

Minneapolis BAC Engineering Subcommittee Minutes 4 PM, November 20, 2012

BAC Members Present: Lisa Bender, Joe Bernard, Billy Binder, Paul Frenz, Robin Garwood, Janice Gepner, Bob Hain, Matthew Hendricks, Shaun Murphy, Ciara Schlichting, Georgianna Yantos

Others Present: Bob Carlson, Adam Flett, David Peterson, Rose Ryan

Actions

1. The BAC Engineering Subcommittee recommends adoption of the **Climate Action Plan** and supports adoption of a bicycle mode share goal of 15 percent for 2025. The BAC supports and recommends adoption of implementation steps identified in the **Climate Action Plan** to increase opportunities for bicycling in order to meet that goal.

2. The Subcommittee passed three resolutions relating to the reconstruction of **15th Ave S/S 4th St** near Cedar/Riverside:
 - A) The BAC Engineering Subcommittee supports the Bicycle/Pedestrian Plaza planned for **16th Ave S** south of S 6th St.

 - B) The BAC Engineering Subcommittee supports a dedicated bicycle lane on **S 4th St** between 15th Ave S and Riverside which would have a similar layout to that on Riverside: concrete bike lane and parking lane (with similar gutter pans), next to an asphalt road.

 - C) The BAC Engineering Subcommittee supports a dedicated bicycle lane on **15th Ave S** from S 4th St S 6th St with a similar design as that recommended for S 4th St, and a mid block pedestrian crossing bump out. It is also recommended that an appropriate bicycle facility connect this section of 15th Ave S to the Hiawatha Bike Trail.

3. The BAC Engineering Subcommittee supports enhanced **funding for bicycle safety** and safe routes to school within the Public Works traffic capital fund, and dedicated funding for bicycle detection at activated traffic signals.

4. The BAC Engineering Subcommittee **recommends that the city of Minneapolis fund** the North Minneapolis Greenway as our highest priority, and also create a \$500,000 Cycle Track Fund to fund projects such as 10th Ave SE/19th Ave S, 26th & 28th Sts, 7th & 8th Sts downtown, Blaisdell Ave S, the Loring Greenway connection, 1st Ave N, and W 36th St between Kings Hwy and Park Av.

Summaries of Discussions

The meeting was called to order at 4:07 pm and chaired by Lisa Bender. Following introductions, the minutes from the October 16th meeting were unanimously approved.

1. **City of Minneapolis Repaving Projects 2013** presented by David Peterson.

- David presented preliminary lists of streets on the Bike Plan Map slated to be repaved and seal coated by the City in 2013.
- Lists just provided. We will discuss specifics next month or so.
- Since budgets are limited, he suggested we consider priorities and citywide balance when we make our proposals.
- Projects are chosen based on their Public Works "Pavement Condition Index" and most are on the 5-year Capital Long Range Improvement Map.
- Repaving provides a new top smoothing layer of asphalt.
- Sealcoating provides a layer of tar and a layer of granite chips to protect road surface and provide added friction.
- Since chips are a problem for bicyclists, the city is looking at other options such as finer chip size and not sealcoating the bike lane portion if it's in good shape.
- Developing a budget for bike facilities is a work in progress.
- David will come back to Subcommittee later with cost estimates for bike facilities.

2. **Hennepin County Repaving Projects 2013** presented by Rose Ryan.

- Rose provided a list of proposed County overlay projects which we will discuss in the next month or two.
- The list included the following streets on the City Bike Plan: two short segments of Franklin Av, 27th Av SE (will keep current bike lane), 45th Av N, far west end of Lake St, 4th St SE through the University and Dinkytown, Hennepin Av from Taft St NE to 33rd Av SE, Washington Av N/N Mississippi Dr. Osseo Rd from Thomas Av N to Penn Av N is on County but not City Bike Plan.
- Thanks to Rose, David and Shaun for providing information so early.

3. **Minneapolis Climate Action Plan - ACTION**

- Lisa suggested we pass a resolution supporting the climate and transportation goals in the Climate Action Plan.
- Robin suggested that our resolution refer to the bicycle-specific goals.
- The motion proposed by Lisa passed unanimously.

4. **15th Avenue South/South 4th Street near Cedar/Riverside- ACTIONS**

- Bob Carlson presented the city's proposed plan for total reconstruction in 2014. Layout approval and final design in 2013.
- Currently a bike lane on 4th St and "obliterated" sharrows on 15th Av.
- Proposed plan is to keep condition on 4th St and improve 15th Av by widening and providing parking and bike lanes on both sides. Also new retaining wall and sidewalk on corner between 4th St and 15th Av.
- Heavy pedestrian traffic all along 15th Av S.

- Discussed impact on pedestrians of widened street.
- Community asked for bump outs near 5th St S to access park across the street.
- Discussion on advantages of advisory bike lanes vs. full bike lanes on 15th Av.
- It was agreed that our recommendations would come as separate resolutions for each segment.
- **ACTION** : Robin Garwood made a motion that the BAC support the bicycle/pedestrian plaza planned for 16th Street south of 6th Street. The motion was passed unanimously.
- **ACTION** : Bob Hain made a motion that the BAC support a dedicated bicycle lane on South 4th Street which would have a similar layout to that on Riverside: concrete bike lane and parking lane (with similar gutter pans) next to an asphalt road. It passed unanimously.
- Matthew Hendricks made a motion that 15th Ave S have advisory bike lanes. This motion did not pass.
- **ACTION** : Bob Hain made a motion to support a dedicated bicycle lane on 15th Ave S from S 4th St S 6th St with a similar design as that recommended for S 4th St, and a mid block pedestrian crossing bump out. It is also recommended that an appropriate bicycle facility connect this section of 15th Ave S to the Hiawatha Bike Trail. The motion passed unanimously.
- Discussion on what should be done for small section of S 6th S near Freewheel.

5. **Draft Cycletrack Map** Update from Lisa

- A small group put together a Draft Cycletrack Map following BAC approval last month.
- Cycletracks are important for inclusion in CLIC discussions.
- Fuller conversation, including goals and guidelines, is needed.
- Shaun agreed to make a GIS version of the map in response to Matthew's suggestion.

6. **CLIC Recommendations** led by Shaun - **ACTIONS**

- Earlier in the year, Jennifer Hager showed us the CLIC schedule, in explaining why our suggestions were provided too late last time. Suggestions are needed now to be considered for the CLIC list for 2104-2018.
- Shaun reported that Don Pflaum suggested the North Minneapolis North/South Greenway, probably along Humboldt/Irving and Hiawatha Avenue between 28th and 32nd, and Simon suggested the Lyndale Ave/Loring Greenway extension to Franklin.
- Discussion of what streets to propose for cycletracks.
- Robin explained the city capital funding process. CLIC makes recommendations to the mayor. It's up to the mayor whether to take these suggestions in the budget he presents to the City Council.
- Citywide way finding is something else to suggest to CLIC.
- **ACTION**: Shaun indicated that a fund is needed for bike safety projects, such as Safe Routes to Schools and modifying actuated traffic signals to pick up bikes. A motion on this was passed unanimously.
- Several projects were discussed for inclusion in our recommendations for a cycletrack.
- Since we don't know what streets are up for repaving in 2018, Joe Bernard suggested we ask for a cycletrack fund.

- David said cycletracks cost at least \$120,000/mile. \$450,000/year would be needed to build 3 miles/year. 3 miles/year are needed to meet the goal of 30 miles by 2020.
- **ACTION:** Lisa proposed a motion that the BAC recommends that the city of Minneapolis fund the North Minneapolis Greenway as our highest priority, and also create a \$500,000 Cycle Track Fund to fund projects such as 10th Ave SE/19th Ave S, 26th & 28th Sts, 7th & 8th Sts downtown, Blaisdell Ave S, the Loring Greenway connection, 1st Ave N, and W 36th St between Kings Hwy and Park Av. The motion passed unanimously.

The meeting was adjourned at 6:05 pm.

Minutes respectfully submitted by Janice Gepner.

Minneapolis Bicycle Advisory Committee Minutes
November 28, 2012, 4 PM – 6 PM
Room 333 Minneapolis City Hall

Members Present: Richard Anderson, Lisa Bender, Joe Bernard, Billy Binder, Marin Byrne, Bill Dooley, Ethan Fawley, Paul Frenz, Robin Garwood, Janice Gepner, Bob Hain, Matthew Hendricks, Hōkan, Joshua Houdek, Nick Mason, Gina Mitteco, Shaun Murphy, Andrew Rankin, Rose Ryan, Greg Sautter, Ciara Schlichting, Jim Skoog, Sarah Stewart, Georgianna Yantos

Members Absent: Brian Funk (excused), Roy Hallanger, Gary Nelson, Jennifer Ringold (excused), Peter Wagenius

Others Present: Ginger Cannon, David Gepner, Chris Maida

Actions

1. **For 2013**, the Bicycle Advisory Committee will continue to meet according to the previously **approved schedule** (3 E Subcommittee on the 2nd Thursday of the month, Engineering Subcommittee on the 3rd Tuesday, full BAC on the 4th Wednesday) with the following exceptions: The May 21 Engineering Subcommittee Meeting will move to May 14, and the November and December meetings will all be moved a week earlier.
2. Whereas, a Bicycle Fix-It Station is a street fixture, installed in the public right-of-way, to provide the public with tools to perform basic bicycle repairs and maintenance; and
Whereas, a Bicycle Fix-It Station is not intended for the purpose of processing, storage, sales, display or other business activities; and
Whereas, the City should encourage and support neighborhoods, organizations and businesses to provide public bicycle amenities; and
Whereas, installing a Bicycle Fix-It Station is a public amenity that encourages bicycling and supports adopted City goals for health, transportation and Livable Communities,
Now, therefore, be it resolved by the Minneapolis Bicycle Advisory Committee (BAC):
That the BAC recommends that the City of Minneapolis support **encroachment permits allowing** for the installation of **Bicycle Fix-It Stations** in the public right-of-way.
3. The Bicycle Advisory Committee supports including **speed limit flexibility** as a local option in the legislative agenda.
4. The Bicycle Advisory Committee supports a contiguous bike facility along **18th Ave NE and 26th Ave N**, connecting the North and Northside, including conversion of the BNSF Bridge, and the technical assistance and planning resources required.
5. The Bicycle Advisory Committee recommends that the Minneapolis City Council accept the \$50,000 Play Streets grant from the Partnership for a Healthier America to organize **four Open Streets events in 2013**. The BAC further recommends that the City formally cosponsor the 2013 Open Streets events, and commit to covering the infrastructure costs of

those events, including barricades, traffic direction, signage, waste and recycling service and permit fees.

6. The Bicycle Advisory Committee recommends adoption of the **Climate Action Plan** and supports adoption of a bicycle mode share goal of 15 percent for 2025. The BAC supports and recommends adoption of implementation steps identified in the Climate Action Plan to increase opportunities for bicycling in order to meet that goal.
7. The Bicycle Advisory Committee passed three resolutions relating to the reconstruction of **15th Ave S/S 4th St** near Cedar/Riverside:
 - A) The Bicycle Advisory Committee supports a dedicated bicycle lane on **15th Ave S** from S 4th St to S 6th St with a similar design as that recommended for S 4th St, and a mid block pedestrian crossing bump out. The BAC further recommends, in keeping with the adopted Access Minneapolis Design Guidelines for Streets and Sidewalks, that the parking lanes be reduced to seven feet wide and the driving lanes be reduced to nine feet wide, for a 7'-6'-9'-9'-6'-7' section. This change to the plans proposed will balance bicyclists' need for a dedicated bicycle lane with pedestrians' desire to narrow the roadway rather than widening it. It is also recommended that an appropriate bicycle facility connect this section of 15th Ave S to the Hiawatha Bike Trail.
 - B) The Bicycle Advisory Committee supports the Bicycle/Pedestrian Plaza planned for **16th Ave S** south of S 6th St.
 - C) The Bicycle Advisory Committee supports a dedicated bicycle lane on **S 4th St** between 15th Ave S and Riverside which would have a similar layout to that on Riverside: concrete bike lane and parking lane (with similar gutter pans), next to an asphalt road.
8. The Bicycle Advisory Committee resolves that Hennepin County and the city of Minneapolis should plan for and install a **signalized crossing at the Greenway entrance at Park Avenue** as soon as possible and to set a timetable for the installation of this signalized crossing. Since the newly installed bike lanes on Park are now on the right side of the street, crossings between the Greenway and the bike lanes are across three traffic lanes.
9. The Bicycle Advisory Committee **recommends that the city of Minneapolis fund** the North Minneapolis Greenway as our highest priority, and also create a \$500,000 Cycle Track Fund to fund projects such as 10th Ave SE/19th Ave S, 26th & 28th Sts, 7th & 8th Sts downtown, Blaisdell Ave S, the Loring Greenway connection, 1st Ave N, and W 36th St between Kings Hwy and Park Av.
10. The Bicycle Advisory Committee supports enhanced **funding for bicycle safety** and Safe Routes to Schools within the Public Works traffic capital fund, and dedicated funding for bicycle detection at activated traffic signals.

11. Whereas, the Southwest Light Rail (Green Line Extension) will provide an environmentally friendly and cost effective mobility option in the Twin Cities region; and
Whereas, the locally preferred alternative (LPA), in the City of Minneapolis primarily utilizes Hennepin County Railroad Authority (HCRA) Right-of-Way (ROW); and
Whereas, high quality bicycle facilities already exist within HCRA ROW; and
Whereas, the **Southwest Light Rail (Green Line Extension) Draft Environmental Impact Statement** (SW LRT DEIS) identifies that existing bicycle facilities can coexist with Southwest Light Rail in HCRRAROW; and
Whereas, providing bicycle connections to Southwest Light Rail stations is key in integrating regional mobility,
Now, therefore, be it resolved by the Minneapolis Bicycle Advisory Committee (BAC):
That the BAC **supports City of Minneapolis Bicycle and Pedestrian Staff Comments** on the SW LRT DEIS **with the following additions:**
At Royalston Ave, the BAC supports an enhanced bicycle connection between the Cedar Lake Trail and the LRT station; and
At Van White Boulevard, the BAC supports a bicycle connection between the Luce Line Trail, located southeast of the LRT station, and the LRT station; and
At Penn Ave, the BAC supports a bicycle connection between Bryn Mawr Meadows area and the LRT station; and
At Lake Street, the BAC supports a bicycle connection between the existing trail and the LRT station; and
At all stations, the BAC supports station designs that accommodate bicycles and provide bicycle amenities; and
The BAC encourages Hennepin County and the Metropolitan Council to study pedestrian and bicycle at grade freight rail crossings along the corridor to identify improvements or new crossings that may be necessary.

Summaries of Discussions

The meeting was called to order at 4:02 pm and initially chaired by Ciara Schlichting. Nick Mason took over as chair starting from the discussion of 18th Av NE/26th Ave N Greenway. Following introductions, the Agenda was revised to include the addition of an Open Streets Action Item from Robin Garwood and a discussion of the 18th Av NE/26th Ave N Greenway led by Council Member Kevin Reich. The revised Agenda and the Minutes from the October 24 meeting were unanimously approved.

1. **2013 BAC Meeting Schedule** presented by Shaun Murphy – **ACTION**
 - Full BAC and Subcommittees will continue to meet according to the previously approved schedule: 3 E Subcommittee on the 2nd Thursday of the month, Engineering Subcommittee on the 3rd Tuesday, full BAC on the 4th Wednesday.
 - Exceptions due to holidays and the vagaries of the calendar:
 - The May 21 Engineering Subcommittee Meeting will move to May 14.
 - The November and December meetings will all be moved a week earlier.
 - The proposed calendar for 2013 was adopted unanimously.

2. **Education, Encouragement, and Enforcement Subcommittee Report** led by Andrew Rankin – **ACTIONS**

- **Pedal Car Ordinance.** The second revision of an ordinance on pedal cars (Pedal Pubs) as recommended by Business Licensing will be an action item in January.
- **Fix-It Station – ACTION**
 - Birchwood Café would like to add a fix-it station on the boulevard in front of their business. They were denied an encroachment permit and will appeal.
 - The Subcommittee passed a resolution supporting encroachment permits for fix-it stations. The full BAC unanimously approved the resolution.
- **Complete Streets Policy** update from Sarah Stewart.
 - There will be a full day workshop to formalize city policy and implementation on this issue on Dec 11.
 - Approximately 30 people will attend, representing many city departments, and including several BAC members.
 - Workshop will be facilitated by 2 national experts.
 - Smaller group will follow up on recommendations. Goal is to have a draft document by early winter.
- **Bike-Related Legislative Items** presented by Shaun Murphy.
 - City preparing legislative items to submit to its lobbyists.
 - Key bike-related items were supporting more flexibility on lane widths and supporting funding for bicycle infrastructure.
 - Other issues include clarifying that motorists must yield to bikes in green lanes, prohibiting parking in bike lanes, and allowing cities flexibility on speed limits.
 - Our representative is Pierre Woulet and Shaun suggested he come to a BAC meeting.
 - Changing speed limits is controversial. Current wording from IGR enables changes that make streets safer for bicyclists and pedestrians but doesn't mention speed limits specifically.
 - Greg Sautter pointed out that this vague language is good for bicyclists.
 - Billy Binder made a motion that the BAC support including speed limit flexibility as a local option in the legislative agenda. The motion passed unanimously with abstentions from Gina Mitteco, Lisa Bender and Rose Ryan. – **ACTION**

3. **18th Ave NE/26th Ave N Greenway** Vision led by Council Member Kevin Reich – **ACTION**

- There has long been a plan to unite 18th Av NE and 26th Av N across the river.
- Progress made in sections as money available.
- Phase 1: 18th Ave NE implemented as a CLIC project in 2010.
- Phase 2 is section from Monroe St NE to Johnson St NE which is scheduled for 2017.
- "Hidden" bike facility added when work done on Quarry. Now being improved: stretch from Highway 88 almost to Johnson St.
- Hope to convert rail bridge for bikes and pedestrians. Not used by rail much.
- We can help by helping to lobby for financial and professional resources.
- Ciara made a motion that we support a contiguous bike facility along 18th Ave NE and 26th Ave N, connecting the North and Northside, including conversion of the BNSF bridge and the technical assistance and planning resources required. The motion was approved unanimously.

4. **Open Streets** resolution presented by Robin Garwood – ***ACTION***
- City was awarded a \$50,000 Play Streets grant from the Partnership for a Healthier America towards organizing four Open Streets events in 2013.
 - Grant must be formally accepted by the city.
 - City should agree to co-sponsor Open Streets events by providing needed logistics.
 - To be considered at December 4 Public Works Transportation Committee meeting.
 - Possible locations for Open Streets events:
 - Will probably continue at Lyndale Ave and Lowry Ave N
 - Possible NE options: Central (MnDOT road), Johnson St NE, 13th Ave
 - South Minneapolis: tons of options including Cedar, Bloomington, Chicago, E Lake, Minnehaha, Franklin.
 - Previous events were great for business so that argues for choosing a commercial corridor.
 - Robin made a motion that the BAC recommend the grant be accepted and that the city agree to formally cosponsor four Open Streets events in 2013. The motion passed unanimously.
5. **Engineering Subcommittee** Report from Lisa Bender – ***ACTIONS***
- Lisa's resolution to support the city **Climate Action Plan** passed unanimously with little discussion. – ***ACTION***
 - City and County staff presented lists of **repaving projects** scheduled for **2013**. These projects will be discussed at next month's Engineering Subcommittee meeting, so attend if you're interested.
 - Reconstruction of **15th Ave S** from S 4th St to S 6th St:
 - Resolution presented is slightly different from the one discussed at the Subcommittee meeting to make it consistent with pedestrian recommendations.
 - The proposed resolution to support a dedicated bicycle lane was passed unanimously with one abstention from Joe Bernard. – ***ACTION***
 - **Bicycle/Pedestrian Plaza at 6th Ave S** south of 6th St
 - 6th Ave S south of 6th St is a small dead end heavily used by pedestrians to access the station.
 - Proposed plaza would remove 10 parking spaces.
 - Greg Sautter said to check language in right-of-way.
 - The resolution supporting the planned plaza passed unanimously with an abstention from Joe B. – ***ACTION***
 - The resolution to support a dedicated bicycle lane on **S 4th St** between 15th Ave S and Riverside with a similar layout to Riverside was passed unanimously with an abstention from Joe B. – ***ACTION***
 - Paul Frenz explained the motion to support a **signalized crossing at the intersection of Park Avenue and the Midtown Greenway**.
 - During morning rush hour it could be impossible to cross the intersection.
 - The County is considering a signalizing crossing but hasn't said when.
 - The proposed resolution supporting a signalized crossing as soon as possible was passed unanimously. – ***ACTION***
 - **Cycle Tracks/Capital Improvement Program Recommendations**

- Criteria and process for selecting streets for cycle tracks is in progress but recommendations needed now to be included in CLIC for 2018.
- Draft cycle track map distributed and will be discussed at next month's subcommittee meeting.
- Branding of cycle tracks discussed: "cycle tracks," "multi-use trails," "bicycle express ways." How do we express they are for protection, comfort, safety?
- Proposed motion to recommend funding the North Minneapolis Greenway and a \$500,000 Cycle Track Fund was passed unanimously with an abstention from Gina Mitteco. – ***ACTION***
- **Funding for Bicycle Safety – *ACTION***
 - City staff proposed a resolution that we support city funding dedicated for bike safety programs and infrastructure.
 - The Pedestrian Advisory Committee passed a similar resolution.
 - The proposed resolution was passed unanimously.
- **Southwest LRT Draft Environmental Impact Statement (SW LRT DEIS) – *ACTION***
 - Andrew reviewed the SW LRT DEIS and proposed a resolution.
 - The DEIS provides for train and bicycle coexistence, keeping the same standard of trail.
 - The main concern is providing bicycle and pedestrian access to stations.
 - Shaun Murphy provided a list of bike/pedestrian related comments from Public Works staff, including CPED.
 - Ginger Cannon said Park Board comments will be on the web tomorrow.
 - Concern that there are not many pedestrian rail crossings, so neighborhoods become divided.
 - Proposed resolution was passed unanimously with an abstention from Rose Ryan.

6. Announcements

- Shaun reported that the Sabo Bridge will be closed twice for work on Xcel transmissions lines.
- Shaun announced that the Hiawatha LRT trail will tentatively open this Friday.
- Ginger reported that, if it passes tonight, the Park Board will be looking for BAC and PAC representatives on a community advisory committee looking at trails near Dean Pkwy and the west side of Cedar Lake. Let Shaun know if you are interested.
- Billy reported that the charette planning group is meeting on Friday.

The meeting was adjourned at 6:09 pm.

Minutes respectfully submitted by Janice Gepner.



Minneapolis Climate Action Plan

EMISSIONS REDUCTION GOALS & STRATEGIES

October 30, 2012

Implementation Goals

Minneapolis will meet the City's adopted 2015 and 2025 greenhouse gas emissions reduction targets by addressing the following categories: Buildings & Energy, Transportation & Land Use, and Waste & Recycling.

Comment [g1]: Confusion between adopted City goals and then the goals listed under Buildings & Energy.

Deleted: by or before the deadlines

While meeting emissions reduction targets, Minneapolis shall:

- Prioritize high impact, short timeframe, cost effective strategies.** Recent science suggests that immediate action (within 5 – 10 years) is necessary to bring down emissions to avoid severe impacts from climate change. This plan will prioritize strategies for implementation that may have the greatest impact on emissions in the short term, acknowledging that the greatest number of co-benefits might not be immediately realized. While seeking immediate impacts, this plan will acknowledge that we are regularly making decisions that may have impacts that will be felt for 50 or 100 years. Doing so, we should always be cognizant of impacts on future generations.
- Seek strategies with multiple benefits with an understanding that there may be tradeoffs.** Wherever possible, implement strategies that provide a range of co-benefits (e.g., job creation, lifecycle cost savings to government or residents, improved public health, or broader awareness of climate impacts). Achieving one benefit may come with tradeoffs: a strategy may reduce greenhouse gas emissions and create new jobs, but require a significant up-front monetary investment. Policy makers and the community will need to carefully weigh these multiple benefits and costs while moving Minneapolis towards its emissions reduction targets.
- Avoid creating disparate impacts across Minneapolis communities and target strategies to communities that could most benefit.** Climate action strategies should be developed that avoid negatively impacting communities already heavily impacted by environmental or economic strain. Strategies should also be implemented in a way to benefit those most in need. This plan should also avoid shifting emissions or impacts outside of the city.
- Monitor progress annually and revisit goals and strategies as necessary.** The City of Minneapolis will continue to track community-wide greenhouse gas emissions and report on the implementation of climate action strategies and impacts.
- Begin building resiliency to climate changes and impacts.** This Climate Action Plan deals primarily with reducing emissions to mitigate climate change. However, we know that changes to the climate are already being felt in Minnesota. Minneapolis should explore the potential impacts and responses and build resiliency in local government and the community.

Deleted: We

Buildings & Energy

Goals

1. Achieve **15 percent energy efficiency in residential buildings** from the growth baseline by 2025.
2. Achieve **20 percent energy efficiency in commercial buildings** from the growth baseline by 2025.
3. Increase **electricity from local & directly purchased renewables from 1.5 to 5 percent** of the total consumed by 2025.¹ Not sure if we should list specific programs like WindSource

Comment [g2]: (utility renewable energy rates or community solar participation)

Deleted: (like WindSource)

Comment [g3]: We could revise the goal to "10 percent of residential electric energy consumption and 5 percent of commercial and industrial consumption."

Comment [g4]:

Deleted: ke

Cross-Cutting Strategies

1. **Launch a City initiative to make Minneapolis the most energy-efficient city in America.** Most of the energy in Minneapolis is consumed by businesses. Focus on efforts that large businesses/properties could undertake to reduce their energy usage. Research shows that the most effective energy efficiency programs succeed because they have committed leadership from the top. The City can use its leadership position to bring top City leaders to the table and affirm their commitment to working together to achieve this goal.
2. **Ensure that City facilities are models of energy-efficiency and renewable energy technology.** The City will investigate opportunities in buildings, street lighting, traffic signals and parking ramps to constantly increase energy efficiency and reduce water use. The water treatment plant is a large energy user, and opportunities for increasing efficiency will be continuously reviewed. Tools like the State's Guaranteed Energy Savings Program could be used to finance retrofits to city buildings. The City will continue to identify opportunities for renewable energy deployment on City facilities to reduce long-term operating costs and demonstrate new technologies.
3. **Support the State's adoption of the latest International Energy Conservation Code (IECC) and International Green Construction Code (IGCC) and adopt the IGCC locally.** The IECC and IGCC will change the building code to require new commercial construction be more water and energy efficient and more durable. If the IGCC is adopted at the state level as an appendix chapter [to the building code](#), Minneapolis will need to adopt it locally before it can be in force.
4. **Incentivize energy and water efficiency in private buildings during every interaction with the City.** City departments could promote energy and water efficiency efforts to anyone interacting with the City for regulatory purposes (moving beyond compliance). This may be targeted towards certain kinds of buildings that showed high promise for targeted efforts on energy efficiency, such as restaurants.
5. **Require City-financed projects to meet an energy efficiency standard, like Sustainable Buildings 2030.** The State of Minnesota has adopted a requirement that all State bonded projects meet the SB2030 standards. This requires progressively better energy performance from new projects. Similar requirements include St. Paul's Sustainable Building Policy. Alternatively, or in combination, the city could require projects to complete Xcel Energy's Energy Design Assistance program. In conjunction, the

¹ The percent of Minneapolis' electricity consumption that is coming from renewables is calculated based on generation sources [that are](#) above and beyond Xcel Energy's average grid mixture. Sources like WindSource and local, distributed generation would be counted towards the [City's](#) goal. In 2010, 19% of the fuel sources used by Xcel to generate grid electricity came from renewable sources.

Deleted:

City should review the ratios required for project financing (gap financing to overall project cost) to minimize any disruption to affordable housing construction that may be caused by implementing additional [energy efficient](#) requirements.

6. **Explore opportunities to restructure the [mechanical permit fee](#) schedule and other fee schedules to incentivize energy- and water-efficient products and renewable energy.** Mechanical permit fees for products like furnaces are currently based on a percentage of the total value of the work being performed. More energy efficient products are typically more expensive than less efficient products, increasing the permit fee, which could be a disincentive to contractors and building owners to install more efficient equipment. With Regulatory Services staff and stakeholders, explore changes to the permit fee structure (ideally revenue neutral) that would incentivize the installation of more energy- and water-efficient equipment or renewable-supportive building design (e.g., “solar ready” buildings).
7. **Determine the feasibility of establishing conservation-based pricing or structuring of franchise fees and using the franchise agreement to support renewables.** During the update of franchise agreements with utilities, Minneapolis should explore options to encourage energy conservation – through utility fee structure or the price passed on to customers. Examples could include structuring fees based on usage per customer or reducing fees if utilities meet energy efficiency/CIP goals. Franchise negotiations also provide an opportunity to plan for better integration of distributed solar PV into the grid (e.g., by linking up to the distribution system currently in place in many City rights-of-way).
8. **Evaluate and expand incentives granted for high energy performance.** Density bonuses are currently available to developments in the downtown zoning districts achieving high energy performance and can be used as an amenity for a planned unit development to obtain approvals for alternatives to the zoning regulations. These bonuses could be extended to areas outside of downtown and/or incorporated into other incentive programs. Extend these incentives to buildings that incorporate or are designed to allow for easy installation of significant renewable energy systems.
9. **Develop tools to finance energy efficiency and renewable energy retrofits for commercial and residential buildings that have low barriers to entry and limited risk for local government.** Property-assessed, on-bill and other financing tools could provide low-interest financing opportunities for homeowners and commercial properties and avoid issues like opportunity costs, high interest rates or high barriers to entry. Working through a process led by the State of Minnesota, identify tools that the City or another regional entity can develop to provide more opportunities for energy efficiency and renewable energy financing.
10. **Support the adoption and implementation of emissions reductions plans by [local businesses](#), [other government entities and institutions](#).** Hennepin County and the University of Minnesota have adopted targets for emissions reduction. Other entities, like health care campuses, may also be taking action on greenhouse gas emissions. Minneapolis should support these and other efforts and collaborate on implementation. The University of Minnesota has adopted aggressive targets for reducing greenhouse gas emissions from their operations, including achieving net zero emissions by 2050. Whenever possible, Minneapolis will support the University’s efforts to reduce emissions [and should do so with other entities’ emissions reduction plans](#).

Comment [g5]: Great!

Deleted: other

11. **Monitor new technologies and regularly reassess strategies. Encourage implementation when feasible.** There are many new technologies that could hold promise for energy efficiency and reducing emissions. Real-time pricing coupled with smarter appliances could reduce costs for electricity consumers and emissions. Advanced energy management technology could reduce wasted energy.
12. **Identify opportunities to increase conservation efforts within the downtown district heating and cooling system and make the system more efficient using technologies like combined heat and power.** The downtown district heating and cooling system, in total, represents one of the single largest loads in the City. Operated by NRG, the City is a major user, with connected loads including the Convention Center. Because customers on this system are unable to access utility conservation programs, an opportunity exists for the City to help increase the efficiency of the customers on this system by providing access to CIP programs. There may also be opportunities to make the district heating and cooling itself more efficient (for example, natural gas fired plants could be retrofitted to include combined heat and power generation). A new business model for energy services could include customer-sited renewable energy installations owned and managed by the district energy system as part of heating or cooling services, or use of renewable fuels in heating and cooling plants. The City should work with Hennepin County and NRG to determine where these retrofits might make sense.
13. **Identify opportunities to expand the use of district heating systems to new and existing buildings.** The downtown district heating and cooling system provides an efficient alternative to individual building heating and cooling systems. Explore barriers to expansion into existing and new buildings in downtown. Identify opportunities for expanded district heating and cooling outside downtown with new or existing systems.

Comment [g6]: NRG transparency a concern for many potential clients. If there was more transparency with rates/billing, there might be more willingness on the part of building owners to participate.

Deleted: do not have

Deleted:

Deleted: to

Deleted: there is

Deleted: c

Deleted: ,

Residential Buildings

1. **Help 75 percent of Minneapolis homeowners participate in whole-house efficiency retrofit programs by 2025.** The City of Minneapolis has provided initial support for CEE's Community Energy Services (CES) program, which has served about 4,800 Minneapolis owner-occupied homeowners, or a little over 5% of the target population. The City could continue to help recruit homeowners into the program, and set a goal of 75% of homeowners participating in CES or a similar whole-house retrofit program.
2. **Create time-of-sale and time-of-rent energy label disclosure.** New homeowners and potential tenants are a target group to promote energy upgrades, as they can be more receptive to needed upgrades, especially when financing is available. Tenants could also use an asset rating label to make comparisons about energy performance and cost between units or buildings. Minneapolis currently requires a home inspection prior to any Minneapolis home being put on the market, called the Truth-in-Housing program. The City could "green the Truth-in-Housing program" by including the collection of data sufficient to generate an energy label. In order to be cost-effective, data collection would need to be as limited as possible, while providing useful information to the homeowner. For Minneapolis housing stock, the Center for Energy and Environment has developed such a label that is particularly relevant and is currently used in the Community Energy Services residential program. This label could be expanded for inclusion in the Truth-in-Housing program. A label for multi-family structures does not yet exist, but once developed, should be utilized by Minneapolis.

Deleted: T

Deleted: for Minneapolis housing stock that

Deleted: being

Deleted: , and

Deleted: use

Deleted: employed

3. **Connect and collaborate with other residential energy efficiency efforts.** This includes:
 - Helping to promote and work with on-line energy efficiency efforts that build teams and help to increase energy efficiency awareness and actions, including the Minnesota Energy Challenge, and OPOWER's new Facebook application.
 - Promoting appliance trade-ins through City events [to encourage the use of more energy efficient appliances](#).
 - Promoting the use of energy benchmarking in Minneapolis multifamily buildings, as through the Minnesota Energy Scorecards program: www.energyscorecardsmn.com

Commercial Buildings

1. **Continue to host an annual Energy Reduction Challenge ("Kilowatt Crackdown") for Commercial Buildings in conjunction with the Building Managers and Owners Association (BOMA) and other partners.** BOMA has developed a program, called the Kilowatt Crackdown, which local [BOMA](#) chapters can implement. Building owners track their energy use, through the EnergySTAR Portfolio Manager tool, over the course of a year or two. This is compared to a benchmark of the previous year, and the buildings with the highest energy reduction receive awards ([monetary, plaques, etc](#)).
2. **Implement a Building Energy Disclosure policy for medium and large commercial buildings.** A disclosure policy for commercial buildings that requires publication of data annually will help increase the impact of energy use information in the marketplace, driving further energy efficiency improvements.
3. **Explore implementation of a commercial asset rating program, such as the Department of Energy's Commercial Building Energy Asset Rating.** Asset ratings provide a tool to evaluate the physical characteristics and as-built energy efficiency of buildings. An asset rating can also identify areas where improvements are needed.
4. **Develop "green lease" model language that allows building owners and tenants to share the energy savings from building capital improvements.** Tenants and building owners often have a split incentive when it comes to energy efficiency improvements since tenants frequently pay the energy bills. New model language could make more capital improvements likely.

Industrial Buildings

1. **Continue to support a loan program to help businesses including industrial companies to become more energy efficient and expand their businesses.** A relatively small number of Minneapolis industrial customers are responsible for a large proportion of total energy usage in the City. Focusing efforts to increase the energy efficiency of these businesses can have a large impact, as well as increase the competitiveness of Minneapolis businesses and support job growth.

Renewable Energy

1. **Support efforts to align utility practices with city and state renewable energy policy.** State and local policies express a clear preference for renewable energy and distributed generation. The City thus supports efforts to reform or eliminate all practices that discourage property owners from adopting on-site renewable energy generation, including limiting standby charges, improving interconnection standards, modifying demand charges, expanding “net metering” benefits to large commercial/industrial businesses, and exploring concepts like feed-in tariffs. The City should continue intergovernmental relations efforts to reduce barriers and encourage development of renewable energy resources.
2. **Investigate the feasibility of large-scale renewable energy purchasing for the municipal government and/or residents.** The City routinely receives unsolicited requests to invest in bulk purchasing of renewable energy. Establish a proactive review process for these requests and/or explore an RFP process for bulk purchasing.
3. **Create policies and programs to incorporate renewable energy into buildings.** A number of cities and states across the nation are creating long-term policy goals and setting in motion building code changes that anticipate the declining cost curve for both solar energy and energy efficiency.
 - Develop a “solar-ready” building certification. Existing buildings were not built to accommodate solar energy installations; retro-fitting existing buildings adds significant costs to solar energy. Making new buildings “solar-ready” adds virtually no cost to construction costs. The next generation of the city’s building infrastructure should accommodate the next generation of energy production.
 - Encourage “net-zero” energy buildings. Net-zero energy buildings maximize synergies between energy efficiency and distributed energy generation. Policies in other states are anticipating building codes that require net-zero standards for residential buildings as soon as 2020. Minneapolis should plan to capture this transformative market trend through support of state efforts and creation of local incentives.
4. **Support new financing and ownership models for developing Minneapolis’ solar resource.** Support explicit authorization of third-party solar leasing and ownership and enabling community solar projects. Expand access to on-site renewable energy generation by simplifying the adoption process of third party ownership and leasing models. Enable the cost-effective bundling of tax incentives, long-term financing, installation, and operation and maintenance into a single transaction. Minneapolis residents who do not own property or whose property has a poor solar resource should be allowed to own part of an off-site solar PV installation, and receive a share of the production credits on their utility bill.

Deleted: Third party ownership and leasing models

Deleted: e

Deleted: and

Deleted: enabling

Deleted: enabled

Transportation & Land Use

Goals

1. **Reduce automobile vehicle miles traveled in Minneapolis** while improving accessibility, increasing transportation choices, and promoting and accommodating [dense and sustainable](#) growth.
2. Support **livable and walkable neighborhoods** that meet the needs of all Minneapolis residents.
3. **Grow jobs and housing** to support [economic growth](#) and non-auto transportation modes.
4. Increase the share of Minneapolis residents and workers choosing **non-auto modes** for commuting and other trips.
5. Through local action and federal and state legislation, **support a transition to cleaner fuels and more efficient vehicles.**

Deleted: a growing economy

Deleted:

Planning & Land Use

1. **Improve inter-departmental and inter-agency collaboration on transportation issues, and track progress.** City policy already instructs staff to work across departments on transportation and land use issues; it also recommends both formal and informal collaboration between the City and partners like the Metropolitan Council and Hennepin County. Add accountability to this policy direction by regularly reporting to the public and policymakers on the successes of recent collaborations, and challenges that may be hindering these partnerships.
2. **Plan for and encourage “complete neighborhoods.”** Residents of complete neighborhoods can safely and conveniently walk to obtain most of the basic goods and services they need on a daily basis. Explore changes to the zoning code to provide maximum flexibility for diverse commercial uses. This could include providing height or density [bonuses](#) for [leasable ground floor commercial spaces](#). This could also include “market development” strategies which would remove barriers for small-scale retail and essential services like daycare centers.
3. **Focus growth in and along land use features designated in *The Minneapolis Plan for Sustainable Growth*.** While supporting [transportation, residential and economic](#) growth throughout the city, follow the adopted Comprehensive Plan to guide future development toward areas with multi-modal transportation access. This means focusing growth along community and commercial corridors, in transit station areas, activity centers, and growth centers such as Downtown.
4. **Review the zoning code to identify impediments & incentives to the construction and retrofit of green buildings.** Further study may highlight opportunities to “green” the zoning code including:
 - a. Exempt greenhouses from maximum height calculation on multi-story structures.
 - b. Exempt additional wall insulation from FAR and setback calculations.
 - c. Allow boiler rooms on the roof of buildings.
 - d. Incentives in zoning to increase energy efficient construction, renovation and operation of buildings.
 - e. Incentivizing the inclusion of car-sharing as part of new developments.

Comment [g7]: In commercial districts, density bonuses already exist for providing mixed-use buildings. In residential districts, the types of commercial uses allowed is very limited.

Transit & Car Sharing

1. **Support the Metropolitan Council's goal of doubling regional transit ridership by 2030.** Through land use and transportation infrastructure decisions, communications and collaboration with partners, the City should support the Metropolitan Council in achieving its 2030 goal.
2. **Support the build-out and upgrade of regional and local transit lines.** The City should support and implement local and regional transit improvements consistent with Access Minneapolis and other plans to reduce VMT and provide more transportation options. Current regional transit facilities in the planning or construction phase include Central Corridor LRT, Southwest LRT, Bottineau and 35-W Bus Rapid Transit (BRT). Local improvements to the Primary Transit Network (PTN) include streetcar and arterial BRT lines.
3. **Advocate for an increase to the dedicated funding stream for transit construction and operations at the local, state level and regional level.** The current funding level for transit projects through the Counties Transit Improvement Board (CTIB) utilizes a quarter-cent sales tax to fund transit improvements. The original legislation proposed a half-cent sales tax. Increasing the amount that counties can opt-in to use would speed development of regional transit projects. Local governments could also benefit from additional tools for funding transit construction and operations like value capture along transit corridors.
4. **Work with Metro Transit and property owners to improve capacity and use of transit during special events.** Many attendees of major events at the Metro Dome, Target Field, the Convention Center and other locations in Minneapolis use transit, but the City should continue to work to increase the use of transit and non-auto modes for these events.
5. **Complete the downtown east-west transit spine improvements.** The Access Minneapolis Plan calls for the upgrade of transit service in the vicinity of 7th Street. This corridor is the second-busiest in terms of weekday boardings in downtown. This improvement may be similar to the Marq2 project, which improved travel times and provided dynamic signage to improve user experience and convenience.
6. **Expand car-sharing services to on-street spaces.** Parking staff will soon begin the process to bring car-sharing services to on-street spaces in the city. Continue to expand these services as demand and feasibility permit.
7. **Make car-sharing convenient and affordable by reducing sales tax on car-sharing products to the minimum rate.** Currently, car-sharing transactions in Minneapolis appear to be taxed at a higher rate (~12 percent) than the general sales tax rate for Minneapolis (7.775 percent). Consider separating car-sharing services from regular rental car service in terms of special sales tax rates.

Deleted: the

Deleted: R

Comment [g8]: Excellent!

Active Transportation

1. **Achieve the City's adopted targets for bicycle mode share and bicycle counts and adopt a stretch goal of 15 percent for 2025.** The City has adopted targets for bicycle mode share of 6 percent by 2012 and 7

percent by 2014. In addition, the City has adopted a target to increased cyclists in annual counts by 60 percent over 2008 by 2014. Consider a mode share goal for 2025 of 15%.

2. **Construct 30 miles of on-street, protected bike facilities (cycle tracks) by 2020 to allow safe and efficient travel for all types of cyclists.** Bicycles are a zero-emissions form of transport. Addressing the perception of safety of on-street bicycle facilities will attract more cyclists to Minneapolis' network of facilities and help to meet mode share goals.
3. **Revisit minimum bicycle parking requirements to support the City's bicycle mode share targets.** The City is investing in on- and off-street bicycle facilities, and has set targets for bicycle use. Providing sufficient parking that is convenient and safe will be a key in meeting these goals. Existing standards, such as the Association of Pedestrian and Bicycle Professional parking guide and the City's adopted workplace access and parking guidelines could be reviewed for consistency with current code. Bicycle parking demand may also vary more based on geography than auto parking. More data on local parking demand is needed.
4. **Support implementation of the Pedestrian Master Plan and Bicycle Master Plan.** When walking and biking are safe, efficient, and comfortable, the benefits are felt community-wide and reduce dependence on automobiles. Monitoring and following up on the Pedestrian and Bicycle Master Plans' recommendations will be integral to meeting greenhouse gas reduction goals across the transportation and land use sectors.
5. **Allow special service districts to levy a surcharge on parking meters to fund streetscape improvements.** District advisory boards can opt to apply a streetscape improvement surcharge to on-street parking, the revenue from which would be used for streetscaping or other improvements that make walking, cycling, or taking transit more attractive.
6. **Continue "Safe Routes to School" efforts.** The City's Safe Routes to Schools effort encourages children to adopt healthy habits of walking and biking. This is done by improving safety near schools through infrastructure projects, as well as fostering a culture of walking and biking in the schools through educational programs.
7. **Adopt a Complete Streets policy.** A Complete Streets policy will demonstrate a commitment to providing adequate pedestrian, transit and bicycle facilities during every road improvement project. While the City already has adopted many elements of Complete Streets work, such as a Bicycle and Pedestrian Master Plan and a multi-modal transportation plan, such a policy may be necessary to best position the City to receive outside funding.

Comment [g9]: For??

Parking Management

1. **Investigate demand-based parking pricing strategies for metered areas.** The city's new parking meters allow for variable pricing. Vary pricing on metered streets, with a goal of achieving one empty spot per block, in order to reduce "cruising" for spots and improve traffic flow.

Comment [g10]: Cool! Yes, Cool!

2. **Continue to adjust minimum parking requirements to better promote alternative modes of transportation.** For example, developers of multi-family housing currently qualify for a 10 percent reduction in required parking stalls if the parcel is within 300 feet of a transit stop, even though one-quarter mile (1,320 feet) is commonly accepted as the distance an average rider will walk to a bus stop.
3. **Support the development of new information technology to reduce “cruising” for parking and make more efficient use of curb & ramp space.** Parking staff are developing new approaches, such as a mobile phone app, which will provide more information to drivers on the location of vacant parking spaces. These types of applications can reduce cruising for parking, which can be a significant source of congestion in certain parts of the city at certain times.
4. **Support the development of a citywide framework for curb space use.** Parking staff will be developing a framework plan to understand how to best use curb space, both for parking, valet services, delivery vehicles, active transportation and other uses. Climate Action Plan goals for increasing active transportation and reducing VMT should be considered during this process.
5. **Require or incent parking “unbundling”.** Adopt requirements or incentives for developers [stating](#) that parking be separated from commercial space and residential units in lease and sale agreements.

Transportation Demand Management & Intelligent Transportation Systems

1. **Support the Downtown Transportation Management Organization’s goal to reduce 4.8 million drive alone trips by 2015.** The Downtown TMO helps commuters get into downtown with less reliance on the single-occupancy vehicle. Supporting their goals include increasing bicycling, transit and rideshare use.
2. **Explore changes to signal timing to reduce idling, improve traffic flow and accommodate non-auto modes.** City staff are currently reviewing signal timing on a citywide basis to increase network efficiency. Potential changes to reduce emissions could include “green waves”, either for cars or cyclists, depending on the roadway and changing lights to flashing red/yellow late at night and early in the morning.
3. **Support the expansion of congestion pricing, dynamic signage and other traffic management techniques on regional highways.** Demand-based pricing can help reduce congestion while encouraging carpooling and transit use. Other techniques that have proven beneficial are dynamic signage which can help reroute drivers and rapid response to crashes.
4. **Support [large employers](#) in implementing alternative work arrangements for employees.** Results-Only Workplace Environments (ROWE), variable work schedules, telecommuting, and teleconferencing all have the potential to reduce overall trips or spread trips from rush hour into less-congested times. The City can collaborate with the downtown TMO, Downtown Council, and other organizations to provide businesses with information and expertise on these practices.

Comment [g11]: Only large?

Clean Fuels

1. **Explore regulatory incentives to increasing electric vehicle charging infrastructure.** The inclusion of electric vehicle charging could be incentivized through the zoning code or other city regulations for large multi-family and commercial buildings. As technology and adoption rates of electric vehicles change, the city should revisit these incentives and consider requirements for EV charging in parking code for multi-family and commercial buildings as appropriate based on demand.
2. **Provide electric vehicle charging stations at City-owned facilities where feasible.** Continue to investigate the feasibility of vehicle charging stations at public facilities as funding allows. Closely monitor electric vehicle technology to ensure investments are appropriate.
3. **Increase the fuel efficiency of the city's licensed taxi and car service fleet.** The City's current requirement for taxi vehicles is to achieve 23 mpg or better in city driving. As the City updates this policy, consider increasing the minimum mpg requirement. Given that taxis are high-mileage vehicles, better fuel efficiency can pay off more quickly than in other applications.
4. **Support the proposed Federal fuel efficiency improvements.** On-road vehicle fuel efficiency has a significant impact on the transportation sector emissions in Minneapolis. Changes to the Federal CAFÉ standards will increase the fuel efficiency of vehicles on the road.
5. **Support increased fuel efficiency in public fleets.** Minneapolis has adopted a green fleets policy which calls for fuel efficiency improvements in City-owned vehicles and equipment. Support the efforts of entities like the Metropolitan Council and the State of Minnesota to improve the fuel efficiency of their fleets. In particular, hybrid or fully electric buses have the added benefits of reducing noise pollution and localized air pollutants like particulates in high-traffic areas.
6. **Support state efforts to adopt a low-carbon fuel standard.** As outlined in the Minnesota Climate Change Advisory report, support the adoption of a statewide Low-Carbon Fuel Standard, with a goal of reducing the lifecycle carbon intensity of transportation by 12% by 2025 from 2007 levels.
7. **Support the development of alternative jet fuels and ensure MSP is prepared for their increased use.** Most emissions attributable to MSP are produced by jet aircraft. Domestic and foreign airlines have successfully trialed a variety of biofuels, which have been approved for use in commercial flights since July 2011. As production chains mature, MAC and its airline partners will need to be sure MSP facilities are adequately prepared to store and dispense biofuel-blended jet fuel. Minneapolis should also support future regulatory actions designed to accelerate the switch to cleaner-burning jet fuels.

Comment [g12]: Provide free parking to cars charging?

Other Strategies

1. **Continue to shift to LED streetlights.** Streetlights are the second largest energy user in the City enterprise, after water treatment. Replacing conventional bulbs with LEDs can net up to a 50 to 60 percent reduction in energy use and have the potential to reduce maintenance costs. As capital costs come down, continue to replace older bulbs with more efficient LEDs, with a long term goal of citywide LED use.

2. **Support continuing efficiency efforts at the Minneapolis-St Paul International Airport.** Increasing vehicle fuel efficiency has led to a reduction in greenhouse gas emissions from the airport. Investigate additional partnership opportunities to support the Metropolitan Airports Commission in meeting the state greenhouse gas reduction targets.
3. **Assist the Metropolitan Airports Commission in making MSP the nation's "greenest" airport.** MAC's Stewards of Tomorrow's Airport Resources program identifies numerous projects that could reduce the airport's emissions, ranging from on-site clean energy production to grey water recycling and storm water reclamation. The airport's constant flow of travelers also make it an excellent location for demonstrating green technologies and educating the public about the causes and impacts of climate change.
4. **Encourage the Metropolitan Airports Commission to expand its use of renewable energy resources.** MAC is exploring investment in renewable energy sources like wind (from off-site sources), solar, and geothermal. The City has a great deal of experience in this area, particularly with solar photovoltaic and thermal technologies. Staff should share expertise and key lessons as MAC undertakes similar initiatives. Examples from other airports, like Denver International, show that large open spaces with unobstructed solar access can provide good opportunities for solar generation.
5. **Support the implementation of more efficient takeoff and landing procedures at MSP International Airport.** Efficiency improvements like pre-set flight paths and GPS-based navigation allow aircraft to take off and land with fewer air quality and noise impacts on airport-adjacent communities – and to burn less fuel, substantially reducing greenhouse gas emissions. The Federal Aviation Administration (FAA) is working with MSP and other local partners to increase the use of these area navigation (RNAV) and required navigation performance (RNP) procedures. Minneapolis should leverage its role on airport-related boards and committees to encourage quick implementation of these procedures with GHG emissions reduction a central goal.
6. **Encourage the State of Minnesota to permit the testing of self-driving vehicles on public roadways.** In the long term, autonomous vehicles have the potential to reduce the total number of vehicles on the road, increase fuel efficiency and increase safety for cyclists and pedestrians, all of which could have a positive climate impact. Permitting the testing of these vehicles will signal to industry that Minnesota is eager to explore this new technology, and could bring economic benefits.

Waste & Recycling

Goals

1. Achieve a **zero percent growth rate** in the total waste stream from 2010 levels.
2. **Recycle 50 percent of the waste stream** (commercial and residential) in Minneapolis by 2025.
3. **Increase organics collection to 15 percent** of the waste stream by 2025.
4. Reduce the flow of wastewater from Minneapolis and support efforts to make wastewater treatment more energy efficient.
5. **Increase awareness of the lifecycle impacts of products** to address GHGs occurring outside the community.

Reducing Waste

1. Identify consumer products and packaging that are neither recyclable nor compostable and engage companies, consumers and retailers in a campaign to reduce the disposal of such products and packaging through reuse efforts, switch to alternative materials, or make changes to the supply chain. In addition, the City should participate in and support the efforts of the MPCA Product Stewardship Council.
2. Identify and promote reuse and repair businesses and opportunities which can reduce the disposal of used goods. Evaluate existing ordinances and remove barriers for reuse and repair opportunities. Connect with the State's reuse network. Examples include "fix-it clinics" or promoting existing businesses with a reuse focus.
3. Work with Hennepin County and other partner organizations to encourage businesses and residents to purchase reused and reusable goods (Choose to Reuse campaign).
4. Expand Green Building programs (such as a requirement for city-financed new construction and renovation projects) to promote a reduction in construction and demolition waste.
5. Expand neighborhood and backyard organic composting through community initiatives and advocate for updated composting rules at a state level.
6. Develop innovative marketing and behavioral strategies. Examples could include behavioral strategies to reduce food waste like signage and reducing tray use, and supporting County efforts for expanded outreach to commercial and multifamily properties.
7. Undertake a public education campaign to inform residents about opt-out opportunities for material like phone books and junk mail. Additionally, explore requiring that businesses like phone directories operate as an opt-in service in Minneapolis.
8. Work with Hennepin County, regional groups and the State of Minnesota to develop better data collection tools and sources, especially for commercial and multifamily waste data.
9. Require City-financed development projects to meet a green building standard (see Buildings & Energy Cross-Cutting Strategy 5) that includes a waste reduction and/or recycling standard. Projects that receive State money must meet Minnesota Green Communities standards, which include rules about construction and debris waste and recycling infrastructure. The City of Minneapolis should follow suit in order to support its existing waste reduction and recycling goals, and to reduce GHG emissions.

Increasing Recycling

1. Support implementation of a single-sort recycling program for curbside pickup.
2. Continue to expand the types of materials accepted by the City's recycling program.
3. Complete a comprehensive assessment of pricing incentives and penalties for residential waste and recycling services and identify strategies, such as volume-based variable-rate pricing, that could increase recycling and reduce waste.
4. Enforce the commercial recycling ordinance and undertake an educational campaign to expand recycling options in multi-family housing.
5. Identify financial and other barriers to recycling in multi-family buildings (different priorities between property management company and tenants, lack of knowledge of costs, etc.).
6. Work with the County to increase the rate of recycling of construction and demolition debris in the city.
7. Support state adoption of the new International Green Construction Code (IGCC) and adopt the IGCC locally (see Buildings & Energy Cross-Cutting Strategy 3). The IGCC includes requirements for diverting construction and debris waste and incorporating recycling infrastructure in the design of projects. If the IGCC is adopted at the state level as an appendix chapter, Minneapolis will need to adopt it locally before it can be in force.

Increase the Composting of Organics

1. Identify major organic waste producers (food service, schools, hospitals, etc.) and conduct a targeted campaign to increase organics recycling. Identify corridors (Nicollet Avenue, for example) with a critical mass of large producers that might make organized collection more feasible. Consider an ordinance requiring large producers to divert organics.
2. Based on the results of pilot programs and through a detailed study, determine the feasibility and costs of expanding the collection of source-separated organics at residential properties citywide. After these costs are known, reassess the best approach for removing organics from the residential waste stream.
3. Support more options for the local processing of organic waste at both large and small scales. There are currently few options for processing collected organic waste in the Twin Cities region. Changes to state and county rules, or a stronger local market for organic composting may be necessary to build more processing capacity.
4. Make City worksites a model for organics composting by developing a collection program for city-owned and (where possible) city-leased buildings.

Addressing Product Lifecycle Impacts

1. Work with Homegrown Minneapolis to incorporate more information on food choice impacts, particularly as it relates to greenhouse gas emissions.

2. Develop educational materials that illustrate the emissions impacts of common products or behaviors, and include these materials in city utility bills.

Reducing Wastewater Treatment Impacts

1. Work with the Metropolitan Council to achieve their energy use goals and track associated impacts on GHG emissions from Minneapolis contribution to wastewater flows.
2. Achieve a 75% participation rate in the Community Energy Services program for eligible Minneapolis properties, which includes low-flow water fixture information and installations.
3. Explore options for expanding the use of greywater systems and water conservation measures in public and private buildings. This could be included in the local adoption of the new state building codes as an elective or promoted in city-financed projects.

DRAFT

Minneapolis Climate Action Plan: Draft Emissions Reduction Goals & Strategies (Oct. 30, 2012)

Clean Fuels

1. Explore regulatory incentives to increasing electric vehicle charging infrastructure. The inclusion of electric vehicle charging could be incentivized through the zoning code or other city regulations for large multi-family and commercial buildings. As technology and adoption rates of electric vehicles change, the city should revisit these incentives and consider requirements for EV charging in parking code for multi-family and commercial buildings as appropriate based on demand.
2. Provide electric vehicle charging stations at City-owned facilities where feasible. Continue to investigate the feasibility of vehicle charging stations at public facilities as funding allows. Closely monitor electric vehicle technology to ensure investments are appropriate. **Investigate the feasibility of installing CNG fueling stations at City garages as funding allows and/or the potential of utilizing existing Public CNG fueling stations (i.e. CenterPoint Energy-501 West 61st Street, Waste Management-Blaine) in Minnesota. Targets for the greatest payback would be where heavy duty vehicles are located. Examples are refuse trucks, dump trucks, snow plows, asphalt trucks and fire trucks.**
3. Increase the fuel efficiency of the city's licensed taxi and car service fleet. The City's current requirement for taxi vehicles is to achieve 23 mpg or better in city driving. As the City updates this policy, consider increasing the minimum mpg requirement. Given that taxis are high-mileage vehicles, better fuel efficiency can pay off more quickly than in other applications. **Provide incentives for taxis to use alternative fuel vehicles (AFV's) such as electric or natural gas fueled vehicles.**
4. Support the proposed Federal fuel efficiency improvements. On-road vehicle fuel efficiency has a significant impact on the transportation sector emissions in Minneapolis. Changes to the Federal CAFÉ standards will increase the fuel efficiency of vehicles on the road. **Implement the recommendations of the Environmental Initiatives' Clean Air Dialogue. Implementing these recommendations will improve air quality in Minnesota and the ability to respond to potential nonattainment designations.**
5. Support increased fuel efficiency in public fleets. Minneapolis has adopted a green fleets policy which calls for fuel efficiency improvements in City-owned vehicles and equipment. Support the efforts of entities like the Metropolitan Council and the State of Minnesota to improve the fuel efficiency of their fleets. In particular, hybrid or fully electric **or natural gas** buses have the added benefits of reducing noise pollution and localized air pollutants like particulates in high-traffic areas. **Work with Metro Transit to incorporate the use of all cost effective alternative fuels to fuel their fleets.**
6. Support state efforts to adopt a low-carbon fuel standard. As outlined in the Minnesota Climate Change Advisory report, support the adoption of a statewide Low-Carbon Fuel Standard, with a goal of reducing the lifecycle carbon intensity of transportation by 12% by 2025 from 2007 levels.

7. Support the development of alternative jet fuels and ensure MSP is prepared for their increased use. Most emissions attributable to MSP are produced by jet aircraft. Domestic and foreign airlines have successfully trialed a variety of biofuels, which have been approved for use in commercial flights since July 2011. As production chains mature, MAC and its airline partners will need to be sure MSP facilities are adequately prepared to store and dispense biofuel-blended jet fuel. Minneapolis should also support future regulatory actions designed to accelerate the switch to cleaner-burning jet fuels.

Other Strategies

1. Continue to shift to LED streetlights. Streetlights are the second largest energy user in the City enterprise, after water treatment. Replacing conventional bulbs with LEDs can net up to a 50 to 60 percent reduction in energy use and have the potential to reduce maintenance costs. As capital costs come down, continue to replace older bulbs with more efficient LEDs, with a long term goal of citywide LED use.
2. Support continuing efficiency efforts at the Minneapolis-St Paul International Airport. Increasing vehicle fuel efficiency has led to a reduction in greenhouse gas emissions from the airport. Investigate additional partnership opportunities to support the Metropolitan Airports Commission in meeting the state greenhouse gas reduction targets.
3. Assist the Metropolitan Airports Commission in making MSP the nation's "greenest" airport. MAC's Stewards of Tomorrow's Airport Resources program identifies numerous projects that could reduce the airport's emissions, ranging from on-site clean energy production to grey water recycling and storm water reclamation. The airport's constant flow of travelers also make it an excellent location for demonstrating green technologies and educating the public about the causes and impacts of climate change. **The Metropolitan Airports Commission should evaluate the installation of a public CNG station at, or near, the airport. The many vehicle trips to and from the airport, and to and from downtown Minneapolis would produce low cost fuel, environmental and noise reduction benefits from the use of natural gas and other alternative fuels. Shuttle buses are an excellent application for natural gas fueling. Natural Gas shuttles are currently in operation at several airports throughout the United States.**
4. Encourage the Metropolitan Airports Commission to expand its use of renewable energy resources. MAC is exploring investment in renewable energy sources like wind (from off-site sources), solar, and geothermal. The City has a great deal of experience in this area, particularly with solar photovoltaic and thermal technologies. Staff should share expertise and key lessons as MAC undertakes similar initiatives. Examples from other airports, like Denver International, show that large open spaces with unobstructed solar access can provide good opportunities for solar generation. **Also explore the use of a Combined Heat and Power System, where a natural gas fueled generator also produces usable thermal energy, with up to 85% overall efficiency.**

5. Support the implementation of more efficient takeoff and landing procedures at MSP International Airport. Efficiency improvements like pre-set flight paths and GPS-based navigation allow aircraft to take off and land with fewer air quality and noise impacts on airport-adjacent communities – and to burn less fuel, substantially reducing greenhouse gas emissions. The Federal Aviation Administration (FAA) is working with MSP and other local partners to increase the use of these area navigation (RNAV) and required navigation performance (RNP) procedures. Minneapolis should leverage its role on airport-related boards and committees to encourage quick implementation of these procedures with GHG emissions reduction a central goal.
6. Encourage the State of Minnesota to permit the testing of self-driving vehicles on public roadways. In the long term, autonomous vehicles have the potential to reduce the total number of vehicles on the road, increase fuel efficiency and increase safety for cyclists and pedestrians, all of which could have a positive climate impact. Permitting the testing of these vehicles will signal to industry that Minnesota is eager to explore this new technology, and could bring economic benefits.

Hennepin County Comments on Minneapolis Climate Action Plan

Attention: Brendon Slotterback

The following are comments by Hennepin County on the October 30, 2012 draft proposed Minneapolis Climate Action Plan, conveyed on behalf of Carl Michaud, Director, Hennepin County Department of Environmental Services and member, Minneapolis Climate Action Plan Steering Committee.

General Comments

1. If this document is intended to be read and reviewed by the general public, more description is needed on the existing programs that are referenced in the Plan, for example, Sustainable Buildings 2030 and Xcel Energy's Energy Design Assistance program. Also, it would be useful to eliminate the use of acronyms, for example, CIP, GHG, PV, CEE and NRG, and to define them when used.
2. The word "support" is used throughout the document. It is difficult to know how the City will support the various strategies. Is it possible to more definitively describe how the strategies translate into work plans, metrics, and priorities?

Comments specific to the Buildings and Energy Section

Goals

- Consider stating a growth baseline for the first two goals. Defining the growth baseline is a critical part of the plan and essential for any reader to understand the City's intent.
- The third goal is unclear. Is the proposal to increase energy generation from renewables from 1.5 to 5% or to achieve an increase between 1.5 to 5%?

Comments specific to the Cross-Cutting Strategies Section

1. If the City is going to enforce initiatives to businesses/properties, then the City should establish a community group, or use an existing one, to help develop these initiatives and establish buy-in at the onset.
3. Has the City compared the International Energy Conservation Code (IECC) and International Green Construction Code (IGCC) with the Minnesota Sustainable Building Guidelines (the Building, Benchmarking and Beyond program, or B3) and the Minnesota Sustainable Building 2030 guidelines (SB2030)? While most buildings are not required to meet the SB2030 goals, many are going through the Xcel Energy Engineering Design Assistance Program. The County supports the City's initiative, and recommends the City evaluate IGCC before adopting it locally to better understand the impacts before implementing. For example, what existing codes and guidelines are building owners currently using? Is the IGCC consistent? What budgeting and planning will be required once adopted? Is it better to integrate IGCC with existing measures through a voluntary or mandatory approach?
4. Is the intent of this recommendation to apply to private *commercial* buildings? How might this be applied to multi-tenant residential buildings? Would this apply to both new and existing buildings? Would

this only be applied for plan review or something as simple as a liquor license or rental license? Will this apply to public buildings, including City-owned buildings?

5. The comment here is similar to comments on strategy #3. How will the various codes, standards and guidelines be integrated and correlated to encourage the desired outcome (conservation and energy efficiency) and avoid unnecessary cost and unconstructive burden?

11. This recommendation seems a bit vague. Is it geared towards residential or commercial or both? Is this for City owned buildings or others? How would it be integrated with the requirements suggested in strategies #3 and #5?

12. This strategy should include proactive efforts by the City for upgrades to the downtown district heating and cooling systems in conjunction with other City projects. For example, advance planning on major street projects with district heating allows for expansions that are otherwise cost-prohibitive.

Comments specific to the Residential Strategies Section

2. Energy disclosure labels are a good idea, but do come with pitfalls. For example, an elderly couple may need to maintain a warmer temperature in their house for the entire day, while a middle aged working couple might set thermostats lower in winter and higher in summer during the day and when they are not at home. This may not be understood by a potential buyer or renter.

Comments specific to the Commercial Strategies Section

2. How will the public fully understand the operations of a building when comparing energy consumption of one building to another? Buildings may be perceived to be more or less energy efficient based on incorrect comparisons. How a building is used may have a greater impact on energy use than the efficiency of its mechanicals. For example, comparing buildings used for daytime services to those with increased operations, to others running 24/7 operations, may lead to false conclusions about the efficiency of a particular building.

3. How will the Department of Energy's Commercial Building Energy Asset Rating program be integrated with IECC, IGCC, B3, SB2030 and other rating systems? What does it mean to implement this? Is the City considering a requirement or voluntary standard? How will this assist the building owner to implement conservation and energy efficiency measures? Why is it important?

4. This is a great idea!

Comments specific to the Renewable Energy Strategies Section

In general, there are some great ideas in this section!

2. This is a worthwhile concept that deserves more detail. Would this include lease programs?

Comments specific to the Transportation & Land Use Section

Planning & Land Use

1. The county is a willing participant in collaborating on transportation issues. More exploration on how to “improve” these collaborations is needed.

Transit & Car Sharing

3. The County recommends adding “While ensuring adequate capacity on busses and trains to accommodate regular transit riders during special events.”
6. The County is of the opinion that car sharing vehicles should not be stored on county roads during the winter because snow removal activities occur at inopportune times and parked vehicles may need to be towed to accommodate plowing.

Active Transportation

1. With regard to biking mode share, the city uses the word "consider" in reference to a proposed mode share goal by 2025. Using that kind of language weakens a policy/implementation document.
2. The County understands the goal for constructing 30 miles of on-street, protected bike facilities (cycle tracks) by 2020, but cautions the parties that the real goal is to provide adequate facilities for cyclists and not to push for cycle tracks on county roads as the accomplishment. For example, the recent restriping of Park and Portland Avenues in south Minneapolis provides safer bike lanes for cyclists, but technically, the lanes are not cycle tracks. One should not be disappointed that the lanes are not cycle tracks.

The County recommends the following two additions:

- Improve pedestrian connections to transit service. Over 90% of transit trips begin and end with a pedestrian trip. Improving pedestrian connections (adding sidewalks, improving busy street crossings for pedestrians) can expand access to transit and boost transit ridership, particularly within LRT corridors--Hiawatha and SW LRT. Hiawatha Ave crossings need to be improved for pedestrians, and SW station areas and connections need to be designed so that people can easily walk to the stations (W Lake, Penn, Van White, and Royalston stations in particular). There are economic benefits of walkable/bikeable districts in and around stations.
- Add a target for pedestrian mode share and pedestrian counts. Transit and bicycling have mode share/ridership goals and so it seems appropriate to add a pedestrian mode share/count goal.

Transportation Demand Management & Intelligent Transportation Systems

1. Support the expansion of congestion pricing, dynamic signage and other traffic management techniques on regional highways. The transportation department has observed the use of dynamic signage as a means of advising the public of reasonable driving conditions along state facilities. Insofar as the county roads within the city tend to be predominantly urban in character, the use of dynamic signage and other traffic management technique opportunities on the roads will be limited. However, we should continue to look for circumstances where such actions may be fruitful.



Minneapolis Climate Action Plan

EMISSIONS REDUCTION GOALS & STRATEGIES

October 30, 2012

Implementation Goals

Minneapolis will meet the adopted 2015 and 2025 greenhouse gas emissions reduction targets.

While meeting emissions reduction targets, Minneapolis shall:

1. **Prioritize high impact, short timeframe, cost effective strategies.** Recent science suggests that immediate action (within 5 – 10 years) is necessary to bring down emissions to avoid severe impacts from climate change. This plan will prioritize strategies for implementation that may have the greatest impact on emissions in the short term, acknowledging that the greatest number of co-benefits might not be immediately realized. While seeking immediate impacts, this plan will acknowledge that we are regularly making decisions that may have impacts that will be felt for 50 or 100 years. We should always be cognizant of impacts on future generations.
2. **Seek strategies with multiple benefits with an understanding that there may be tradeoffs.** Wherever possible, implement strategies that provide a range of co-benefits (e.g., job creation, lifecycle cost savings to government or residents, improved public health, or broader awareness of climate impacts). Achieving one benefit may come with tradeoffs: a strategy may reduce greenhouse gas emissions and create new jobs, but require a significant up-front monetary investment. Policy makers and the community will need to carefully weigh these multiple benefits and costs while moving Minneapolis towards its emissions reduction targets.
3. **Avoid creating disparate impacts across Minneapolis communities and target strategies to communities that could most benefit.** Climate action strategies should be developed that avoid negatively impacting communities already heavily impacted by environmental or economic strain. Strategies should also be implemented in a way to benefit those most in need. This plan should also avoid shifting emissions or impacts outside of the city.
4. **Monitor progress annually and revisit goals and strategies as necessary.** The City of Minneapolis will continue to track community-wide greenhouse gas emissions and report on the implementation of climate action strategies and impacts.
5. **Begin building resiliency to climate changes and impacts.** This Climate Action Plan deals primarily with reducing emissions to mitigate climate change. However, we know that changes to the climate are already being felt in Minnesota. Minneapolis should explore the potential impacts and responses and build resiliency in local government and the community.

Buildings & Energy

Goals

1. Achieve **15 percent energy efficiency in residential buildings** from the growth baseline by 2025.
2. Achieve **20 percent energy efficiency in commercial buildings** from the growth baseline by 2025.
3. Increase **electricity from local & directly purchased renewables (like WindSource) from 1.5 to 5 percent** of the total consumed by 2025.

2006
→ what is growth baseline?

— please explain further

so is this
from 1.5%
up to 5%
or 1.5-5%?
a range
not clear

Cross-Cutting Strategies

1. **Launch a City initiative to make Minneapolis the most energy-efficient city in America.** Most of the energy in Minneapolis is consumed by businesses. Focus on efforts that large businesses/properties could undertake to reduce their energy usage. Research shows that the most effective energy efficiency programs succeed because they have committed leadership from the top. The City can use its leadership position to bring top City leaders to the table and affirm their commitment to working together to achieve this goal. } infrastructure is a
2. **Ensure that City facilities are models of energy-efficiency and renewable energy technology.** The City will investigate opportunities in buildings, street lighting, traffic signals and parking ramps to constantly increase energy efficiency and reduce water use. The water treatment plant is a large energy user, and opportunities for increasing efficiency will be continuously reviewed. Tools like the State's Guaranteed Energy Savings Program could be used to finance retrofits to city buildings. The City will continue to identify opportunities for renewable energy deployment on City facilities to reduce long-term operating costs and demonstrate new technologies.
3. **Support the State's adoption of the latest International Energy Conservation Code (IECC) and International Green Construction Code (IGCC) and adopt the IGCC locally.** The IECC and IGCC will change the building code to require new commercial construction be more water and energy efficient and more durable. If the IGCC is adopted at the state level as an appendix chapter, Minneapolis will need to adopt it locally before it can be enforced. enforced
4. **Incentivize energy and water efficiency in private buildings during every interaction with the City.** City departments could promote energy and water efficiency efforts to anyone interacting with the City for regulatory purposes (moving beyond compliance). This may be targeted towards certain kinds of buildings that showed high promise for targeted efforts on energy efficiency, such as restaurants. such as
5. **Require City-financed projects to meet an energy efficiency standard, like Sustainable Buildings 2030.** The State of Minnesota has adopted a requirement that all State bonded projects meet the SB2030 standards. This requires progressively better energy performance from new projects. Similar requirements include St. Paul's Sustainable Building Policy. Alternatively, or in combination, the city could require projects to complete Xcel Energy's Energy Design Assistance program. In conjunction, the

¹ The percent of Minneapolis' electricity consumption that is coming from renewables is calculated based on generation sources above and beyond Xcel Energy's average grid mixture. Sources like Wind Source and local, distributed generation would be counted towards the goal. In 2010, 19% of the fuel sources used by Xcel to generate grid electricity came from renewable sources.

City should review the ratios required for project financing (gap financing to overall project cost) to minimize any disruption to affordable housing construction that may be caused by implementing additional requirements.

6. **Explore opportunities to restructure the mechanical permit fee schedule and other fee schedules to incentivize energy- and water-efficient products and renewable energy.** Mechanical permit fees for products like furnaces are currently based on a percentage of the total value of the work being performed. More energy efficient products are typically more expensive than less efficient products, increasing the permit fee, which could be a disincentive to contractors and building owners to install more efficient equipment. With Regulatory Services staff and stakeholders, *the City will* explore changes to the permit fee structure (ideally revenue neutral) that would incentivize the installation of more energy- and water-efficient equipment *and* renewable-supportive building design (e.g., "solar ready" buildings).
7. **Determine the feasibility of establishing conservation-based pricing or structuring of franchise fees and using the franchise agreement to support renewables.** During the update of franchise agreements with utilities, Minneapolis should explore options to encourage energy conservation – through utility fee structure or the price passed on to customers. Examples could include structuring fees based on usage per customer or reducing fees if utilities meet energy efficiency/CIP goals. Franchise negotiations also provide an opportunity to plan for better integration of distributed solar PV into the grid (e.g., by linking up to the distribution system currently in place in many City rights-of-way). *photo-voltaic*
8. **Evaluate and expand incentives granted for high energy performance.** Density bonuses are currently available to developments in the downtown zoning districts achieving high energy performance and can be used as an amenity for a planned unit development to obtain approvals for alternatives to the zoning regulations. These bonuses could be extended to areas outside of downtown and/or incorporated into other incentive programs. Extend these incentives to buildings that incorporate or are designed to allow for easy installation of significant renewable energy systems.
9. **Develop tools to finance energy efficiency and renewable energy retrofits for commercial and residential buildings that have low barriers to entry and limited risk for local government.** Property-assessed, on-bill and other financing tools could provide low-interest financing opportunities for homeowners and commercial properties and avoid issues like opportunity costs, high interest rates or high barriers to entry. Working through a process led by the State of Minnesota, identify tools that the City or another regional entity can develop to provide more opportunities for energy efficiency and renewable energy financing.
10. **Support the adoption and implementation of emissions reductions plans by other local businesses, government entities and institutions.** Hennepin County and the University of Minnesota have adopted targets for emissions reduction. Other entities, like health care campuses, *along with* may also be taking action on greenhouse gas emissions. Minneapolis should support these ~~and~~ other efforts and collaborate on implementation. The University of Minnesota has adopted aggressive targets for reducing greenhouse gas emissions from their operations, including achieving net zero emissions by 2050. Whenever possible, Minneapolis will support the University's efforts to reduce emissions.

This seems geared towards residential and or smart metering.

this seems too vague for the description

11. **Monitor new technologies and regularly reassess strategies.** Encourage implementation when feasible. There are many new technologies that could hold promise for energy efficiency and reducing emissions. Real-time pricing coupled with smarter appliances could reduce costs for electricity consumers and emissions. Advanced energy management technology could reduce wasted energy.

12. **Identify opportunities to increase conservation efforts within the downtown district heating and cooling system and make the system more efficient using technologies like combined heat and power.** The downtown district heating and cooling system, in total, represents one of the single largest loads in the City. Operated by NRG, the City is a major user, with connected loads including the Convention Center. *and? City Hall* Because customers on this system do not have access to utility conservation programs, there is an opportunity for the City to help increase the efficiency of the customers on this system. *really* There may also be opportunities to make the district heating *energy system* itself more efficient, for example, natural gas fired plants could be retrofitted to include combined heat and power generation. The City should work with Hennepin County and NRG to determine where these retrofits might make sense. *steam to hot water systems*

13. **Identify opportunities to expand the use of district heating systems to new and existing buildings.** The downtown district heating and cooling system provides an efficient alternative to individual building heating and cooling systems. Explore barriers to expansion into existing and new buildings in downtown. Identify opportunities for expanded district heating and cooling outside downtown with new or existing systems.

Residential Buildings

spell out

1. **Help 75 percent of Minneapolis homeowners participate in whole-house efficiency retrofit programs by 2025.** The City of Minneapolis has provided initial support for CEE's Community Energy Services (CES) program, which has served about 4,800 Minneapolis owner-occupied homeowners, or ~~a little~~ *La* over 5% of the target population. The City could continue to help recruit homeowners into the program, and set a goal of 75% of homeowners participating in CES or similar whole-house retrofit program.

2. **Create time-of-sale and time-of-rent energy label disclosure.** New homeowners and potential tenants are a target group to promote energy upgrades, as they can be more receptive to needed upgrades, especially when financing is available. Tenants could also use an asset rating label to make comparisons about energy performance and cost between units or buildings. Minneapolis currently requires a home inspection prior to any Minneapolis home being put on the market, called the Truth-in-Housing program. The City could "green the Truth-in-Housing program" by including the collection of data sufficient to generate an energy label. In order to be cost-effective, data collection would need to be as limited as possible, while providing useful information to the homeowner. The ~~Center for Energy and Environment~~ *CEE* has developed such a label that is particularly relevant for Minneapolis housing stock that is currently being used in the Community Energy Services residential program, and could be expanded for use in the Truth-in-Housing program. A label for multi-family structures does not yet exist.

How do they prove this? House could be efficient but temp m wires set high

3. **Connect and collaborate with other residential energy efficiency efforts.** This includes:

- Helping to promote and work with on-line energy efficiency efforts that build teams and help to increase energy efficiency awareness and actions, including the Minnesota Energy Challenge, and OPOWER's new Facebook application.
- Promoting appliance trade-ins through City events. *and neighborhood programs*
- Promoting the use of energy benchmarking in Minneapolis multifamily buildings, such as through the Minnesota Energy Scorecards program: www.energyscorecardsmn.com

Commercial Buildings

1. **Continue to host an annual Energy Reduction Challenge ("Kilowatt Crackdown") for Commercial Buildings in conjunction with the Building Managers and Owners Association (BOMA) and other partners.** BOMA has developed a program, called the Kilowatt Crackdown, which local chapters can implement. Building owners track their energy use, through the EnergySTAR Portfolio Manager tool, over the course of ~~a year or two~~ *one to two years.* This is compared to a benchmark of the previous year, and the buildings with the highest energy reduction receive awards.
2. **Implement a Building Energy Disclosure policy for medium and large commercial buildings.** A disclosure policy for commercial buildings that requires publication of data annually will help increase the impact of energy use information in the marketplace, driving further energy efficiency improvements.
3. **Explore implementation of a commercial asset rating program, such as the Department of Energy's Commercial Building Energy Asset Rating.** Asset ratings provide a tool to evaluate the physical characteristics and as-built energy efficiency of buildings. An asset rating can also identify areas where improvements are needed. *- expand more on what this includes*
4. **Develop "green lease" model language that allows building owners and tenants to share the energy savings from building capital improvements.** Tenants and building owners often have a split incentive when it comes to energy efficiency improvements since tenants frequently pay the energy bills. *and owners operate the facility* New model language could make more capital improvements *likely*. *beneficial to both the tenant and the owner.*

Industrial Buildings

1. **Continue to support a loan program to help businesses including industrial companies ~~to~~ become more energy efficient and expand their businesses.** A relatively small number of Minneapolis industrial customers are responsible for a large ~~proportion~~ *the* of total energy usage in the City. Focusing efforts to increase the energy efficiency of these businesses can have a large impact, as well as increase the competitiveness of Minneapolis businesses and support job growth.

Renewable Energy

1. **Support efforts to align utility practices with city and state renewable energy policy.** State and local policies express a clear preference for renewable energy and distributed generation. The City thus supports efforts to reform or eliminate all practices that discourage property owners from adopting on-

site renewable energy generation, including limiting standby charges, improving interconnection standards, modifying demand charges, expanding “net metering” benefits to large commercial/industrial businesses, and exploring concepts like feed-in tariffs. The City should continue intergovernmental relations efforts to reduce barriers and encourage development of renewable energy resources.

2. **Investigate the feasibility of large-scale renewable energy purchasing for the municipal government and/or residents.** The City routinely receives unsolicited requests to invest in bulk purchasing of renewable energy. ^{Thus, the City could} establish a proactive review process for these requests and/or explore an RFP process for bulk purchasing.
3. **Create policies and programs to incorporate renewable energy into buildings.** A number of cities and states across the nation are creating long-term policy goals and setting in motion building code changes that anticipate the declining cost curve for both solar energy and energy efficiency.
 - Develop a “solar-ready” building certification. Existing buildings ^{are} ~~were~~ not built to accommodate solar energy installations. ^{Retro-fitting} existing buildings adds significant costs to solar energy. Making new buildings “solar-ready” adds virtually no cost to construction costs. The next generation of the city’s building infrastructure should accommodate the next generation of energy production.
 - Encourage “net-zero” energy buildings. Net-zero energy buildings maximize synergies between energy efficiency and distributed energy generation. Policies in other states are anticipating building codes that require net-zero standards for residential buildings as soon as 2020. Minneapolis should plan to capture this transformative market trend through support of state efforts and creation of local incentives.
4. **Support new financing and ownership models for developing Minneapolis’ solar resource.** Support explicit authorization of third-party solar leasing and ownership ~~and~~ enabling community solar projects. Third party ownership and leasing models expand access to on-site renewable energy generation by simplifying the adoption process and enabling the cost-effective bundling of tax incentives, long-term financing, installation, and operation and maintenance into a single transaction. Minneapolis residents who do not own property or whose property has a poor solar resource should be enabled to own part of an off-site solar PV installation, and receive a share of the production credits on their utility bill.

Transportation & Land Use

Goals

1. **Reduce automobile vehicle miles traveled in Minneapolis** while improving accessibility, increasing transportation choices, and promoting and accommodating growth.
2. Support **livable and walkable neighborhoods** that meet the needs of all Minneapolis residents.
3. **Grow jobs and housing** to support a growing economy and non-auto transportation modes.
4. Increase the share of Minneapolis residents and workers choosing **non-auto modes** for commuting and other trips.
5. Through local action and federal and state legislation, **support a transition to cleaner fuels and more efficient vehicles.**

Planning & Land Use

1. **Improve inter-departmental and inter-agency collaboration on transportation issues, and track progress.** City policy already instructs staff to work across departments on transportation and land use issues; it also recommends both formal and informal collaboration between the City and partners like the Metropolitan Council and Hennepin County. Add accountability to this policy direction by regularly reporting to the public and policymakers on the successes of recent collaborations, and challenges that may be hindering these partnerships.
2. **Plan for and encourage “complete neighborhoods.”** Residents of complete neighborhoods can safely and conveniently walk to obtain most of the basic goods and services they need on a daily basis. Explore changes to the zoning code to provide maximum flexibility for diverse commercial uses. This could include providing height or density bonuses for leasable ground floor commercial spaces. This could also include “market development” strategies which would remove barriers for small-scale retail and essential services like daycare centers.
3. **Focus growth in and along land use features designated in *The Minneapolis Plan for Sustainable Growth*.** While supporting growth throughout the city, follow the adopted Comprehensive Plan to guide future development toward areas with multi-modal transportation access. This means focusing growth along community and commercial corridors, in transit station areas, activity centers, and growth centers such as Downtown.
4. **Review the zoning code to identify impediments & incentives to the construction and retrofit of green buildings.** Further study may highlight opportunities to “green” the zoning code including:
 - a. Exempt greenhouses from maximum height calculation on multi-story structures.
 - b. Exempt additional wall insulation from FAR and setback calculations.
 - c. Allow boiler rooms on the roof of buildings.
 - d. Incentives in zoning to increase energy efficient construction, renovation and operation of buildings.
 - e. Incentivizing the inclusion of car-sharing as part of new developments.

Transit & Car Sharing

1. **Support the Metropolitan Council's goal of doubling regional transit ridership by 2030.** Through land use and transportation infrastructure decisions, communications and collaboration with partners, the City should support the Metropolitan Council in achieving the 2030 goal.
2. **Support the build-out and upgrade of regional and local transit lines.** The City should support and implement local and regional transit improvements consistent with Access Minneapolis and other plans to reduce VMT and provide more transportation options. Regional transit facilities in the planning or construction phase include Central Corridor LRT, Southwest LRT, Bottineau and 35-W Bus Rapid Transit (BRT). Local improvements to the Primary Transit Network (PTN) include streetcar and arterial BRT lines.
3. **Advocate for an increase to the dedicated funding stream for transit construction and operations at the local, state level and regional level.** The current funding level for transit projects through the Counties Transit Improvement Board (CTIB) utilizes a quarter-cent sales tax to fund transit improvements. The original legislation proposed a half-cent sales tax. Increasing the amount that counties can opt-in to use would speed development of regional transit projects. Local governments could also benefit from additional tools for funding transit construction and operations like value capture along transit corridors.
4. **Work with Metro Transit and property owners to improve capacity and use of transit during special events.** Many attendees of major events at the Metro Dome, Target Field, the Convention Center and other locations in Minneapolis use transit, but the City should continue to work to increase the use of transit and non-auto modes for these events.
5. **Complete the downtown east-west transit spine improvements.** The Access Minneapolis Plan calls for the upgrade of transit service in the vicinity of 7th Street. This corridor is the second-busiest in terms of weekday boardings in downtown. This improvement may be similar to the Marq2 project, which improved travel times and provided dynamic signage to improve user experience and convenience.
6. **Expand car-sharing services to on-street spaces.** Parking staff will soon begin the process to bring car-sharing services to on-street spaces in the city. Continue to expand these services as demand and feasibility permit.
7. **Make car-sharing convenient and affordable by reducing sales tax on car-sharing products to the minimum rate.** Currently, car-sharing transactions in Minneapolis appear to be taxed at a higher rate (~12 percent) than the general sales tax rate for Minneapolis (7.775 percent). Consider separating car-sharing services from regular rental car service in terms of special sales tax rates.

Active Transportation

1. **Achieve the City's adopted targets for bicycle mode share and bicycle counts and adopt a stretch goal of 15 percent for 2025.** The City has adopted targets for bicycle mode share of 6 percent by 2012 and 7

percent by 2014. In addition, the City has adopted a target to increase cyclists in annual counts by 60 percent over 2008 by 2014. Consider a mode share goal for 2025 of 15%.

2. **Construct 30 miles of on-street, protected bike facilities (cycle tracks) by 2020 to allow safe and efficient travel for all types of cyclists.** Bicycles are a zero-emissions form of transport. Addressing the perception of safety of on-street bicycle facilities will attract more cyclists to Minneapolis' network of facilities and help to meet mode share goals.
3. **Revisit minimum bicycle parking requirements to support the City's bicycle mode share targets.** The City is investing in on- and off-street bicycle facilities, and has set targets for bicycle use. Providing sufficient parking that is convenient and safe will be a key in meeting these goals. Existing standards, such as the Association of Pedestrian and Bicycle Professional parking guide and the City's adopted workplace access and parking guidelines could be reviewed for consistency with current code. Bicycle parking demand may also vary more based on geography than auto parking. More data on local parking demand is needed.
4. **Support implementation of the Pedestrian Master Plan and Bicycle Master Plan.** When walking and biking are safe, efficient, and comfortable, the benefits are felt community-wide and reduce dependence on automobiles. Monitoring and following up on the Pedestrian and Bicycle Master Plans' recommendations will be integral to meeting greenhouse gas reduction goals across the transportation and land use sectors.
5. **Allow special service districts to levy a surcharge on parking meters to fund streetscape improvements.** District advisory boards can opt to apply a streetscape improvement surcharge to on-street parking, the revenue from which would be used for streetscaping or other improvements that make walking, cycling, or taking transit more attractive.
6. **Continue "Safe Routes to School" efforts.** The City's Safe Routes to Schools effort encourages children to adopt healthy habits of walking and biking. This is done by improving safety near schools through infrastructure projects, as well as fostering a culture of walking and biking in the schools through educational programs.
7. **Adopt a Complete Streets policy.** A Complete Streets policy will demonstrate a commitment to providing adequate pedestrian, transit and bicycle facilities during every road improvement project. While the City already has adopted many elements of Complete Streets work, such as Bicycle and Pedestrian Master Plan and a multi-modal transportation plan, such a policy may be necessary to best position the City to receive outside funding.

Parking Management

1. **Investigate demand-based parking pricing strategies for metered areas.** The city's new parking meters allow for variable pricing. Vary pricing on metered streets, with a goal of achieving one empty spot per block, in order to reduce "cruising" for spots and improve traffic flow.

2. **Continue to adjust minimum parking requirements to better promote alternative modes of transportation.** For example, developers of multi-family housing currently qualify for a 10 percent reduction in required parking stalls if the parcel is within 300 feet of a transit stop, even though one-quarter mile (1,320 feet) is commonly accepted as the distance an average rider will walk to a bus stop.
3. **Support the development of new information technology to reduce “cruising” for parking and make more efficient use of curb & ramp space.** Parking staff are developing new approaches, such as a mobile phone app, which will provide more information to drivers on the location of vacant parking spaces. These types of applications can reduce cruising for parking, which can be a significant source of congestion in certain parts of the city at certain times.
4. **Support the development of a citywide framework for curb space use.** Parking staff will be developing a framework plan to understand how to best use curb space, both for parking, valet services, delivery vehicles, active transportation and other uses. Climate Action Plan goals for increasing active transportation and reducing VMT should be considered during this process.
5. **Require or incent parking “unbundling”.** Adopt requirements or incentives for developers that parking be separated from commercial space and residential units in lease and sale agreements.

Transportation Demand Management & Intelligent Transportation Systems

1. **Support the Downtown Transportation Management Organization’s goal to reduce 4.8 million drive alone trips by 2015.** The Downtown TMO helps commuters get into downtown with less reliance on the single-occupancy vehicle. Supporting their goals include increasing bicycling, transit and rideshare use.
2. **Explore changes to signal timing to reduce idling, improve traffic flow and accommodate non-auto modes.** City staff are currently reviewing signal timing on a citywide basis to increase network efficiency. Potential changes to reduce emissions could include “green waves”, either for cars or cyclists, depending on the roadway and changing lights to flashing red/yellow late at night and early in the morning.
3. **Support the expansion of congestion pricing, dynamic signage and other traffic management techniques on regional highways.** Demand-based pricing can help reduce congestion while encouraging carpooling and transit use. Other techniques that have proven beneficial are dynamic signage which can help reroute drivers and rapid response to crashes.
4. **Support large employers in implementing alternative work arrangements for employees.** Results-Only Workplace Environments (ROWE), variable work schedules, telecommuting, and teleconferencing all have the potential to reduce overall trips or spread trips from rush hour into less-congested times. The City can collaborate with the downtown TMO, Downtown Council, and other organizations to provide businesses with information and expertise on these practices.

Clean Fuels

1. **Explore regulatory incentives to increasing electric vehicle charging infrastructure.** The inclusion of electric vehicle charging could be incentivized through the zoning code or other city regulations for large multi-family and commercial buildings. As technology and adoption rates of electric vehicles change, the city should revisit these incentives and consider requirements for EV charging in parking code for multi-family and commercial buildings as appropriate based on demand.
2. **Provide electric vehicle charging stations at City-owned facilities where feasible.** Continue to investigate the feasibility of vehicle charging stations at public facilities as funding allows. Closely monitor electric vehicle technology to ensure investments are appropriate.
3. **Increase the fuel efficiency of the city's licensed taxi and car service fleet.** The City's current requirement for taxi vehicles is to achieve 23 mpg or better in city driving. As the City updates this policy, consider increasing the minimum mpg requirement. Given that taxis are high-mileage vehicles, better fuel efficiency can pay off more quickly than in other applications.
4. **Support the proposed Federal fuel efficiency improvements.** On-road vehicle fuel efficiency has a significant impact on the transportation sector emissions in Minneapolis. Changes to the Federal CAFÉ standards will increase the fuel efficiency of vehicles on the road.
5. **Support increased fuel efficiency in public fleets.** Minneapolis has adopted a green fleets policy which calls for fuel efficiency improvements in City-owned vehicles and equipment. Support the efforts of entities like the Metropolitan Council and the State of Minnesota to improve the fuel efficiency of their fleets. In particular, hybrid or fully electric buses have the added benefits of reducing noise pollution and localized air pollutants like particulates in high-traffic areas.
6. **Support state efforts to adopt a low-carbon fuel standard.** As outlined in the Minnesota Climate Change Advisory report, support the adoption of a statewide Low-Carbon Fuel Standard, with a goal of reducing the lifecycle carbon intensity of transportation by 12% by 2025 from 2007 levels.
7. **Support the development of alternative jet fuels and ensure MSP is prepared for their increased use.** Most emissions attributable to MSP are produced by jet aircraft. Domestic and foreign airlines have successfully trialed a variety of biofuels, which have been approved for use in commercial flights since July 2011. As production chains mature, MAC and its airline partners will need to be sure MSP facilities are adequately prepared to store and dispense biofuel-blended jet fuel. Minneapolis should also support future regulatory actions designed to accelerate the switch to cleaner-burning jet fuels.

Other Strategies

1. **Continue to shift to LED streetlights.** Streetlights are the second largest energy user in the City enterprise, after water treatment. Replacing conventional bulbs with LEDs can net up to a 50 to 60 percent reduction in energy use and have the potential to reduce maintenance costs. As capital costs come down, continue to replace older bulbs with more efficient LEDs, with a long term goal of citywide LED use.

2. **Support continuing efficiency efforts at the Minneapolis-St Paul International Airport.** Increasing vehicle fuel efficiency has led to a reduction in greenhouse gas emissions from the airport. Investigate additional partnership opportunities to support the Metropolitan Airports Commission in meeting the state greenhouse gas reduction targets.
3. **Assist the Metropolitan Airports Commission in making MSP the nation's "greenest" airport.** MAC's Stewards of Tomorrow's Airport Resources program identifies numerous projects that could reduce the airport's emissions, ranging from on-site clean energy production to grey water recycling and storm water reclamation. The airport's constant flow of travelers also make it an excellent location for demonstrating green technologies and educating the public about the causes and impacts of climate change.
4. **Encourage the Metropolitan Airports Commission to expand its use of renewable energy resources.** MAC is exploring investment in renewable energy sources like wind (from off-site sources), solar, and geothermal. The City has a great deal of experience in this area, particularly with solar photovoltaic and thermal technologies. Staff should share expertise and key lessons as MAC undertakes similar initiatives. Examples from other airports, like Denver International, show that large open spaces with unobstructed solar access can provide good opportunities for solar generation.
5. **Support the implementation of more efficient takeoff and landing procedures at MSP International Airport.** Efficiency improvements like pre-set flight paths and GPS-based navigation allow aircraft to take off and land with fewer air quality and noise impacts on airport-adjacent communities – and to burn less fuel, substantially reducing greenhouse gas emissions. The Federal Aviation Administration (FAA) is working with MSP and other local partners to increase the use of these area navigation (RNAV) and required navigation performance (RNP) procedures. Minneapolis should leverage its role on airport-related boards and committees to encourage quick implementation of these procedures with GHG emissions reduction a central goal.
6. **Encourage the State of Minnesota to permit the testing of self-driving vehicles on public roadways.** In the long term, autonomous vehicles have the potential to reduce the total number of vehicles on the road, increase fuel efficiency and increase safety for cyclists and pedestrians, all of which could have a positive climate impact. Permitting the testing of these vehicles will signal to industry that Minnesota is eager to explore this new technology, and could bring economic benefits.

Waste & Recycling

Goals

1. Achieve a **zero percent growth rate** in the total waste stream from 2010 levels.
2. **Recycle 50 percent of the waste stream** (commercial and residential) in Minneapolis by 2025.
3. **Increase organics collection to 15 percent** of the waste stream by 2025.
4. Reduce the flow of wastewater from Minneapolis and support efforts to make wastewater treatment more energy efficient.
5. **Increase awareness of the lifecycle impacts of products** to address GHGs occurring outside the community.

Reducing Waste

1. Identify consumer products and packaging that are neither recyclable nor compostable and engage companies, consumers and retailers in a campaign to reduce the disposal of such products and packaging through reuse efforts, switch to alternative materials, or make changes to the supply chain. In addition, the City should participate in and support the efforts of the MPCA Product Stewardship Council.
2. Identify and promote reuse and repair businesses and opportunities which can reduce the disposal of used goods. Evaluate existing ordinances and remove barriers for reuse and repair opportunities. Connect with the State's reuse network. Examples include "fix-it clinics" or promoting existing businesses with a reuse focus.
3. Work with Hennepin County and other partner organizations to encourage businesses and residents to purchase reused and reusable goods (Choose to Reuse campaign).
4. Expand Green Building programs (such as a requirement for city-financed new construction and renovation projects) to promote a reduction in construction and demolition waste.
5. Expand neighborhood and backyard organic composting through community initiatives and advocate for updated composting rules at a state level.
6. Develop innovative marketing and behavioral strategies. Examples could include behavioral strategies to reduce food waste like signage and reducing tray use, and supporting County efforts for expanded outreach to commercial and multifamily properties.
7. Undertake a public education campaign to inform residents about opt-out opportunities for material like phone books and junk mail. Additionally, explore requiring that businesses like phone directories operate as an opt-in service in Minneapolis.
8. Work with Hennepin County, regional groups and the State of Minnesota to develop better data collection tools and sources, especially for commercial and multifamily waste data.
9. Require City-financed development projects to meet a green building standard (see Buildings & Energy Cross-Cutting Strategy 5) that includes a waste reduction and/or recycling standard. Projects that receive State money must meet Minnesota Green Communities standards, which include rules about construction and debris waste and recycling infrastructure. The City of Minneapolis should follow suit in order to support its existing waste reduction and recycling goals, and to reduce GHG emissions.

Increasing Recycling

1. Support implementation of a single-sort recycling program for curbside pickup.
2. Continue to expand the types of materials accepted by the City's recycling program.
3. Complete a comprehensive assessment of pricing incentives and penalties for residential waste and recycling services and identify strategies, such as volume-based variable-rate pricing, that could increase recycling and reduce waste.
4. Enforce the commercial recycling ordinance and undertake an educational campaign to expand recycling options in multi-family housing.
5. Identify financial and other barriers to recycling in multi-family buildings (different priorities between property management company and tenants, lack of knowledge of costs, etc.).
6. Work with the County to increase the rate of recycling of construction and demolition debris in the city.
7. Support state adoption of the new International Green Construction Code (IGCC) and adopt the IGCC locally (see Buildings & Energy Cross-Cutting Strategy 3). The IGCC includes requirements for diverting construction and debris waste and incorporating recycling infrastructure in the design of projects. If the IGCC is adopted at the state level as an appendix chapter, Minneapolis will need to adopt it locally before it can be in force.

Increase the Composting of Organics

1. Identify major organic waste producers (food service, schools, hospitals, etc.) and conduct a targeted campaign to increase organics recycling. Identify corridors (Nicollet Avenue, for example) with a critical mass of large producers that might make organized collection more feasible. Consider an ordinance requiring large producers to divert organics.
2. Based on the results of pilot programs and through a detailed study, determine the feasibility and costs of expanding the collection of source-separated organics at residential properties citywide. After these costs are known, reassess the best approach for removing organics from the residential waste stream.
3. Support more options for the local processing of organic waste at both large and small scales. There are currently few options for processing collected organic waste in the Twin Cities region. Changes to state and county rules, or a stronger local market for organic composting may be necessary to build more processing capacity.
4. Make City worksites a model for organics composting by developing a collection program for city-owned and (where possible) city-leased buildings.

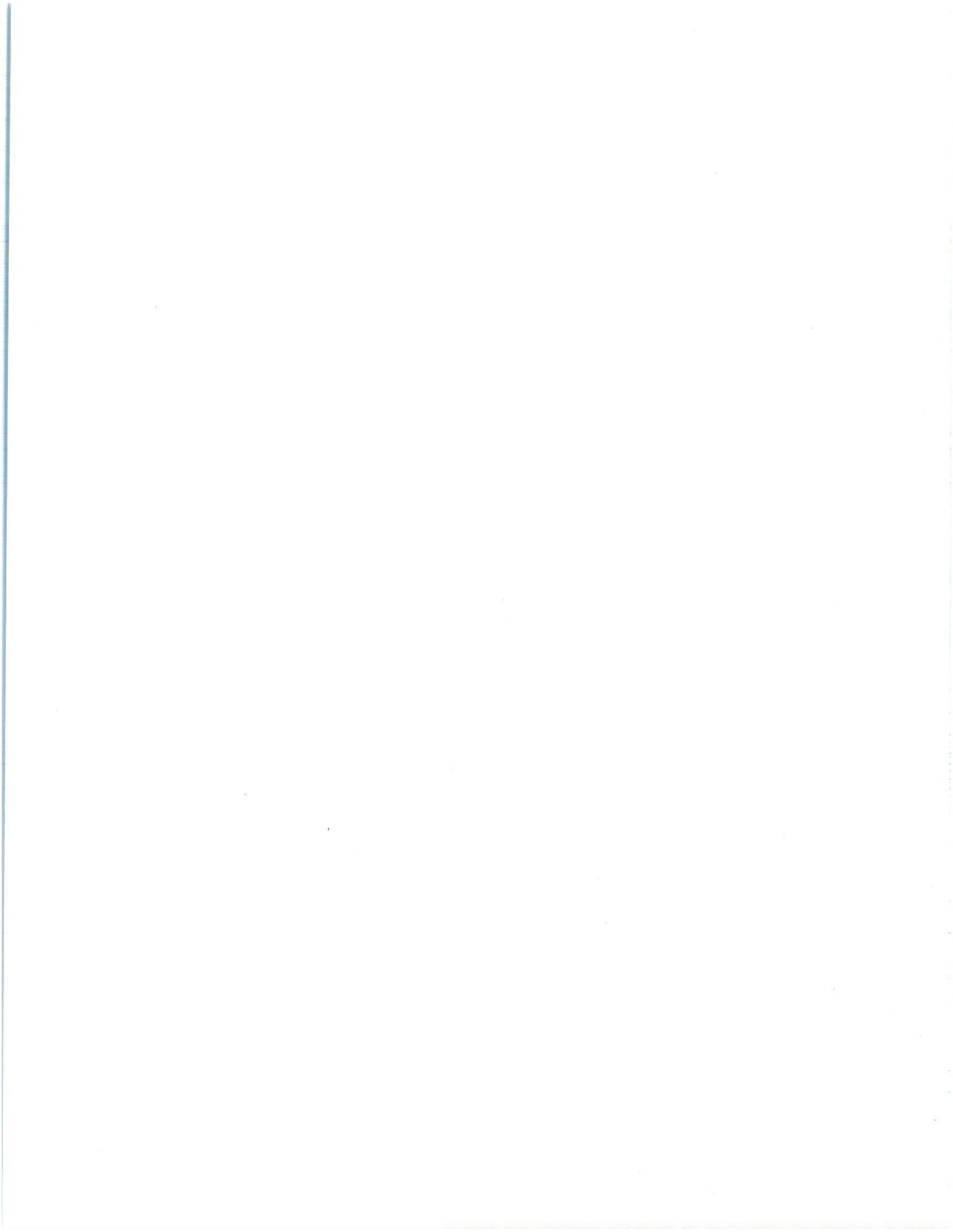
Addressing Product Lifecycle Impacts

1. Work with Homegrown Minneapolis to incorporate more information on food choice impacts, particularly as it relates to greenhouse gas emissions.
2. Develop educational materials that illustrate the emissions impacts of common products or behaviors, and include these materials in city utility bills.

Reducing Wastewater Treatment Impacts

1. Work with the Metropolitan Council to achieve their energy use goals and track associated impacts on GHG emissions from Minneapolis contribution to wastewater flows.
2. Achieve a 75% participation rate in the Community Energy Services program for eligible Minneapolis properties, which includes low-flow water fixture information and installations.
3. Explore options for expanding the use of greywater systems and water conservation measures in public and private buildings. This could be included in the local adoption of the new state building codes as an elective or promoted in city-financed projects.

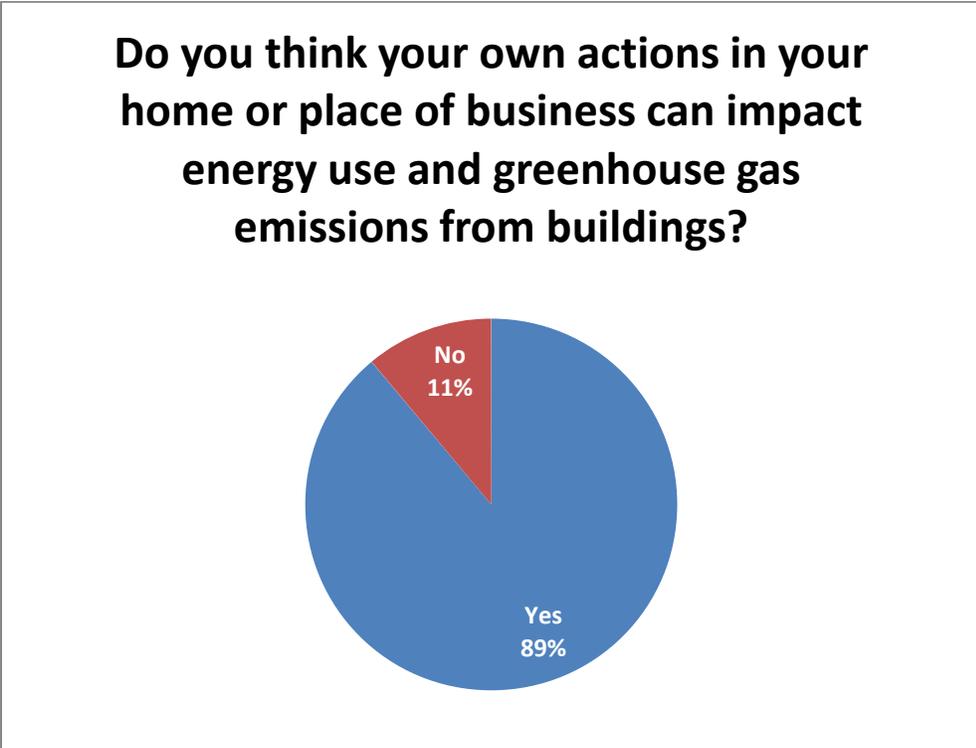
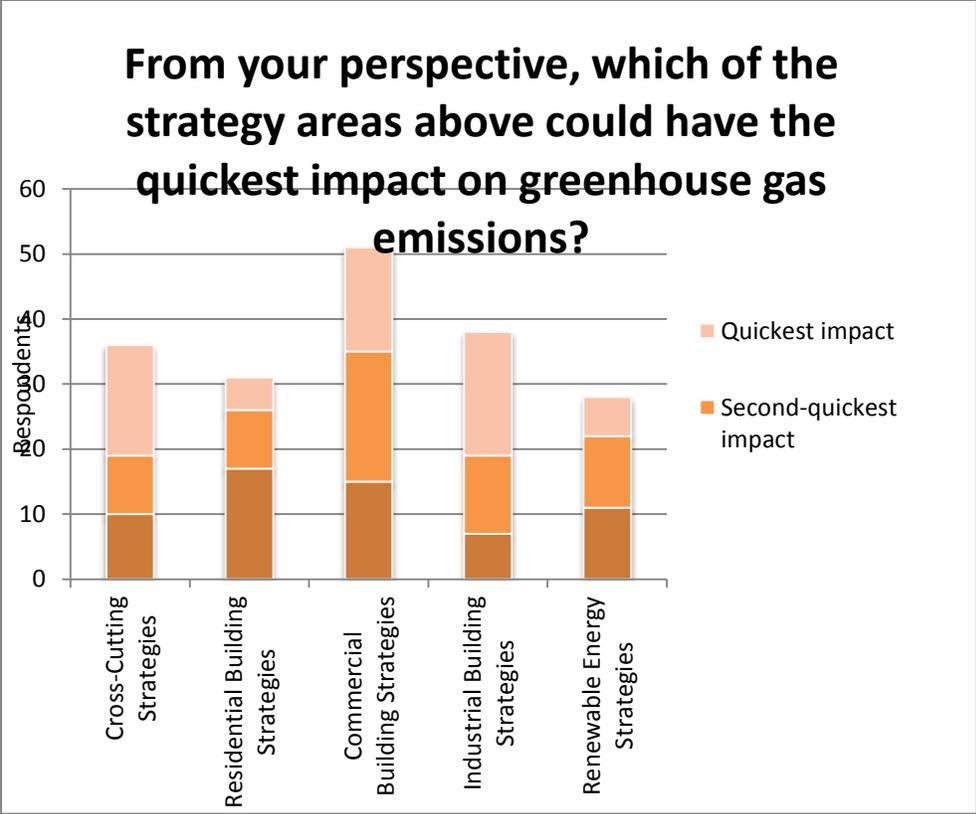
DRAFT



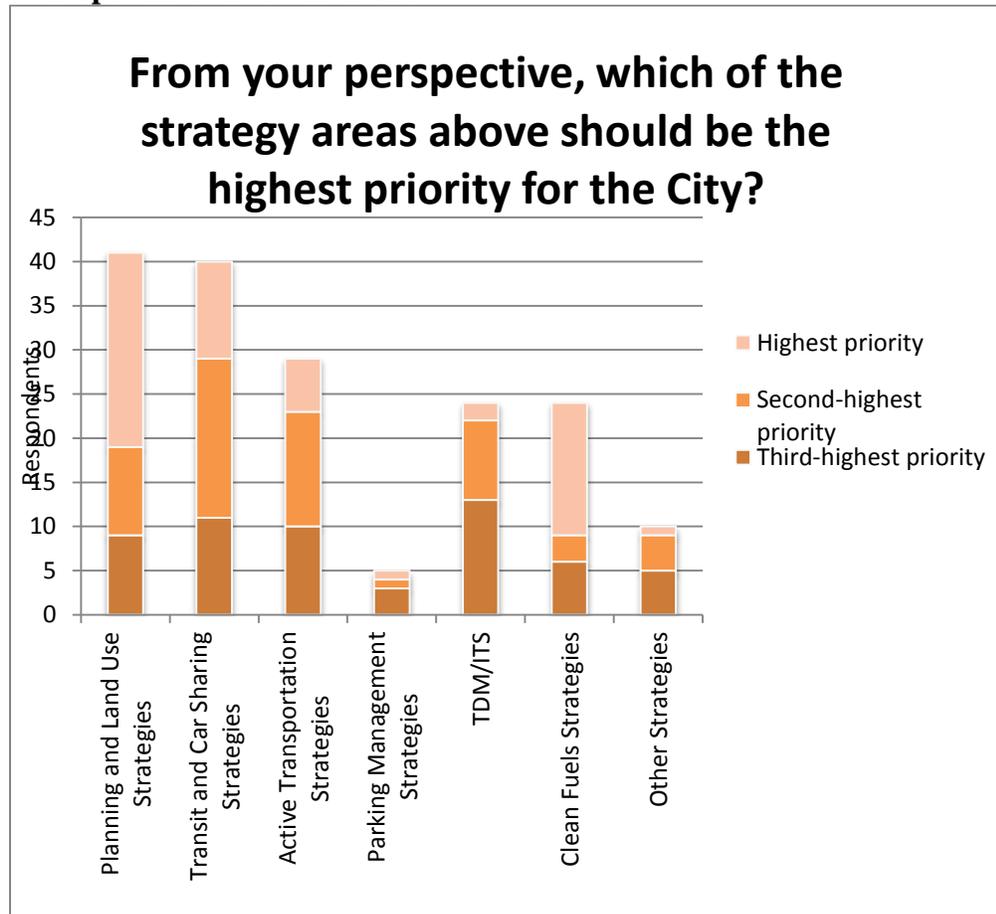
Minneapolis Climate Action Plan Online Survey Summary

Staff used an online survey as one tool to solicit feedback on the draft Climate Action Plan goals and strategies. The survey was open for one month, from mid-November to mid-December, attracting 65 responses. Most respondents answered demographic questions at the end of the survey. The demographic information is available at the end of this document.

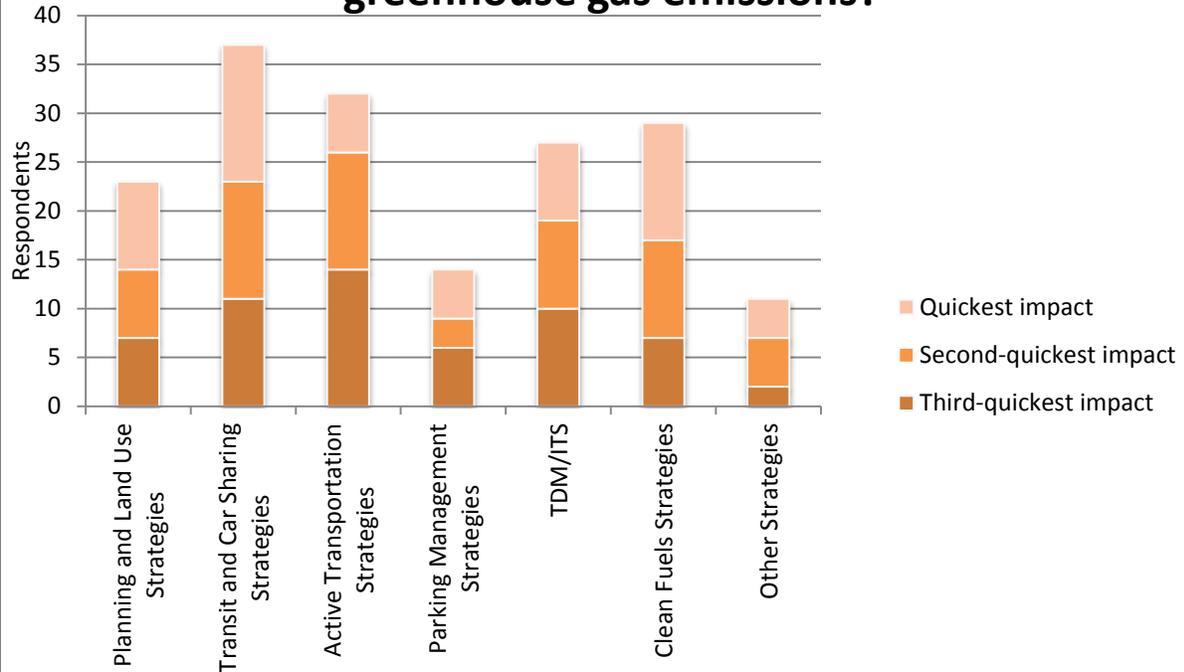




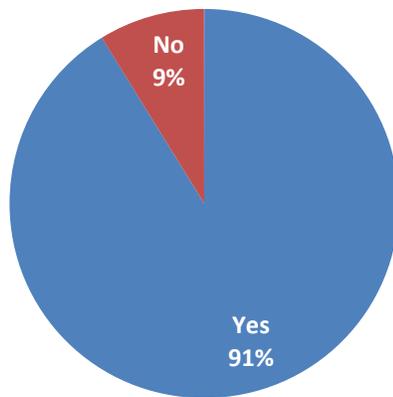
Transportation and Land Use



From your perspective, which of the strategy areas above could have the quickest impact on greenhouse gas emissions?



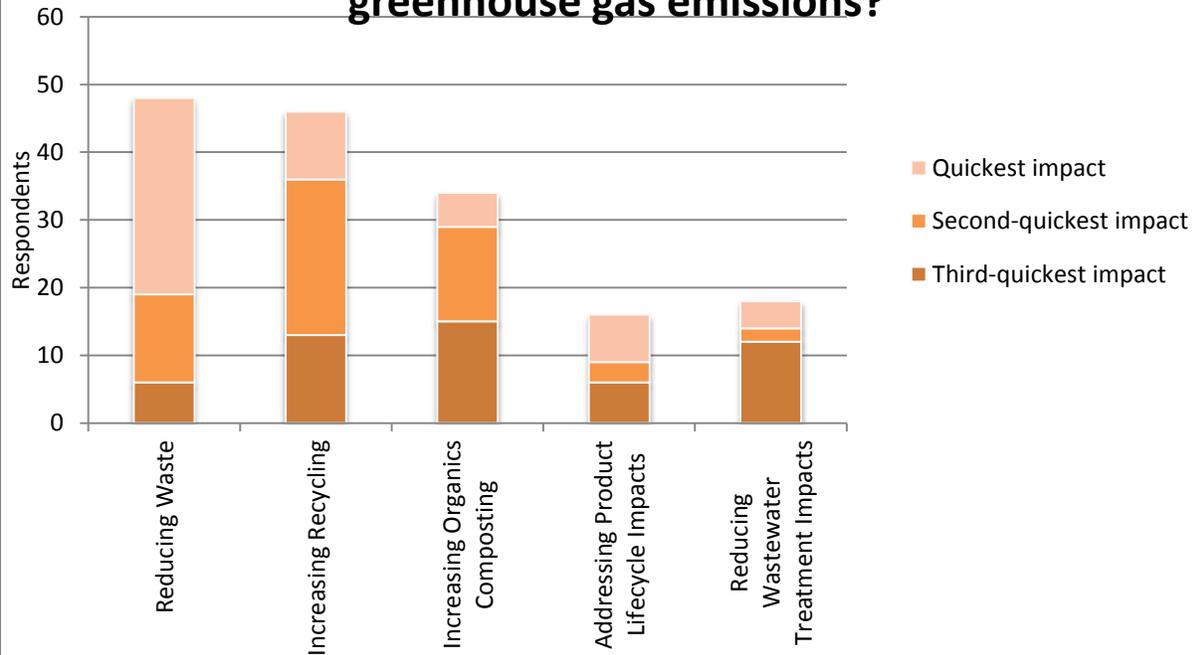
Do you think your own actions can impact energy use and greenhouse gas emissions from transportation?



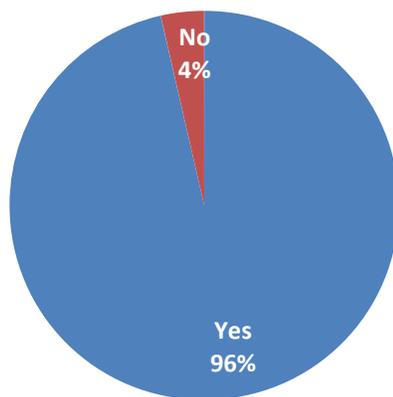
Waste and Recycling



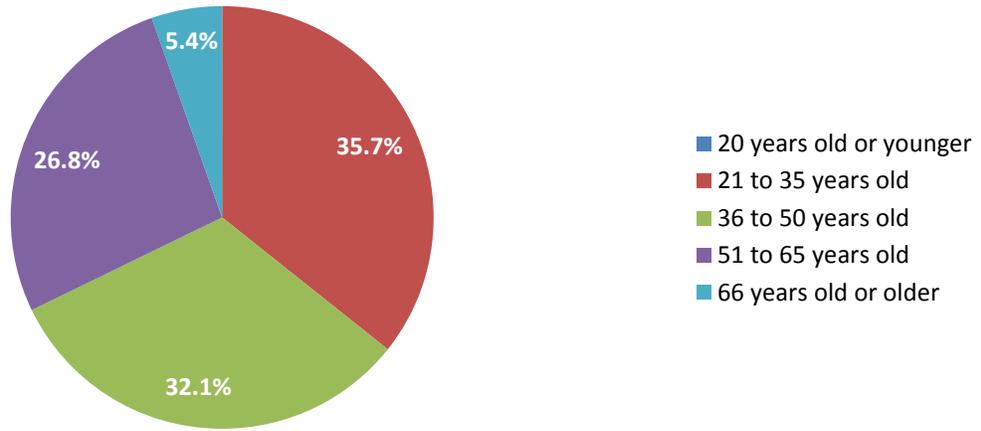
From your perspective, which of the strategy areas above could have the quickest impact on greenhouse gas emissions?



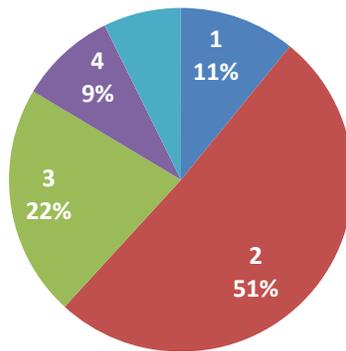
Do you think your own actions in your home or place of business can impact energy use and greenhouse gas emissions from waste?



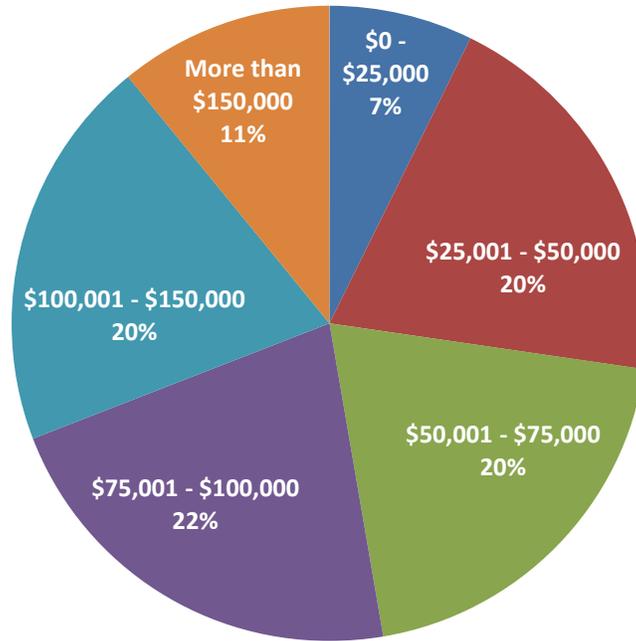
What is your age group?



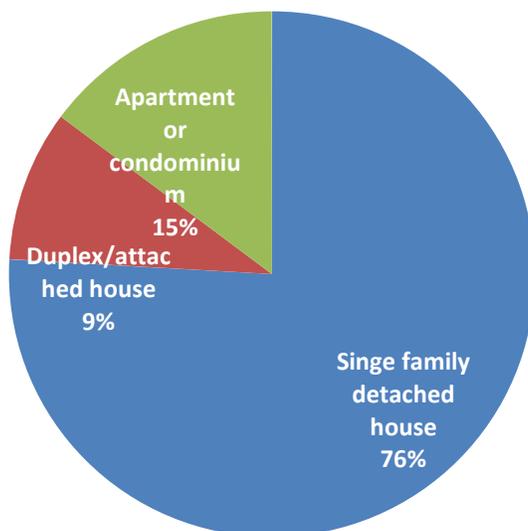
How many people live in your household, including yourself?



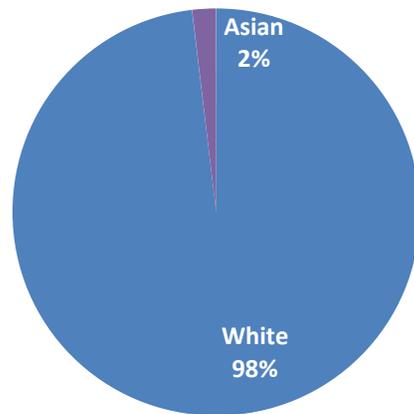
What is your annual household income?



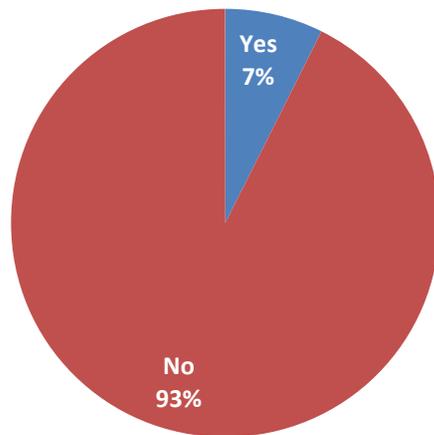
Which of the following best describes your home?



What race(s) do you consider yourself?



Are you of Hispanic, Latino, or Spanish origin?



Minneapolis Climate Action Plan Public Open House Feedback Summary

What strategies do you feel should be the highest priority for reducing greenhouse gas emissions in Minneapolis?

Responses to this question were quite diverse, touching on over fifty topics. The most frequently occurring responses discussed renewable energy sources, building energy efficiency, increasing the use of non-auto modes of transportation (primarily transit, biking, and walking), and the need for better public education about climate issues. While strategies in the Waste sector did receive some mention, most answers focused on the Buildings & Energy and Transportation & Land Use sectors, consistent with Minneapolis' greenhouse gas emissions footprint.

Other strategies receiving multiple mentions included water conservation, direct City investment in renewable energy production, better efficiency in transit operations, and a prominent role for urban agriculture and locally produced food.

How do you think you could have the most impact on greenhouse gas emissions in your home or business?

The most common answers to this question related to building energy efficiency, mostly in respondents' homes. Improvements like high-efficiency furnaces, insulation, and new windows were cited as a high impact way to lower one's own emissions footprint.

A significant number of respondents also suggested that they could drive less than they currently do, whether by using alternative modes of transportation, or by reducing overall travel by bundling trips or working from home.

Other strategies receiving multiple mentions included buying local food and products, planting more trees, reducing waste and recycling more, and talking with friends, family, and neighbors about climate/environmental issues and remedies.

Do you have additional comments about any of the draft goals and strategies?

Responses:

- [Buildings & Energy] Cross Cutting strategy #6 is great! Land Use strategy #2: zoning code already includes density bonus for mixed-use buildings. Height increase does not exist.
- They are all wonderful, but they are all *far too modest* for the climate disaster that is rapidly unfolding around us.
- As this plan progresses, other communities in the metro need to be included. Need a viable mechanism for retrofit loans that could make the City money. Solar *cannot* be forgotten! MN has sufficient solar flux and costs are dropping. Distributed energy should be sought for many reasons. Keep an eye on new technologies for renewable storage (e.g. molten salts, hydrogen, and liquid fuels generation).
- Degree of community agreement?
Efforts to engage Hispanic, Somali, Hmong, Black, Asian [communities].

Social media initiatives.

Get more non-white, non-middle/upper class people involved.

- How will the EJ working group analysis be incorporated in the final recommendations to the City Council?

Need to communicate to communities of color how they can be engaged in adaptation policy creation.

Material needs to be bilingual and posted in The Circle, La Prensa, and other minority/protected or marginalized groups' press.

- It's critical to find ways to involve people from all walks of life and of all groups; this is an issue that will affect all communities. (It's good to see the connection to environmental justice.)

Involve schools (how large is the K-12 footprint?) and the kids and staff. Could schools be a model for composting and less food waste, for example?

Educating and empowering citizens that what they do that's good for their personal/household economy can also be part of the solution to global climate change.

- Needs to have concrete numbers for goals and objectives to implement renewables.
- Is the Met Council dumping the hybrid buses? Why? Replacement?
- Inclusion of the 80% reduction by 2050.
- Check out Susan Reed's book, "Energy Wise Landscape Design."

Missing in Action Plan is attention to things we can do to "cool" the summer heat island by changing/educating public on use of land. These choices can also reduce need for heat in winter.

Educate public on vicious cycle of A/C in summer which adds heat to outside air, adding to heat island around city.

- I think overlooking landscaping is a problem. I don't know for sure about Minneapolis but in many cities the application of [nitrogen] fertilizer is a significant source – this is a low investment reductions possibility through a public education campaign.

Seems like these should be more focused on public education/promoting action through social media.

- Double public transportation ridership by 2020.
Set clear benchmarks for meeting renewables and energy efficiency goals.
- Figure out how to offer residents cheap/affordable alternative energy sources.
- New idea: support more homeowners to take on a housemate (mini loans/referral network?). More cash flow, fewer foreclosures, more density, lower CO2 footprint per person, adds residents near transit.
- The new Vikings stadium!

Adopted November 7, 2012.

The [Pedestrian Advisory Committee] endorses the Climate Action Plan, with particular support for Active Transportation items #1 (cycling mode share goal increases), #2 (safe and efficient cycling travel), #4 (implementation of Pedestrian and Bicycle Master Plans), #6 (“Safe Routes to School”), and #7 (“Complete Street”).

Further, the PAC urges the development of a pedestrian component and incorporation of equivalent text into increasing mode share (Active Transportation item #1) and increasing safe and efficient travel (Active Transportation item #2).

Finally, the PAC encourages the full implementation of the Pedestrian Master Plan, with a focus on promoting and maintaining year round pedestrian activity by emphasizing snow and ice removal on sidewalks and other pedestrian routes in the winter months.



Public Health Advisory Committee

Department of Health & Family Support

250 South 4th Street – Room 510
Minneapolis, MN 55415-1372

Office 612 673-2301
Fax 612 673-3866
TTY 612 673-2157

www.minneapolismn.gov/dhfs

MEMORANDUM

To: Brendon Slotterback, Minneapolis Sustainability
From: John Schrom and Karen Soderberg, Co-Chairs
Date: December 5, 2012
RE: Endorsement of and Preliminary Comments on Climate Action Plan

The City of Minneapolis' Public Health Advisory Committee (PHAC) would like to submit this letter of endorsement for the City of Minneapolis Climate Action Plan, a set of long-range goals and strategies aimed at reducing greenhouse gas emissions. Adopting these strategies will mitigate the most serious impacts to the environment and human health.

As part of the public outreach of the Climate Action Plan Steering Committee, a presentation of the plan was presented to the PHAC on October 23, 2012. Committee members accepted your invitation to provide comments from a public health perspective. Generally, our committee endorses the goals and strategies outlined in the plan and would offer these additional comments:

1. The report reasonably focuses on prevention and emissions mitigation; however, the city's climate action planning should be more comprehensive and include escalated weather events that put the public at risk. The plan does not address the very real effects that present a current threat. Events such as high-intensity storms, excessive heat and drought periods, all of which we have seen recently, pose challenges to ensuring public health across the city. The current preparedness measure may not be adequate therefore the city should leverage its emergency response infrastructure and discuss the necessary adjustments to respond to these challenges.
2. With respect to the Transportation and Land Use goal, we comment on these strategies:
 - a. **Planning & Land Use:** Plan for and encourage "complete neighborhoods" which meet the needs of all Minneapolis residents. Long-term, we believe this strategy should include access to health care facilities as part of the livable, walkable, and growing neighborhoods that meet the needs of all Minneapolis residents.
 - b. **Active Transportation:** Ensure the public works department understands the importance of keeping bikeways clear of snow and ice for year-round use, that they are well-lit and well-maintained. This is crucial to users' safety and encourages year-round use of alternative modes of transportation.
 - c. **Clean Fuels:** Consider instituting a complete prohibition on vehicle idling when unoccupied, including city owned/operated vehicles and all diesel vehicles. This practice reduces emissions and also improves air quality for residents and passersby.

www.minneapolismn.gov

Affirmative Action Employer

The City should abide by this prohibition at all times as it applies to its vehicles, operators, and equipment.

As stated earlier, the committee endorses the strategies and goals in this plan with a desire to see that next steps include a comprehensive approach in addressing other environmental factors that put the public's health at risk. We believe a key component is integrating the Climate Action Plan with Emergency Preparedness and Public Works departments in order to not only prevent but reduce the impacts of climate change already being experienced.

If we can be of any further assistance, please don't hesitate to contact Margaret Schuster, MDHFS staff for PHAC at: (612) 673-2643 or Margaret.Schuster@minneapolismn.gov.

City of Minneapolis' Public Health Advisory Committee

Julie Ring	Ward 1
Robin Schow	Ward 2
Patricia Hillmeyer	Ward 3
Saeng Kue	Ward 4
Tara Jensen	Ward 5
Happy Reynolds	Ward 6
Karen Soderberg	Ward 7
Abdullahi Sheikh	Ward 8
John Schrom	Ward 9
Linda Welter	Ward 10
Robert Burdick	Ward 11
Autumn Chmielewski	Ward 12
Dr. Rebecca Thoman	Ward 13
Silvia Perez	Mayor's Representative
Daniel Brady	Member at Large
Samira Dini	Member at Large
Douglas Limon	Member at Large
Julie Young-Burns	Minneapolis Public Schools Representative
Linda Brandt	Hennepin County Human Services and Public Health Department
Alan Lifson	University of Minnesota School of Public Health