asked to “share one thing you think is important to consider when thinking about Minnesota’s transportation needs over the next 50 years.”
- *Quick polls* which related to weekly discussion topics
- *Weekly discussion forums* started by moderators on areas of interest

In addition, a “Learn” page provided resources on a wide variety of topics to get teens thinking about transportation and life in the future.

Workshops. In addition to the online component, there were five in person workshops throughout May and June. These five workshops were held at:

- Century College – first year students in a public policy course (White Bear Lake)
- Parkview Center School – Minnesota Future Problem Solvers group (Roseville)
- High School for the Recording Arts (St. Paul)
- Washburn Public Library (Minneapolis)
- Wilder Foundation (St. Paul)

Participants’ views were collected at the workshops in three ways:

- *Written responses* were gathered on questions. Each participant was given a handout with the questions that helped them envision life in 2061 and to think through potential impacts on transportation networks. (This document was similar to what was used in the general Minnesota GO workshops.)

- *A live “survey”* was conducted throughout four of the five workshops (for one workshop the technology was not available) via individual response devices. Participants were asked their thoughts on a series of questions and voted with a handheld keypad (individual response devices). The results were then projected instantaneously on a screen. For the majority of workshops, participants were asked their opinions on: (a) the future state of a variety of topics (technology, community, health, finance, etc.; see the Appendix for a summary of this survey) and (b) what values they thought were important to transportation planning.
- *A large group discussion* was held after teens created or reviewed future scenarios. This large group discussion had teens describing their vision of the future, their lives within the scenario and what it meant to future transportation networks.

Who Participated?

Forty-seven people participated online, by registering on the site. Approximately 50 online surveys were taken and 224 comments were submitted. Forty-one teens attended the workshops. (Some of the online participants also attended the workshops, so these totals may contain duplicates.) It should be noted that the project website has a much broader reach than the number who registered—it has had 1,318 visits by 495 unique visitors.

From March 23rd – June 28th there were:

- 1,318 visits by 495 unique visitors (967 from Minnesota)
- 7.07 average number of page views per visit
- average time spent on site: 11 minutes 16 seconds
- 9,319 total page views
- People from all over Minnesota participated online. The map below shows the location of those who visited online.



Students Speak Out places a high priority on the recruitment of diverse participants. The seven Teen Commentators selected for this project were diverse in gender, age, type of school and ethnicity.

Name	Gender	City	Age	Grade	School
Joey	M	Minneapolis, MN	Under 16	8th	Sanford Middle School (public)
Louise	F	St. Paul, MN	16-19	Junior	Mounds Park Academy (independent school)
Ann	F	Roseville, MN	Under 16	8th	Parkview Center School
Jackquiline	F	Brooklyn Park, MN	16-19	Junior	Osseo Alternative Center
Nafiso	F	Minneapolis, MN	16-19	Senior	Washburn High School (Public)
Hannah	F	Rosemount, MN	16-19	Senior	School for Environmental Studies
Daniel	M	Askov, MN	Under 16		EdVisions Online School (project based, online school)

In publicizing and recruiting for the project we utilized existing Citizens League, Students Speak Out and CitiZing networks. In addition, we contacted the following people/organizations:

Cheryl Whitesett, Minnesota Future Problem Solvers
Bethany Baker, Admission Possible
Denise Merrick and Calahena Hals, Phoenix program
Jake Lantry, Public Affairs Program Manager, Minnesota High Tech Association
Doug Paulson, STEM Specialist, MSP Grant State Coordinator, Division of Academic Standards Minnesota Department of Education
Alberto Monserrate, President CEO, Latino Communications Network (LCN Media)
Kelsey Schonning , Youth Development Americorps VISTA, Community Education, Minneapolis Public Schools
Liz Henry, Director of Community Partnerships, Earth Force
Lynn Nordgren, President, Minneapolis Federation of Teachers
Mary Cathryn Ricker, President, St. Paul Federation of Teachers
Nic Rosenau, Homeschooler Adventures (Minnesota Homeschooling Organization)
Aaron Grimm, EdVisions Schools
Teresa Neal, Boys' TotemTown School (St. Paul)
Minnesota Association of Christian Home Educators (MACHE)
Pam Costain, Achieve Minneapolis
Jackie, Minnesota DECA
Orville Lindquist and Jamal Riley, YMCA Youth in Government
Nick Koesters, President, Hugh O'Brien Youth Leadership Minnesota
LiCho Xenexai, Executive Director Hmong Youth Education Services
Arshia Sandozi, Muslim Youth of Minnesota
Wendy Mayer, Teacher, International Falls Public Schools (ISD361)
Rachel Breen, Youth Group Leader, Shir Tikvah Congregation
Mike Conway and Tony Sutton, High School for Recording Arts
Youth Environmental Activists of Minnesota (Mike Conway and others)
Tracy Grimm, Minneapolis Public Schools
Nan Taylor, Independent Schools District 623
Jeb Myers, Principal, Christo Ray High School (Minneapolis)
Bob Schneider, Edina High School
Molly Johnson, IQ Academy
Kathleen Wilson, Harding High School (St. Paul)
Sandy Reichert, Metropolitan Federation of Alternative Schools
Bruce Hoff, Principal, Stewartville High School
Carrie Bakken, Avalon Charter School
Marnita Schroedl, Co-Founder & Social Capitalist, Marnita's Table

Key Themes

The online activities and in person workshops began by asking participants to envision life in 2061. Across the various conversations, a number of common themes emerged. It would be inaccurate to conclude that there is unanimity around these themes; indeed many viewpoints were represented. The appropriate interpretation is that these themes were voiced repeatedly online and in the workshops.

The top five themes were:

(1) Teen are extremely concerned about the environment and the impact the current or future activities will have on it. Energy efficiency was of primary concern.

Some findings and comments that support this theme –

- The top transportation value for teens was “alignment with other systems”; many participants cited “environmental stewardship” as the primary element to this. (See Transportation Values, Page 8, for more detail.)
- Workshop participant – “We need energy efficiency within public transportation.”
- Louise E. – “Because gas prices have risen drastically, it is a good opportunity to change transportation systems so they depend on more environmentally friendly fuels/resources.”
- Jesse B. – “... a great way to become more efficient as a state, nation and planet would be to lessen the amount of resources that we put toward transportation and travel.”
- Ann D. – “I also think that towns and communities will become more eco-friendly. I simply don’t see how our civilization can continue if we don’t.”
- Kate G. – “I hope that these changes being to occur now, as we don’t have time to wait 50 years to move away from large vehicles with one person in them for most of the day or busses or trains that only transport to hubs, but are otherwise inaccessible.”
- Teens are optimistic about our transition to alternative energy sources. Sixty-three percent of teens surveyed (n=30) agreed or strongly agreed with the statement that in 2061, “Alternative energies, such as wind and solar, flourish.”

(2) Except for the environment and energy, teens are somewhat pessimistic about life in 2061, particularly the future state of our health.

Some findings and comments that support this theme –

- 63% of teens polled (n=30) said that they agreed or strongly agreed that in 2061, “The incidences of obesity, diabetes, and Alzheimer’s reach crisis proportions.”
- Teens agreed or strongly agreed with the more pessimistic statement in five of eight questions about life in 2061. The more pessimistic outlooks were in education (40%), health (63%), the economy (47%), finance (57%), and community (50%.) (See the Appendix for additional detail on this survey.)
- Hannah O. – “You would think with all the breakthroughs in technology and the medical field in general, the life expectancy would be a sure shot to improve, however, until the other problems are fixed, I can't see it going anywhere but down.”
- Joey L. – “The climate as we know it would no longer exist, because the sheer damage done to the environment in the past 200 years would have critically damaged the weather patterns leaving weather erratic...”

(3) Teens place an emphasis on public transportation and consistently cited public transportation as a valuable component to future transportation networks.

Some findings and comment that support this theme –

- Teens frequently mentioned the importance of mass transportation in ensuring both strong communities and economies in their scenarios.
- Louise E. – “...public transportation will become much more popular for people commuting to work because this is more environmentally friendly.”
- Joey L. – “Most mass transportation (airplanes, buses, subways, etc.) will have to use alternative energy sources and will likely become the primary means of transportation for people both in the city and far out like to St. Cloud.”
- Hannah O. – “Pushing the use of the public transportation system to help combat climate change will be effective...”
- Workshop participant – “I think mass transportation would be necessary [for a strong economy] to keep prices cheap.”

(4) Teens described a future built around close-knit communities with many aspects of future life – including mass transportation – increasing our sense of connectedness.

Some findings and comments that support this theme–

- Many teens felt that energy restrictions would require more public transportation and decrease time spent with technology, which would bring communities together for more “unplugged” social interactions.
- In more “severe” scenarios, many teens described close-knit communities brought together through the sharing of goods and services and a desire to be more self-sustaining communities.
- Workshop participant – “Mass transit and car pooling would allow people to get to know one another...”
- Hannah O. – “A strong mass transportation system would be needed, impressive light rail systems that allow families to connect on weekends and for neighbors to greet each other on the commute home from the office. Children [could] form bonds with the kids they ride the mass transit] system with...”
- Nafiso M. – “Gas will increase and the need for public transportation will also. Transportation will unite people.”

(5) Teens believe technology will play a big role in 2061, but said electronic or virtual communication cannot replace in person interactions.

Some comments that support this theme–

- Joey L. – “... it feels better to talk to someone in person than over a computer...”
- Hannah O. – “I definitely agree that programs such as Skype will get to be even more stronger, but I don’t see them replacing a real relationship either.”
- Louise E. – “...the idea that people can so easily lose touch with the physical, real world is scary. I think it is imperative that, as new communication tools are invented in the future, we remember that there is so much to be gained from face to face communication. If we were to lose daily, personal interactions with each other, I think we would lose, in a sense our humanity. We would lose the ability to interact with each other in the real world and therefore lose the ability to understand each other.”

Transportation Values

After discussing future possibilities, teens were asked to consider what several future scenarios might mean for transportation. After discussing the scenarios, participants were asked: “Given this scenario, what values to you think should be used for transportation planning and investments over the next 10-15 years?”

Participants were asked to select two options from the following list:

- (1) Fix it first – maintain existing infrastructure before building new
- (2) Expand choice – prioritize diversity of travel choices
- (3) Support existing communities – prioritize investments in existing communities before expanding to serve yet-to-be-built communities
- (4) Align system with other public purposes – emphasize environmental stewardship, economic competitiveness, public health, energy independence and education
- (5) Emphasize reliability/predictability – the reliability of the system and predictability of travel time are more important than speed
- (6) Regional connectivity – ensure regional centers are connected to each other and to the Twin Cities
- (7) *Use partnerships – coordinate with the private sector and with other units of government to make transportation projects and operations more efficient
- (8) *Other (describe)

*These two options were available online, but not the in person workshops.

Teen participants said that the three most important values in transportation planning are aligning the system with other public purposes (mainly environmental stewardship), expanding choice and maintaining existing infrastructure before building new.

Value rankings were as follows:

	#	%
Align the system	34	26%
Expand choice	27	20%
Fix it first	21	16%
Ensure regional connections	18	14%
Support existing communities	13	10%
Emphasize reliability	13	10%
Use partnerships	5	4%
Other	1	1%
Total	132	100%

Teens chose these values across varying scenarios (some scenarios were more positive than others).

Value #1: Align the system (26%)

- Ann D. – “...with emphasizing our environmental stewardship we are ensuring the one of our greatest resources will remain as one of our greatest resources.”
- Hannah O. – “I also think that because everything is a system, in order to make sure there’s order, it’s important to align the system to emphasize the importance of public health and push for environmental stewardship.”
- Workshop participant – “There is such stress on fossil fuels. We have to use and align what we have.”
- Workshop participant – “View transportation with multiple lenses. It’s more than just getting from Point A to Point B.”

Value #2: Expand choice (20%)

- Joey L. – “...with...gas prices, there should be more options to travel with, given that cars [might be] restricted.”
- Workshop participant – “Expand choice, create choice to lower costs. Use public transportation [options] to lower cost.”
- Ann D. – “Diversity in our travel choices would make it possible for us to separate and raise ourselves above other places...”

Value #3: Fix it first (16%)

- Workshop participant – “With new technology, no one thinks about the long-term environment impact ... Don’t add new. Make what we have better.”
- Hannah O. – “It’s important to work on the efficiency of the systems that are already in place in order to make sure that when gas prices do reach ... \$12 a gallon, we can have ... a more effective system.
- “I feel as though because this is such a broken society, it’s incredibly important to fix the brokenness before we move on to building more.”
- Louise E. – “...it seems like the existing infrastructure is a good starting place to build from. Instead of totally restructuring the entire infrastructure (which would take a lot of resources), it makes sense to try to use what is in place already.”

Some Additional Themes

Teens envision great change in the way we travel - from restrictions on car use to more purposeful use of transportation. They spoke of the development and incorporation of smart technology into vehicles and the elimination of gas-powered engines.

Some findings and comments related to this theme –

- Louise E. – “I think banning traditional emission cars in cities where there is easy access to public transportation would be a great way to reduce greenhouse gases. This could easily be implemented in cities with extensive public transportation systems such as the subway systems in New York, Boston, etc. If St. Paul/Minneapolis were to consider this, our public transportation system would probably have to be improved. However, work on the light rail system seems to be progressing and it does not seem implausible that in fifty years we could be living in a city that is car-free.”
- Kate G. – “I think that people will be more purposeful about traveling, and do so when there is a need to meet with others, but not just for “seat time” either in an office or at a school.”
- Louise E. – “...public transportation will become much more popular for people commuting to work because this is more environmentally friendly. Also in cities like London, permits must be bought in order to drive into the city because of limited space for driving and parking cars. Cars will also become more energy efficient and environmentally friendly. Everyone will have hybrid cars or even cars powered by electricity or water.”
- Brady S. – “Transportation will probably be different too. More electric cars, light rails, freeways, and possibly electric airplanes. Oil will probably be scarce or used up, and we will rely on wind, solar, geothermal, and hydroelectric energy.”
- Joey L. – “...traditional cars will probably be out of function, replaced by some sort of smart transportation. Vehicles of the future will be able to do anything ordered. So, basically, you'd talk into a microphone and the car/plane/segway would automatically go where you needed it to go. Most mass transportation (airplanes, buses, subways, etc.) will have to use alternative energy sources and will likely become the primary means of transportation for people both in the city and far out like to St. Cloud.”
- Jesse B. – “... a great way to become more efficient as a state, nation and planet would be to lessen the amount of resources that we put toward

transportation and travel. While I am not suggesting that we altogether stop traveling and shipping goods, a lot of energy could be saved by cutting down on transportation... cutting back would also reduce the fossil fuels emitted.”

While there was disagreement over the extent of population growth (some thought it would explode, others felt it would level off), teens discussed the repercussions of population growth, such as resource allocation, overcrowding and government regulation.

Some comments related to this theme –

- Louise E. “The human population has already exceed its carrying capacity ... usually when a population does this the population levels off or decreases because there are no longer enough resources to support the population. Do you think the human population is an exception to this rule or will the population decrease?”
- Louise E. – “... the average life span has been rising. This would likely lead to overpopulation, causing numerous problems such as more pollution, cramped living conditions and lack of resources for everyone to live at a high standard of living. This poses questions such as: ‘How do we regulate pollution? How should resources be distributed?’ “
- Joey L. “When the immigrants were coming over during the Industrial Revolution, they were crowded into small areas with insufficient waste. It’ll probably happen again, as conditions get worse.”

Teens think online classes will become more popular, but the traditional model (with a physical building and in person interaction with teachers and peers) will continue. They emphasized the importance of connecting with peers and teachers in person. School and work schedules will become more flexible.

Some comments related to this theme –

- Jackqueline G. – “Although i do believe that the internet is a wonderful tool when combined with other learning techniques i do not believe that the internet alone should be what we teach our next generation with.”
- Wyatt J. – “I think that ... [we] will be working in ways that are flexible when it comes to time and place. Advances in technology may allow us to use computers and communication devices to do almost any job remotely. Working from really anywhere at anytime will be the norm. That could

completely change the nature of our cities and homes as we become less 'settled' or tied to one place."

- Hannah O. – "I really want to see a push in education too, and I don't just mean laptops in schools. I mean, experiential learning – sending kids out there to figure out the world, because I think the strongest education systems are those that get the kid out of the classroom and out of the lecture halls."
- "In fifty years, high schools will have a more integrated focus (in my opinion)... schools will be focused more towards real-world learning experiences with more opportunities to get outside and learn by doing not be hearing."
- Joey L. – "My grandchildren won't be learning at schools because most learning will be done via computer."
- "And if I don't see a push in education I swear I'll go crazy!"
- Liz F. – "My grandchildren are being educated through online courses and robots teaching us instead of hiring teachers, because the school budget problem can't be solved yet."

Nearly all participants said climate change will impact life in 2061. However, students are split on the degree to which it will impact daily life. Some said the changes in the next fifty years will be drastic (i.e., contributing to WWII), while others said the impact would be smaller in scale (i.e., wet areas wetter, dry areas drier).

Some comments related to this theme –

- Daniel B. – "It is the year of 2061 and the world is gradually growing back from world war three. The war started when our governments couldn't decide whether or not to go green ... People [will be] constructing water turbines and windmills all around me."
- Wyatt J. – "I could imagine a future where we will be able to predict with more accuracy how the changing climate will affect weather patterns like extreme temperature and precipitation swings, or catastrophic events like hurricanes and earthquakes ... People will be able to migrate or relocate temporarily to avoid disaster or simply to be more comfortable."
- Nafiso M. – "... if Minnesota's climate changes, the economy will change."
- Joey L. – "The climate as we know it would no longer really exist, because the sheer damage done to the environment in the past 200 years would have

critically damaged the weather patterns leaving weather erratic and basically unpredictable.”

- Brady S. – “The climate will have changed. I'm assuming the temperature will be the main change. Most of the world will be warmer, which will cause more thunderstorms and severe weather.”

Teens said development patterns will change because of population growth and climate change. They said living sustainably, preserving “natural beauty” and agricultural land should be valued in development decisions.

Some comments related to this theme –

- Louise E. – “We must work to preserve natural beauty. Already there are so few places where we can escape from noisy traffic, perfectly manicured lawns and polluting factories. As we work to preserve natural beauty we must also remember that there is value in preserving historically significant people, places and objects. Both nature and history are equally important and should both be saved for future generations.”
- Hannah O. – “I see a major shift in architecture... to be more “green” and eco-friendly... becoming “one with nature” while maintaining the beauty and preserving the ecosystem and causing as little harm as possible... living more sustainably.”
- Ann D. – “The population ... is estimated to grow to 9 billion [in 2050]. This means compact living.”
- Brady S. – “The world's population will be much higher, and we will run out of room for farming and developing. Taller buildings will be built even in small towns, because we will need as much space for agriculture as possible.”

Teens are split on whether or not rural areas will decline and cities will grow in population. However, they envision more self-sustaining communities and describe a future where transportation networks allow for efficient and inexpensive travel.

Some comments related to this theme –

- Joey L. – “I believe that trains and extended lightrail such as the one being discussed from St. Cloud to Minneapolis will begin to replace cars for intra-travel. Passenger rails such as Amtrak, are cleaner than cars and are comfortable transportation, and I feel they are going to make a comeback.”

- Louise E. – “I definitely think that communities will at least try to move toward being self-sustainable. Growing and depending on local food would reduce the cost of transportation and be healthier because fewer preservatives would need to be used.”
- Hannah O. – “I think transport of goods through the market is going to become more efficient as cities become more sustainable... thinking along the lines that it’s far more efficient (sic.) and logical to produce goods close to home so the prices don’t skyrocket because it was expensive to ship it in.”

Appendix F: Citizens League staff/contractors for Minnesota GO

Erin Sapp, Project Director

Lindsey Alexander, Students Speak Out Director

Maya Petrovic, Project Coordinator

Stacy Becker, Project Consultant

Kim Farris-Berg, Students Speak Out Consultant

Lars Johnson, Web Developer

Additional support was provided by Citizens League staff

Appendix G: Citizens League Minnesota GO budget

estimated/unofficial

	General	SSO
Envisioning the future: gathering public input on what the future holds, developing scenarios and project activities (Feb-Apr)	\$11,660.00	\$8,408.45
Transportation vision: facilitating workshops and online activities via scenarios (May-Jun)	\$16,937.50	\$9,766.45
Analysis: synthesizing results, gathering feedback on themes and findings to date (Jul-Aug)	\$795.00	\$222.50
Final vision: input into development of final vision by MnDOT, reporting (Sep-Nov)	\$6,425.00	\$635.00
Expenses	\$1,895.02	\$1,357.69
Subtotal	\$37,712.52	\$20,390.09
 Citizens League Admin Fee (15% of total contract budget)	 \$10,063.46	
TOTAL	\$68,166.07	
 Contract Budget (amended)	 \$76,913.21	
Budget Remaining (over/under)	\$8,747.14	