

Glenview Community Bike Initiative Assessment



Ryan Donald and Mark Kopec

In partnership with The Village of Glenview

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Executive Summary

Bike Glenview is an initiative to increase bicycle usage among residents. This research examined the businesses and services available to support Bike Glenview and identified key stakeholders for the success of its initiatives. We found that Glenview has many strengths to support a bike-friendly community and Bike Glenview has many supportive stakeholders. Our primary recommendation is to strengthen relationships between key stakeholders in order to support and grow Bike Glenview.

Our audit included an analysis of the stock management of bicycles according to five categories of a circular economy. The five categories are how users share, maintain/prolong, reuse/redistribute, refurbish/re-manufacture, and recycle bikes in the Glenview community. We measured how many of these options are available to Glenview's biker population. The information provided by our analysis highlighted aspects of Bike Glenview that meet the requirements of the Circular Economy as well as provide insight for necessary areas of improvement. The information provided by our analysis should further inform Glenview's leaders as they make future decisions developing their bike initiatives.

Glenview Community Bike Initiative Assessment

Bike Glenview is an initiative within the village of Glenview to promote cycling among residents. Bike Glenview hopes to expand to more residents in the community. As such, we conducted a two-pronged assessment of the community in order to gauge support for Bike Glenview and the promotion of a more sustainable community.

First, using the Circular Economy¹ framework, we conducted a gap assessment of Glenview's network of businesses and services that interact with a bicycle during its product lifecycle. A gap assessment is one tool to examine the current condition versus the desired condition and identify actions that can help bridge the gap.

Second, we conducted a Stakeholder Analysis² of Bike Glenview. A stakeholder analysis identifies all parties with an interest in Bike Glenview and determines their position in the success of this initiative.

This assessment finds that Glenview has many strengths. The elements are in place to contribute to a sustainable circular economy and numerous stakeholders are supportive of Bike Glenview. Based upon information obtained from our two assessments, we present some recommendations for successful growth of Bike Glenview and developing a more sustainable community. These recommendations should further inform Glenview's leaders as they make future decisions developing their bike initiatives.

Mark Kopec and Ryan Donald, seniors at Loyola University Chicago, completed this project.

¹ Ellen MacArthur Foundation. "Circular Economy - UK, Europe, Asia, South America & USA | Ellen MacArthur Foundation." Circular Economy. The Ellen MacArthur Foundation, 2015. Web. 18 Apr. 2016. <<http://www.ellenmacarthurfoundation.org/circular-economy>>

² Thompson, Rachel. "Stakeholder Analysis: Winning Support for Your Projects." Stakeholder Analysis. Mind Tools Ltd, 2002. Web. 18 Apr. 2016. <https://www.mindtools.com/pages/article/newPPM_07.htm>.

Circular Economy Assessment

Our current economic system is based on a linear model where goods are produced and manufactured from a finite amount of resources and eventually discarded in sprawling landfills. The linear model has led to economic growth, innovation, and development across the globe; however, it depends on cheap and easily accessible fossil fuels. This take-make-dispose model is wasteful and limited by design. Tremendous amounts of labor and energy go into extracting price-volatile raw materials that ultimately end in landfill after a limited product lifecycle. Both producers and consumers uphold this economic system with continuous consumption and disposal of products into landfills while the products retain value. However, there is an alternative to this approach.

The circular economy (Figure 1) is a model proposed by the Ellen MacArthur Foundation to help build more sustainable communities and their economies. A Circular Economy is one that is restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times. The concept distinguishes between technical (man-made) and biological (natural) materials. Materials are regenerated in the biological cycle or recovered and restored in the technical cycle. The circular economy model identifies how we can more efficiently use biological (natural) materials and technical (man-made) materials. The Circular Economy concept offers a continuous positive development cycle that enhances and preserves natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows. It can work effectively at any scale.

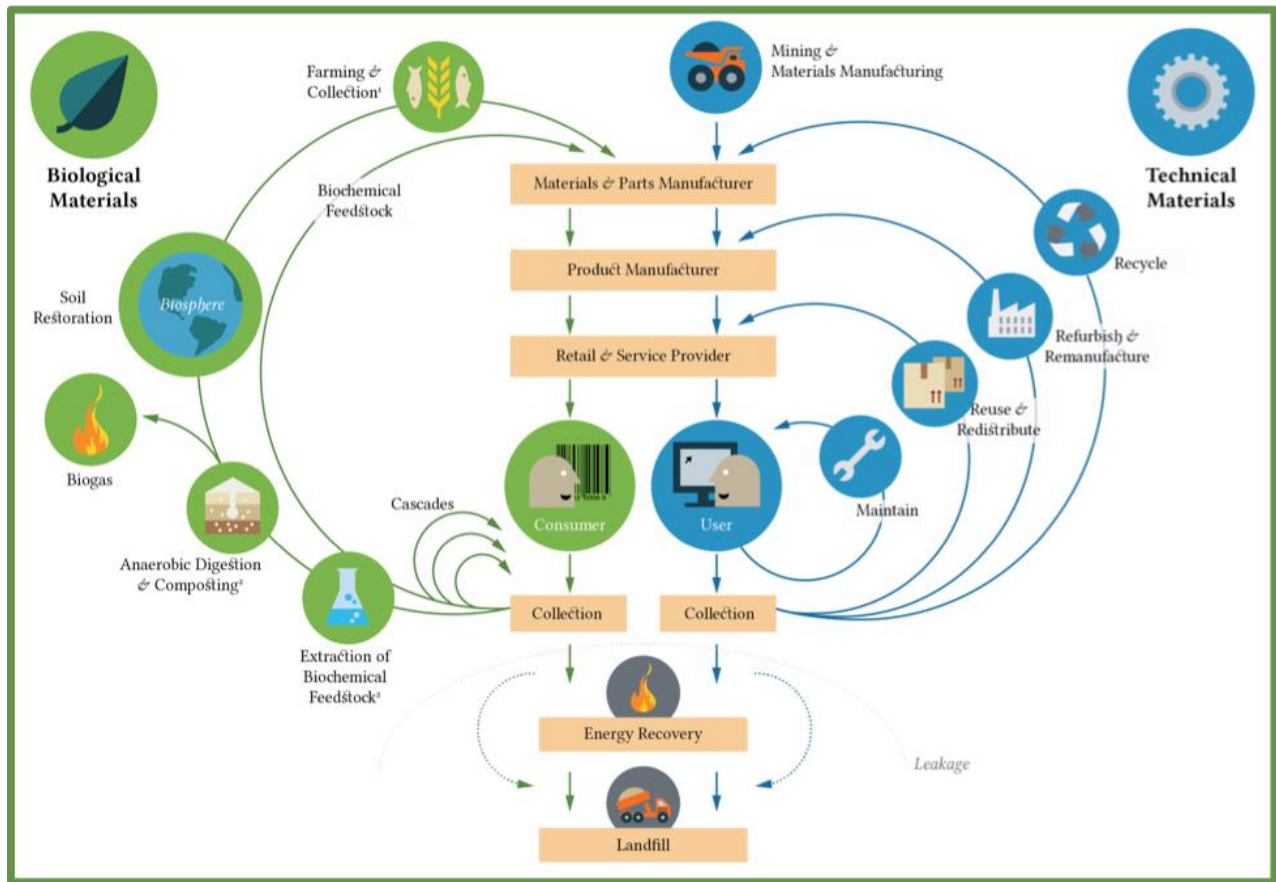


Figure 1. The Circular Economy (Source: Ellen MacArthur Foundation, 2015).³

The transition from a linear economy to a Circular Economy begins at the local level by improving the connections among the existing network of businesses and programs. We collaborated with The Village of Glenview and Bike Glenview to envision ways the community-wide initiative can expand sustainably, include more residents, while promoting biking as a healthy, cost-effective, and low-polluting way to travel around the village. This project will serve as Bike Glenview's introduction to the Circular Economy that highlights existing programs and services, establishes stakeholder relationships, and ultimately educates The Village of Glenview on the benefits of this concept. In our assessment of the Village of Glenview's biking initiatives, we focused on the technical (man-made) materials aspect of the model and applied it to building a bicycle-friendly sustainable community. The circular economy model suggests that man-made items, such as bicycles, can most efficiently and sustainably contribute to a local economy by progressively cycling through five cascades. Users are customers who use the products, in this case, bicycles. Users should then be able to Maintain (or repair) their own bicycles instead of

³ The Ellen MacArthur Foundation. "Circular Economy System Diagram." Circular Economy System Diagram - Ellen MacArthur Foundation. Ellen MacArthur Foundation, 2015. Web. 18 Apr. 2016. <<http://www.ellenmacarthurfoundation.org/circular-economy/interactive-diagram>>.

discarding them into the waste stream. When the User no longer desires the bicycle, it should be Reused or Redistributed to another User instead of discarding it into the waste stream. When the bicycle can no longer be Maintained or Reused/Redistributed, the bicycle should be Refurbished or Remanufactured into a good-as-new bicycle for new Users. Then the bicycle is beyond repair, at this point its various component parts can be destroyed and recycled. Following this cycle keeps products from the landfill, allows for products to stay in the economy much longer, and promotes a sustainable community.

Following the circular economy model, we conducted an assessment of the Village of Glenview to determine existing services and future opportunities in each loop of the circular economy that could contribute to a more sustainable bike-friendly community.

User & Share

The share loop is located within the User cascade. By focusing on use rather than consumption, a Circular Economy emphasizes increased access to goods and services rather than ownership. Relating this to bicycling in Glenview, there is an opportunity for residents to rent bikes that allows them to experience the benefit of Glenview's network of bike paths and trails throughout the village. The Village of Glenview borders two State Forest Reserves on the east and west side of the village. There are biking paths within the forest where people can experience the beautiful natural lands Glenview offers.

- *Glenview Cycle*: Established in 2004, Glenview Cycle strives to be the village's first choice for all biking necessities. Besides selling bikes and accessories, the local shop rents out bicycles at rates of \$8 per hour or \$150 per week. Bike renting services extend the benefits of ridership to the casual user who may not afford or want to own a bike. As the only bike rental location in Glenview, Glenview Cycle will expand rental services to meet local demand. Peak rental occurring during the summer months highlights residential preferences of recreational use over commuter use.

Maintain & Prolong

Maintaining and prolonging the use of products is the cascade that focuses on extending product life and maximizing its utility for as long as possible. The Maintain Cascade may be the most important waste loop. Tighter loops represent more effective use of resources, thus the tighter the loop the more energy preserved and recovered at this stage. Bikes make great promoters for the Circular Economy. Bicycles are modular by design, meaning that parts and components are interchangeable to a certain degree. It is unlikely that all aspects of the bicycle will degrade

uniformly. Therefore, the product-life can be extended by replacing only worn parts instead of replacing the entire bike. This is cost effective for consumers and producers investing the minimum resources while obtaining a fully functional bicycle.

•*Glenview Cycle* is the village's neighborhood bike shop that plays an important role in extending a bike's lifetime by offering maintenance services to the community. In addition to selling new bikes, Glenview Cycle's services include flat repairs, tubes, tune-ups, brake and derailleur adjustments, and full bike overhauls. This shop is continuing to serve Glenview's community for over 10 years.

Reuse & Redistribute

When bikes are reused or redistributed, the losses in material value are minimized as materials are withheld from the waste stream. Purchasing items second hand optimizes reuse by extending product life to a second or third user. In addition to Goodwill and Salvation Army, there are two locations in Glenview that accept bicycle donations promoting this cascade selling bikes back to the community.

•*Our Lady of Perpetual Help*, a local Catholic church, hosts an event called "Deals on Wheels" sponsored by the OLPH Women's Club Guild 26. This event takes place once a year in May, it provides a place for people to donate and buy bikes, tricycles, etc. The process is very convenient for people to sell bikes as they may leave their bikes on the lot during the day and have volunteer workers handle the sale. The program also offers the option to donate a bike if it is unsold by the end of the day. Sellers may set their own prices and 20% of the commission goes to OLPH. For more information, this program's contact is Tricia J. at 847-834-0332.

•*Working Bikes* donates over 6,000 bicycles each year to local and international partners including Latin America, Africa, and various other partner organizations located in Chicago. Working Bikes collects discarded bicycles and redistributes them as tools of empowerment in areas of high poverty and high unemployment. There are two drop-off locations in The Village of Glenview and you can visit their website to look up all their drop-off locations. Their initiative was featured on Channel 11 WTTW⁴.

Refurbish & Remanufacture

The cost of replacing or repairing a single component is much lower than investing in a brand new bike. Refurbishing and remanufacturing goods grants products a second life. Too many

⁴ Link to Channel 11 WTTW segment on Working Bikes. https://www.youtube.com/watch?v=58y0qUM_p6U

bikes lay useless, discarded in garages due to a single broken part or component. For bicycles, the fix may come in the form of new brakes, handlebars, or a set of gear, etc. Remanufacturing and refurbishing maximize value and usage by extending the time spent in use in this cascade. When usage time of a product is extended, then replacing the product is postponed saving the user money while extending value.

•*The Recyclery Collective* is a non-profit educational bike shop that promotes sustainability by giving the community access to tools, skills, and opportunities for collaboration through education. The Recyclery accepts donations of used bikes and parts. Bikes and parts are then repaired and refurbished by skilled volunteer mechanics or staff and sold back to the community. The Recyclery hosts bicycle mechanics classes and open shops where people can learn how to maintain and repair their own bikes becoming knowledgeable and self-reliant cyclists. Their vision is to promote a diverse, resilient, and knowledgeable neighborhood of self-resilient cyclists.

Recycle

Recycling materials is considered the outermost loop. At the end of a product's usable life cycle the components, materials, form, and shape retain amounts of embedded energy from production. When these products are dematerialized for recycling, this energy is lost again. However, the cost production decreases in the long run as more precious metals and materials continue circulating within the economy. Recycling is the final resort to hold on to the technical nutrients allowing them to re-enter a Circular Economy as new goods and products.

•*The Northfield Township Recycling Center* accepts many items including bikes to recycle appropriately according to state and federal environmental regulations. Bikes in valuable working condition are donated to Goodwill. However, those that have no mechanical use are disassembled into metal and rubber materials. After disassembly, the Recycling Center's contractors recycle them appropriately.

Stakeholder Assessment

Stakeholder management is a tool to use to determine the relative influence and interest of an organization's or project's stakeholders. Stakeholders are defined as any individual or entity with an interest in an organization's activities. Identifying and understanding the relative influence and interest of stakeholders can help an organization understand the best way to interact with each stakeholder group. Thompson (2002) suggests that there are four positions in which to categorize stakeholders dependent upon relative power or influence and the level of interest of the stakeholder (Figure 2):

- I) Those who fall on the grid in Category I are stakeholders of great influence and interest. The best approach with these stakeholders is to work closely with them, keep them fully engaged, and put forth great effort to keep them satisfied.
- II) Those who fall on the grid in Category II are stakeholders of great influence but little interest. The best approach with these stakeholders is to keep them informed and try to keep them satisfied.
- III) Those who fall on the grid in Category III are stakeholders of great interest but little influence. The best approach with these stakeholders is to keep them informed and engaged.
- IV) Those who fall on the grid in Category IV are stakeholders of little influence and little interest. The best approach with these stakeholders is to monitor them and keep them on the initiative's radar.

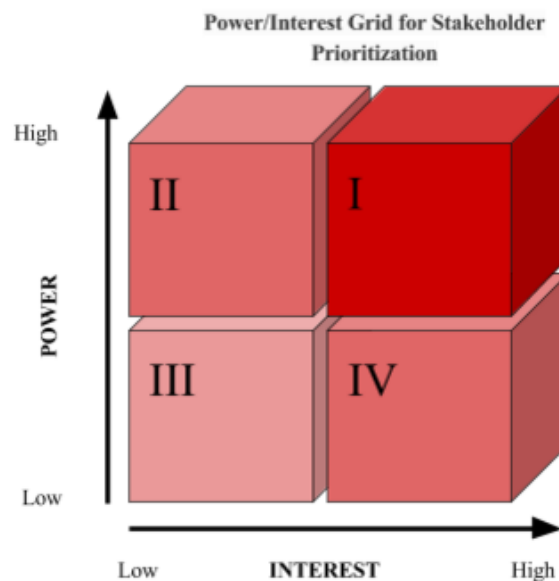


Figure 2. Stakeholder Management (Source: Thompson, 2002).⁵

⁵ Thompson, Rachel. "Stakeholder Analysis: Winning Support for Your Projects." Stakeholder Analysis. Mind Tools Ltd, 2002. Web. 18 Apr. 2016. <https://www.mindtools.com/pages/article/newPPM_07.htm>.

The first step involved identifying stakeholders available to Glenview that contribute to the promotion of cycling. We identified the following stakeholders: Glenview Cycle, Glenview Comprehensive Planning Committee, Glenview Park District, Our Lady of Perpetual Help Parish, Illinois Department of Transportation, Glenview Chamber of Commerce, The Recyclery, Working Bikes, and Glenview Public Library. We met with representatives from each stakeholder group to assess their interest and influence in Bike Glenview's development. We made the following determinations regarding positioning of stakeholders of Bike Glenview.

Category I Stakeholders.

- Glenview Cycle:
 - This bike shop is very valuable to the bike initiative because it is the only bike shop that Glenview has and meaningfully connects with the needs of residents.
 - The store owner served Glenview for over 10 years and demonstrates willingness to stay current with local bicyclists.
 - The shop's services are related to the cascades of the Circular Economy and the shop is collaborating as a partner with Working Bikes.

- Glenview Comprehensive Planning Committee:
 - Holds meetings to construct future development plans for Glenview
 - Incorporates the public's voice into initiatives

- Glenview Park District
 - Key resource for community members of yearly biking events
 - Holds high level of transparency by distributing maps of green infrastructure biking paths and trail paths
 - Educates public on best bike safety practices

- Our Lady Of Perpetual Help Parish
 - Deals on Wheels event has potential to reach out to community members through the Parish Community
 - The event is highly noticeable on Glenview Rd.
 - The event offers convenience for bike redistribution while benefitting both the Parish and sellers

- Glenview cycling clubs and members
 - Incorporating these members ideas and desires in development could improve the long-term sustainability of bike initiatives
 - They hold the most enthusiasm and local knowledge of bicyclists' needs

Category II Stakeholders.

- Illinois Department of Transportation (IDOT)
 - Maintains important roads in Glenview including Central, Pfingsten, Shermer, Willow, and Waukegan Rd.
 - Has power to create or prevent implementation of bike lanes

Category III Stakeholders.

- Glenview Chamber of Commerce
 - Currently not associated with the bike initiative
 - Is open to become involved in future local business discounts for bikers
 - Could be a connection to future collaborative relationships between bike initiatives and Glenview's local businesses

Category IV Stakeholders.

- The Recyclery
 - Donates bikes to at risk beneficiaries within the city of Chicago and abroad
 - Involved in Glenview farmers market
 - Is an influential component of educating bike users how to maintain and repair bikes
 - Contact shows willingness to improve presence in Glenview through future community outreach
 - Largest need is bike donations
- Working Bikes
 - Contributes as a resource for public bike donations
 - Has 2 drop-off locations in Glenview
 - Offers cheaper option of refurbished bikes for community members
 - Bike and part donations contribute to improving underprivileged community conditions
- Glenview Public Library
 - Collaborating with the bike initiative
 - Educational avenue for bike initiative information
- Glenview residents

- Some community members expressed that implementation of past development plans is not prevalent
- Collective power is most through bike programs and events

Recommendations

Based upon our analyses of the circular economy in Glenview and a stakeholder assessment of Bike Glenview, we have developed the following recommendations:

- We recommend improvement of existing partnerships to increase interest in Glenview’s bike initiative. The most influential stakeholders in the success of creating a bicycle-friendly sustainable community are Glenview Cycle, Glenview Comprehensive Planning Committee, Glenview Park District, Our Lady of Perpetual Help Parish. These stakeholders are necessary for the success of a bicycle-friendly sustainable community. Events, activities, committees, or other efforts to bring this community together in collaborative and cooperative planning will be necessary.
- The Illinois Dept. of Transportation is a stakeholder that should be kept informed at all times.
- Stakeholders who hold little power or influence but who hold an interest in this initiative include The Recyclery, Working Bikes, and Glenview Public Library. These stakeholders should be kept informed at all times and they can become great allies and advocates. Engage and involve them to support Bike Glenview. For example, by increasing the frequency of bike-related events occurring each year and improving advertisement of each program, Bike Glenview can incentivize these stakeholders to become more involved in Glenview’s bike initiative by improving communication and identifying current needs of these stakeholders.
- Surveying community members could help gather an understanding of the community's feelings towards the Village’s process in implementing the infrastructure for cyclists. This data could serve as a baseline to understand the level of transparency and trust that community members feel toward Glenview's bike initiative. It is important to continue to include Glenview’s cycling clubs in the decision-making process of the Glenview Comprehensive Planning Committee.
- Finally, data needs to be gathered and analyzed to determine if bike-sharing programs like Divvy would be successful in Glenview. According to Alison Cohen, CEO of Bicycle Transit Systems, extended commute times to bike stations occur in smaller cities and towns⁶. These extended commute times discourage the use of bike-sharing programs

⁶ Lazarski, Lindsay, “How smaller cities should think differently about bike share.” Keystone Crossroads, 28 Apr., 2015.

in smaller towns. There is a potential risk that this style of bike-sharing program may not fit well for the commuters in Glenview's community.

Conclusion

Through the assessment process, we discovered that Glenview has many strengths upon which to build. The existing businesses and services work together to support the principles of a Circular Economy that will help lead Glenview toward increased sustainability. We also identified key stakeholders that are critical to the success of Bike Glenview. Through increased collaboration and cooperation with these important stakeholders, there is promise to grow the Bike Glenview initiative.

Appendix: Contact List

The Village of Glenview

Address: 2500 East Lake Avenue, Glenview, IL 60026

Website: <http://glenview.il.us>

Phone: (847) 724-1700

Contact Lynne Stiefel, Communications Manager

Email: lstiefel@glenview.il.us

Bike Glenview

Address: Glenview Park Center 2400 Chestnut Avenue Glenview, IL 60026

Website: <http://www.glenviewparks.org/bike-glenview/>

Phone: (847) 724-5670

Glenview Park District

Address: 2400 Chestnut Avenue Glenview, IL 60026

Website: <http://www.glenviewparks.org/>

Phone: (847) 724-5670

Contact: Jena Johnson, Communications Manager

Glenview Cycle

Address: 1011 Harlem Ave. Glenview, IL 60025

Website: <http://www.glenviewcycle.com/>

Phone: (847) 998-5900

Email: info@glenviewcycle.com

Northfield Township Recycling Center

Address: 1928 Lehigh, Glenview IL, 60026
Website: thfieldtownship.com/recycling-program.html
Phone: (847) 724-7055
Email: ntroad@northfieldtownship.com

Glenview Natural Resources Commission

Address: Village of Glenview 1225 Waukegan Road Glenview, Illinois 60025
Website: <http://glenview.il.us/government/Pages/Natural-Resources.aspx>
Phone: (847) 724-1700

Working Bikes

Address: 2434 S Western Ave. Chicago, IL 60608
Website: <http://www.workingbikes.org/>
Phone: (773) 847-5440

The Recyclery Collective

Address: 7628 N Paulina St. Chicago, IL 60626
Website: <http://therecyclery.org/>
Phone: (773) 262-5900
Email: info@therecyclery.org

Our Lady of Perpetual Help Parish

Address: 1775 Grove St. Glenview, IL 60025
Website: <http://www.olphglenview.org/>
Phone: (847) 729-1525
Email: Messages available through website