Age-Friendly Arborg

Erika Blackie Rebecca Copping Gabrielle Donoff Jasreen Sidhu

University of Manitoba Department of City Planning, December 2012

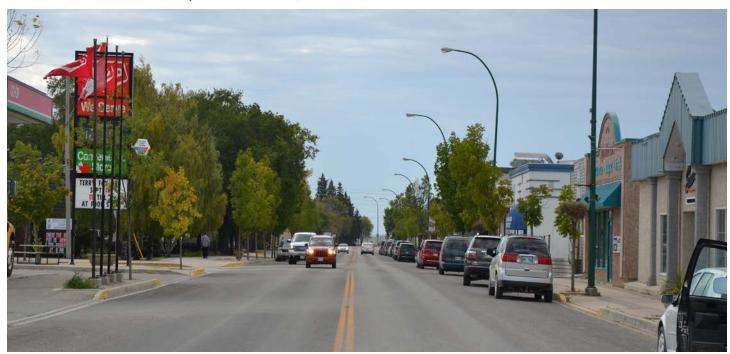




Table of Contents

Age-Friendly Arborg	5
Age-Friendly Guiding Documents	6
Process and Methodology	7
About Arborg	8
Population	9
Land Use and Built Form	10
Street Feel	11
Strengths and Opportunities	
Housing Transportation Outdoor Spaces and Buildings Social Participation	12 14 16 18
Focus Areas	20
Potential for Rail Yards	22
Developing Crosstown Avenue	28
River and Main Gateway	34
A Town Square in Arborg	40
Future Focus Areas	46
Final Consultation and Feedback	47
Conclusion	49
Figure List	50
Works Cited	53



Age Friendly Arborg

Relevance of this project

As the 'baby boomer' generation reaches retirement, Canada is beginning to feel the impacts of an aging population. Seniors access Canada's health care system disproportionately to their relative population size. Safe and supportive communities allow seniors to live in better health independently, while engaging in civic participation and enhancing the general well-being of a population.

Although urbanization is shrinking Canada's rural population, 23% of Canadian seniors live in rural areas and small towns (Public Health Agency of Canada, 2009, p.6). By focusing on the unique challenges and opportunities of aging in rural Canada, this project examines how the built environment can allow Canada's rural seniors access to supportive and healthy communities.

Envisioning age-friendly cities and towns

Following the launch of the Age-Friendly Manitoba Initiative and the Age-Friendly Communities Active Aging Alliance (based at the University of Manitoba Centre on Aging), many towns and cities across the province have expressed interest in becoming more age-friendly. Since 2010, the Community University Research Alliance (CURA) has linked interested communities with the University of Manitoba's Department of City Planning. The following report is the result of a three-month studio designed to introduce first year Master's students to community planning and urban design. Fieldwork, research, and community engagement have all contributed to the content in this document.

Age-friendly Arborg

Four first year planning students were assigned to work with Arborg, Manitoba, in envisioning the town as an age-friendly community. This report outlines the methods and research for this project, provides background information about the town, and describes the design ideas and community feedback that have emerged during this project. The scope of this project was to initiate conversations and ideas about age-friendliness, and also to introduce first-year students to the basics of community planning. Although a great amount of time and effort was spent in designing and evaluating these schemes, much work is still required before finalized plans are made.

Age-Friendly Guiding Documents

Observations discussed in this report are guided by Global Age-Friendly Cities: A Guide published by the World Health Organization (WHO) and Age-Friendly Rural and Remote Communities: A Guide published by the Public Health Agency of Canada (PHAC). Both documents identified eight topics that influence a city's agefriendliness and include: transportation, housing, outdoor spaces and buildings, respect and social inclusion, social participation, civic participation and employment opportunities, communication and information, and community support and health services. For this report, social participation, civic participation and employment opportunities, communication and information, and community support and health services are consolidated as social participation.

Guiding Principles

The following four age-friendly principles guided our observations and ideas:

- Transportation
- Housing
- Outdoor spaces and buildings
- Social participation

Global Age-Friendly Cities: A Guide

Global Age-Friendly Cities: A Guide, highlights the need for urban spaces to become more age-friendly. Research in the determinants of active aging highlights the global trend of aging and urbanization. Focus groups of older adults from 33 cities worldwide helped inform this documents recommendations. Comments on the existing advantages and barriers to aging in urban spaces has helped determine best practices for planning and designing cities for older adults, presenting a model of 'active aging' that informs the direction of this guide.

Age-Friendly Rural and Remote Communities: A Guide

Although the majority of older adults live in Canadian cities, an estimated 23% live in rural areas and small towns. Age-Friendly Rural and Remote Communities: A Guide published by the Public Health Agency of Canada emphasizes the unique social and environmental factors facing rural aging adults. Focus groups of both older adults and service providers were interviewed across Canada. The interviews influenced the documents key findings and recommendations to foster planning of age-friendly rural and remote communities.

Process and Methodology

Research

Our research for this project included consultating the WHO and PHAC documents. The guiding principles in these documents framed our analysis. In addition, local and national data including Statistics Canada, the Arborg Housing Needs Assessment, and the Arborg Community Profile provided context to our work. Our ideas were inspired by both community feedback and examples of similar initiatives around the world.

Figure 1: Community consultation tool

Observations and Community Consultation

To begin our analysis, we visited Arborg on two seperate occasions to gather photographs and observe the age-friendliness of the town. On Tuesday, Ocotber 23, 2012, we held a public consultation session at the local Co-op grocery store. The purpose was to share our initial findings with the public and learn about the strengths and opportunities of Arborg (Figure 1). The results were highly constructive and we heard:

- Arborg is very friendly
- the curbs are too high on main street
- Arborg acts as a hub for the surrounding area
- there is an anticipated increase in immigration
- there is a shortage of affordable housing and rental units
- there are long wait lists for seniors' housing
- the Chamber of Commerce is quite active
- residents would like the option to purchase a garden plot
- the river trails are popular
- seniors have priority access to shuttle service
- shops and amenities are within a convenient distance

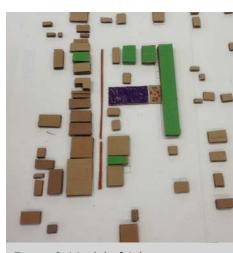


Figure 2: Model of Arborg

Design Process

After the public consultation, we used models and sketching to explore design ideas. We created a massing model (Figure 2) to visually identify possibilities and sketched hypothetical scenarios (Figure 3). A lot line map was provided by the ABCDC, showing property lines which helped inform the feasibility of our ideas. Through this process we were able to identify our focus areas.



Figure 3:Design idea sketches

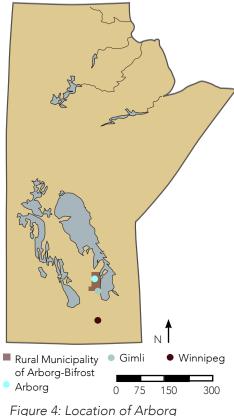
About Arborg

History

In 1890, a group of settlers founded the town of Arborg along the Icelandic River. Icelandic, Polish, and Ukrainian settlers established homesteads, quickly populating the area. In 1910, Canadian Pacific Rail (CPR) offered regular train service to Arborg. By 1964 Arborg was incorporated as a village, and in 1997, a town (Manitoba Historical Society, 2012). Steady growth continued throughout the 20th century. Today, Arborg is closely linked to the resources that surround it: conventional grains, oilseed, and livestock are common types of agriculture in the area. Arborg supplies much of the seed, animal feed, and machinery used in the Bifrost region, and also produces machinery for international sale (Town of Arborg, 2012). Arborg's slogan, "a tradition with a future" indicates an interest in continued growth that celebrates their historical past (Town of Arborg, 2012).

Location

Arborg is located approximately 100 kilometres north of Winnipeg, Manitoba (Figure 4). The town is in the Rural Municipality of Bifrost, which also encompasses Morweena, Vidir, Hnausa and the Village of Riverton. Located 50 kilometres to the south is the town of Gimli (population 5,845). Gimli offers a variety of shops, services and a well established 55+ Seniors Club, New Horizons. Winnipeg is a destination for business and commerce; Arborg residents will travel to Winnipeg to access specialty stores, air and rail transportation, and health services.



Local Amenities

Because Arborg provides amenities for the Bifrost region, local residents benefit from a wide selection of shops, services, and recreation opportunities. Figure 5 shows the following services available in Arborg.



Figure 5: This word graphic illustrates the various services of Arborg

Population

Since 2001, Arborg's population (Figure 6) has been steadily growing. As the overall population of Arborg has increased, the proportion of adults aged 65 and over has remained guite stable. Despite this stability, significant demographic changes have occurred. Most notably, the number of men and women aged 45 to 54 and 55 to 64, as well as females over 85 years old has experienced continuous growth from 1996 to 2011 (Figure 7, Figure 8). As the first wave of Baby Boomers turned 65 only recently in 2011, it is projected that the number of older adults will continue to grow. Furthermore, immigration and employment opportunities will also affect Arborg's demographics. The Arborg Housing Needs Assessment projected that Arborg will grow by 5% per year over the next 3 years in which the total population of Greater Arborg will be 2,209 by 2015 (Arborg-Bifrost Community Development Corporation, 2011).

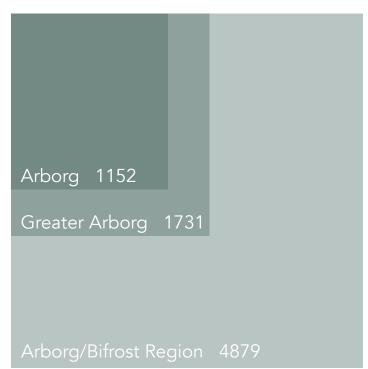


Figure 6: Arborg's population is 1,152 however the population of Greater Arborg (those who collect their mail in Arborg), is 1,731. Approximately 5000 people rely on the town's services and amenities.

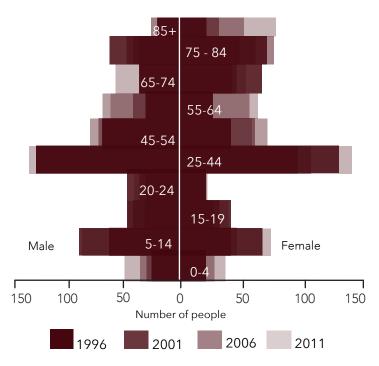


Figure 7: Arborg population growth by age and gender

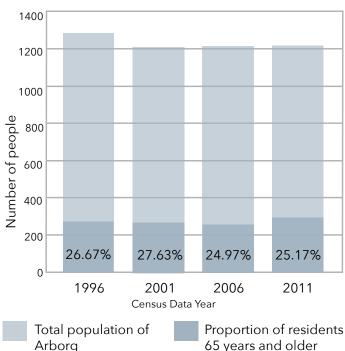


Figure 8: Proportion of residents 65 years and older

Land Use and Built Form

Figure Ground Map

The overall grid-pattern and density of the built environment of Arborg is seen in Figure 9. The built environment is medium to low density comprised largely of residential units followed by commercial buildings. Seniors' housing is primarily east of Main Street and south of the Icelandic River. Industry and institutions are pimarily located at the north and south ends of Main Street. A 7 acre parcel of land east of Main Street, four commercial buildings and eight lots adjacent to Main Street are identified as vacant. Recreational pathways have been developed along the Icelandic River which flows through town.

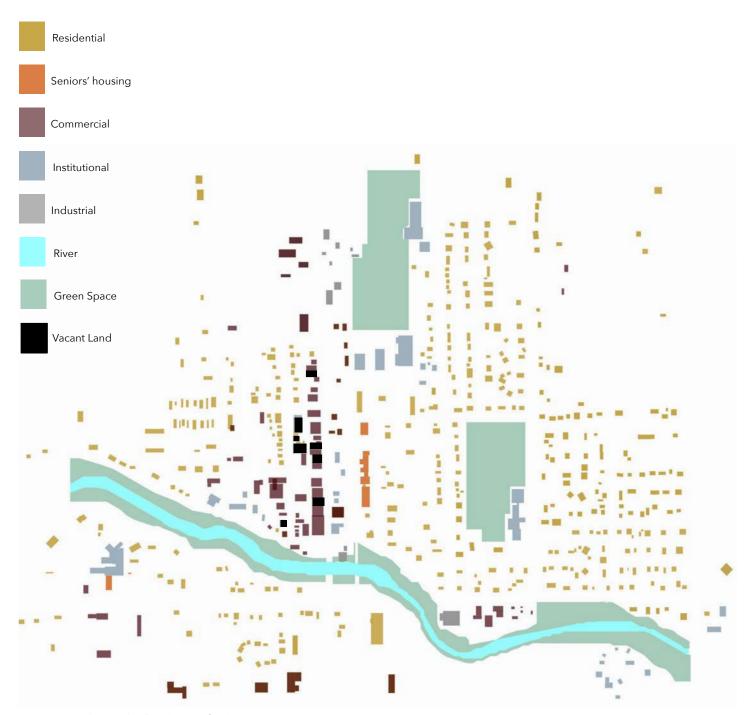


Figure 9: Shows the land use of Arborg

Street Feel

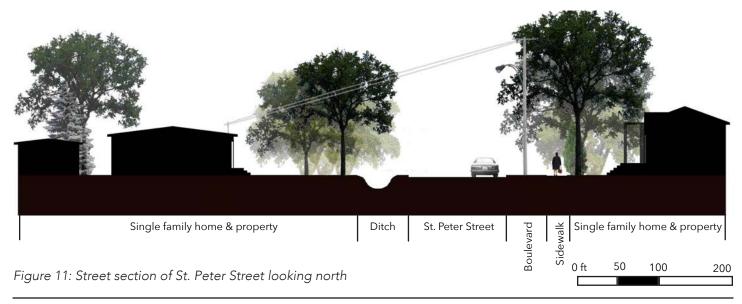
Main Street

Figure 10 is a street section of Main Street looking north. Amenities are in close proximity to one another and wide sidewalks and landscaping make this area pleasant to visit. Trees in front of the post office appeal to the pedestrian scale. However, vehicles are prioritized over pedestrians. Wide sidewalks are comfortable for all users and railings leading to the post office are inviting and age-friendly.



St. Peter Street

Figure 11 is a street section of St. Peter Street, a typical residential street east of Main Street. Single-family homes are centered on large lots surrounded by green space. The sense of space is less pedestrian friendly as the large set backs of the residential homes makes the space feel 'uninhabited'. While the homes are well-kept, there is little interaction between the buildings and the street.



Strengths and Opportunities: Housing

Strengths

Continuum of Care

Arborg offers a large range of assistive, supportive, and continuing care options. Older adults could benefit from home care services to bridge the gap between independent and assistive living.

There should be a continuum of care in a community, providing independent, assisted, and long-term care spaces.

Public Health Agency of Canada, 2009



Figure 12: Seniors' housing, Arborg, MB

There are 16 units of 55+ independent living at the House of Hope (Figure 12), 16 units each of supportive housing and assisted living at Mary Thorarinson Estates, and 40 beds at the Arborg Personal Care Home (Interlake RHA, 2010), as well as additional units at Sunrise Lodge North and South (Figure 13). Although there is concern over a 30 person waiting list at Mary Thorarinson Estates, Arborg is clearly including seniors in local housing plans.

Quality of homes and lots

The homes in Arborg are generally very well maintained. Lot sizes in Arborg are typically quite generous, providing an opportunity for optional secondary suites (Figure 14).





Figure 14: Single family homes, Arborg, MB

Strengths and Opportunities: Housing

Opportunities

Design

The majority of the homes in Arborg are not zero step entry, making it difficult, or even impossible, for some people to enter buildings. New construction should include universal design standards allowing the home owners to age in place.

Spaces should be designed for modification when needed to allow residents to age in place.

Public Health Agency of Canada, 2009

Housing Types

Arborg has limited housing options and availability of: affordable apartments, independent living housing options, subsidized housing, and condominiums and smaller houses for sale.

Infill Housing

Increasing density downtown is a good option for creating new housing that has convenient access to daily goods and services within walking distance.

Secondary Suites

Adding suites to existing infrastructure is an efficient way to increase housing options for older adults. Types of secondary suites are: granny flats, basement suites, garage suites, gardens suites and guesthouses.

Age-friendly housing principles

Age-friendly communities should provide:

- a continuum of care offering housing options for a range of physical and mental
- the coordination of home care, designated seniors housing, assisted living, and continuing care facilities to ensure older adults are adequately housed
- unit sizes should vary, providing a variety of living options as needs change
- units should be low-maintenance, affordable, and adaptable for changing physical needs
- housing with even surfaces, passages wide enough for wheelchairs, and appropriately designed bathrooms, toilets and kitchens
- opportunities to modify existing structures to become barrier free; this will allow adults to age in place

Strengths and Opportunities: Transportation

Strengths

Transit accessibility

The Handi-van is a great asset to Arborg and could continue to increase ride frequencies and destinations (Figure 16). This is a good alternative for older adults having to rely on family and friends.

Aging and driving

Parking along Main Street and River Avenue (Figure 15) allows those with limited mobility to access shops and services. Traffic calming measures would slow vehicles around parked cars increasing safety, while lowering curbs mid-block can increase accessibility.



Figure 15: Standard parking, Arborg, MB

Sidewalks and pathways

The sidewalks in Arborg are of very high quality. The bridges across the Icelandic River are heavily used and highly praised (Figure 17).

The bridges across the Icelandic River are heavily used and highly praised.



Figure 17: Bridge over the Icelandic River, Arborg, MB

Strengths and Opportunities: Transportation

Opportunities

Parking

Designated seniors' parking and drop off spaces would make it easier for older drivers and passengers to accesss services in Arborg.

Designated seniors parking should be accessible for those with mobility issues who do not qualify for a disability sticker.

Public Health Agency of Canada, 2009

Walking

Arborg pedestrians can be further supported with designated road crossings, shortcuts between residential areas and Main Street, and well maintained pathways and lower curbs heights. Bump-outs decrease the distance that pedestrians must cross, and also make pedestrians waiting to cross more visible to traffic.

Age-friendly transportation principles

Age-friendly communities should provide:

- asccessible and convenient parking for older adults who drive or carpool
- several designated parking spots for those with mobility issues who do not qualify for disability stickers
- accessible parking spots that are wide enough to open doors fully, and be located close to lowered curbs and entrances
- traffic calming measures, such as bump outs to help control traffic, as well as mark loading and unloading zones for ridesharing vehicles and drivers with limited mobility
- public transportation options for older adults who no longer drive. The availability, affordability, and frequency of these services can be difficult to provide in rural communities
- volunteer drivers, dial-a-ride programs, and short local public transit routes can help older adults stay independent.
- local transit that corresponds with popular travel destinations such as health services, shops, and social events
- transit vehicles which can accommodate passengers in wheelchairs and scooters
- marked transit stops with comfortable seating, be well-lit, and display clear information about trip frequency and cost

Strengths and Opportunities: Outdoor Spaces & Buildings

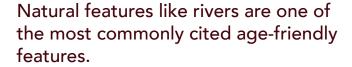
Strengths

Sidewalks

The sidewalks in Arborg are in good condition, and are all located within 400m of the town's centre. There has been great investment in local sidewalks and indication that efforts to improve walkability will continue (Figure 18).

Green Space

The Icelandic River offers many recreational opportunities. Pedestrian trails are heavily used, and seasonal bridges are highly praised for increasing connections and enjoyment of use.



WHO, 2007

Benches on Main Street

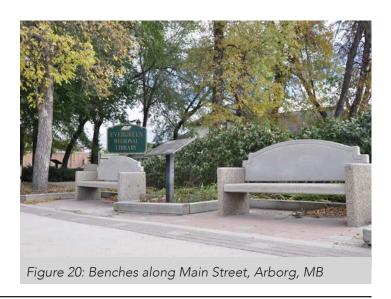
There are frequent benches for pedestrians to rest along Main Street (Figure 20).



Figure 18: Curb cuts, Arborg, MB



Figure 19: Stairs are not age-friendly, Arborg, MB



Strengths and Opportunities: Outdoor Spaces & Buildings

Opportunities

There are several opportunities for outdoor spaces and buildings to be more age-friendly:

Accessibility

Incentives like an age-friendly branding program could encourage local services in Arborg to consider zero-step entries, wide doorways and aisles, and large-print signs (Figure 19). Infill of vacant land would increase proximity between stores and services.

Services should be clustered near housing, and be easily accessible.

WHO, 2007

Gardens

Arborg has made a good effort to include green spaces in vacant spaces along Main Street. However, a centrally located community garden would further enhance the recreational opportunities. Raised garden beds allow for increased access and intergenerational gardening opportunities.

Shortcuts and resting places

Designated pedestrian short cuts between residential areas and Main Street would encourage walking for daily goods and services. Well marked trails and pathways with frequent benches would further allow those with limited mobility to access outdoor spaces and buildings independently.

Age-friendly outdoor spaces and buildings principles

Age-friendly communities should provide:

- sidewalks with the following: a smooth, level, non-slip surface; sufficient width to accommodate wheel-chairs or scooters; dropped curbs that taper off to street height; clearance from obstructions such as street vendors, parked cars and trees; and priority access for pedestrians
- seating in public spaces
- shelters for weather protection
- street furniture that is smooth, without sharp edges or recesses that may hold water or food particles. The ideal seat height from the ground is 50 cm
- seats with back supports, arm rests, and be able to support a minimum of 115 kg. Materials that do not retain heat or cold are preferable (American Society of Landscape Architects, 1976)
- factors that create barrier free access including: elevators; escalators; ramps; wide doorways and passages; suitable stairs (not too high or steep) with railings; non-slip flooring; rest areas with comfortable seating; adequate signage; and public toilets with handicap access
- services located in close proximity to one another to allow older adults to carry out their daily errands and activities with greater ease

Strengths and Opportunities: Social Participation

Strengths

Recreation

Arborg has many recreation opportunities, organized at the seniors' housing facilities, Age Friendly Club (Figure 22), public library (Figure 21), curling rink, ice rink, and seasonal pool.

Age-friendly communities should provide opportunities for physical and nonphysical recreation.



Figure 21: Public Library, Main Street, Arborg, MB

Community Support

The Age Friendly Club facilitates social participation in Arborg. Volunteerism in Arborg is very high (Statistics Canada, 2011).

Local Government

Arborg's City Council is heavily involved in the community and actively looks for ways to improve and increase local social participation.

Age-friendly communities create an environment of inclusion by consciously demonstrating community support in community design.



Figure 22: Age Friendly Club, Arborg, MB



Figure 23: Informal notice board, Arborg, MB

Strengths and Opportunities: Social Participation

Opportunities

Recreation

There is an opportunity for a community gathering and park space in Arborg. A space where the community could meet, learn, socialize, garden, and relax, would create a local hub and community focal point.

A space where the community could meet, learn, socialize, garden, and relax, would create a local hub and community focal point.

Communication and Inclusion

While information boards exist in Arborg, they are currently located in private spaces (Figure 23). Designated public space for the purpose of advertising community events and services would enforce Arborg's community outreach programs as community resources for all residents.

Multigenerational Space

Frequent resting spaces along the river walk would expand the usability of this great resource. A community meeting space in the centre of town would also provide a space for all community members to meet and interact. The Age Friendly Clubhouse could also be used to host multigenerational events and activities.

Age-friendly social participation principles:

Age-friendly communities should provide:

- opportunities for physical and non-physical recreation
- opportunities for older adults to participate as spectators at local sporting events, and provide an 'extra pair of eyes' at playgrounds and other public spaces
- public recreation facilities that are accessible and convenient to access
- an environment of inclusion by consciously demonstrating community support in community design. Central public message boards can facilitate the sharing of information within a community
- opportunities for civic participation such as volunteering, be open to residents of all ages and considerate of the unique needs of older adults by allowing for flexible hours and ensuring accessibility
- an age-friendly business program which certifies local services as accessible and considerate to older adults. For example, the Province of British Columbia, Moncton Senior Friendly Business Program, and Alberta Council on Aging provide resources for creating an age-friendly business program
- a community space that is designed for all ages to create the opportunity for intergenerational learning. Public spaces should include elements that are attractive to people of all ages and abilities
- housing developments that include units for a range of family structures and be situated within close proximity of services and recreation opportunities

Focus areas

For this project four main focus areas have been chosen (Figure 24). Each area has strengths, however we will focus on the areas of opportunity that will enhance Arborg as an age-friendly community.



Rail Yards

The vacant rail yards east of Main Street have great potential. The central location is ideal for increasing connectivity, for intensifying the residential area, and for amplifying community space.



Crosstown Avenue

Crosstown, which is perpendicular to Main Street, serves as a main thoroughfare of east-west traffic. This underdeveloped area offers potential for commercial and residential expansion, and an enhanced streetscape.



River and Main

The intersection of River Avenue and Main Street is the main gateway into town. This area holds potential for multi purpose infill, as well as connecting the vibrancy of Main Street to the Icelandic River trails.



Town Square

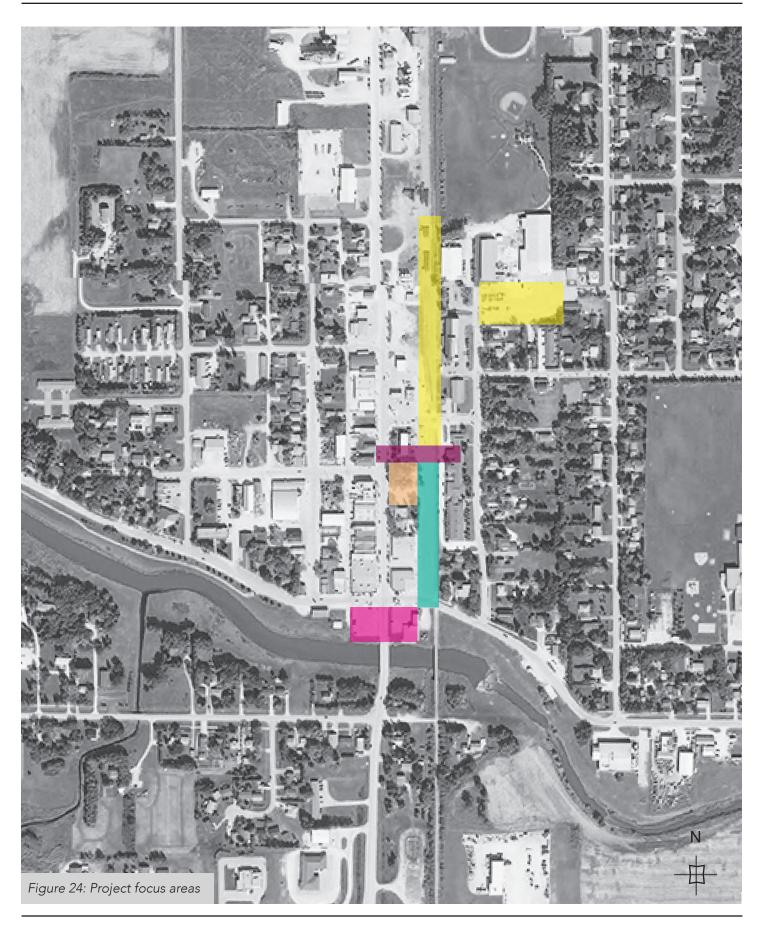
The opportunity for a town square in Arborg would facilitate community involvement and social participation. A town square connecting Main Street to the rail yards would further promote connectivity and add vibrancy to the area.



Long Term Interventions

The 'recreation district', north rail yards, and connections with the Bifrost Region are long-term interventions. These areas have potential for future growth, however, for the purposes of this project, they will not be examined at this time.

Focus area map



Potential for the Rail Yards

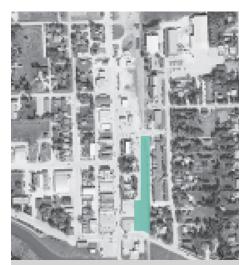


Figure 25: Map indicating rail yards



Figure 26: Vacant rail yards behind the public library, Arborg, MB



Figure 27: South rail yards, behind Sunrise Lodge, Arborg, MB

Running parallel to Arborg's Main Street, development of the vacant rail yard site (Figure 25) has potential for increasing the vibrancy of the town's centre. The proposals suggested here will attempt to:

- create pedestrian connections between residential houses and Main Street
- connect pedestrians to the Icelandic River walking trail
- increase affordable housing
- increase seniors' housing
- increase variety of housing
- increase rental opportunity
- provide access to community garden plots
- provide a space for recreation and community functions
- provide new parking to offset spaces lost to infill development

The former rail yard site is long, narrow, and varying in width, posing a challenge for development. The orientation of residential and commercial 'backs' also requires creativity to ensure the space does not feel like a back lane (Figure 26 and 27).

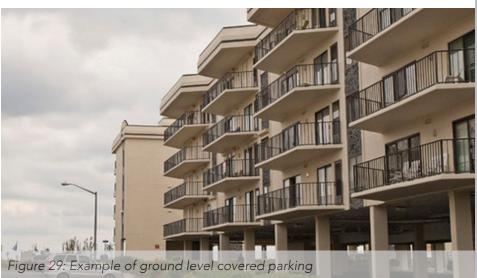
Personal observations and consultation with the community confirmed that despite these challenges, the proximity of the property to Main Street and the Icelandic River holds great potential to meet local community demands, such as affordable housing, public recreation and gathering space, and increased commercial opportunities along Main Street.

Consideration of the phases of development ensures that at each stage, the spaces feel complete. This time line allows for flexibility of implementation with respect to finances and resources.



Town houses

Town houses are a good option for increasing density in a narrow lot while maintaining the scale of the surrounding area. This style of town house orients views sideways, which would work well on the rail yards, directing sight lines towards the river and away from back lanes.



Covered Parking

Ground-level covered parking is an efficient method to provide parking in narrow spaces like the rail yards. Utilizing the footprint of a building, parking spaces are on ground level, underneath the units. An exterior wall is removed to help make the space feel open. This style is cost efficient compared to underground parking.



Figure 30: Example of landscaped zero-grade pathway

Landscaped Path

A landscaped path would visually and physically connect the rail yards to the Icelandic River walking trail. This example shows a zero-gradient path that is paved to accommodate those with limited mobility, and is visually separated from the adjacent roadway.

Potential for the Rail Yards Option One

The south-end of the rail yard site is approximately 140 feet wide by 280 feet long. With these dimensions, town houses could be a viable option. Units could vary in size and have multiple suites (Figure 31). To provide accessibility, it is recommended that parking (Figure 33) be located within close proximity and the ground level suite feature barrier free entries. Private green space (Figure 34) for each unit would benefit residents, providing a space to garden, barbecue and enjoy the weather.

To provide a connection to Arborg's walking paths, the Icelandic River and to encourage recreation, a zero-gradient walking path could be a feature of the rail yards. This path could become a 'backbone' of the site and branch to Main Street, Ingolfs Street, and the proposed town square and community gardens.



Figure 31: Option 1 plan view for rail yard development

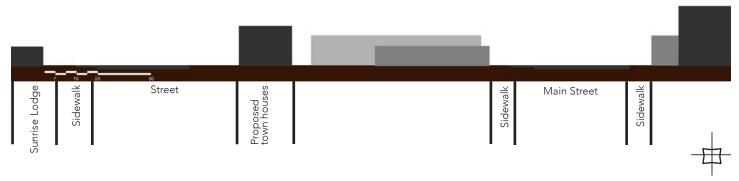


Figure 32: At street level looking south, town houses are to scale with Arborg's existing infrastructure

N

Figure 33: In rail yards looking south at Option 1 town house development

Suggested phases:

Short-term

- 1. town houses at the south end of the rail yards; development of this location is a priority to complete the street scape of River Avenue
- 2. construct pathway through the rail yards connecting Crosstown Avenue to River Avenue, and east-west to Main Street
- Medium-term 3. construct additional town houses as resources become available



Figure 34: At River Avenue looking north at Option 1 town house development

Potential for the Rail Yards Option Two

The size of the rail yard site is suitable for infill apartment buildings; this is an alternative option to town houses. Apartment buildings (Figure 35) would significantly increase the number of rental accommodations and could vary in size and type. Balconies facing the Icelandic River and overlooking the proposed town square would connect residents to life on the street. The ground floor could be allocated to covered parking. Barrier-free parking stalls and entry ways are recommended (Figure 37).

A zero-gradient pathway (Figure 38) from Option 1 remains present in this option. A pathway connecting spaces is important to encourage recreation and provide access to the shops and amenities on Main Street.

Proposed

apartments



Existing building

Figure 36: At street level looking south, apartment buildings are to scale with Arborg's existing infrastructure

Sidewalk

Existing building

Ν

Main Street

Street

Suggested phases:

Short-term

- 1. apartment buildings at the south end of the rail yards; development of this location is a priority to complete the streetscape of River Avenue
- 2. construct pathway through the rail yards connecting Crosstown Avenue to River Avenue, and eastwest to Main Street



Medium-term

3. construct additional apartment building(s) as resources become available



Figure 37: In rail yards looking north at Option 2 apartment development



Figure 38: In rail yards looking south at Option 2 apartment development

Developing Crosstown Avenue



Avenue

are to:

Figure 39: Map indicating Crosstown



Figure 40: Looking north from Crosstown Avenue to rail yards, Arborg, MB



Figure 41: Looking north-east on Crosstown Avenue to Ingolf Street, Arborg, MB

Through observation and community consultation, Crosstown Avenue (Figure 39, 40 and 41) was identified as the main route linking residents from the east side of Arborg to Main Street. Pedestrians and vehicles share this route, which leads to Arborg's schools and recreation facilities. The objectives for redesigning Crosstown Avenue

- visually connect Crosstown Avenue with Main Street
- create safe drop-off bays for future developments
- create a pleasant and safe route for pedestrians
- increase the density of commercial and residential buildings
- complete the streetscape of Crosstown Avenue and Main Street

Traffic calming measures such as bump outs, zebra cross walks, and roadside landscaping will slow traffic around this popular pedestrian route.

As the northern edge of the rail yard develops, connectivity to the space should be maintained.

Infill development and landscaping will create a space that echoes Main Street, connecting the areas visually and physically.

Increasing density by building new commerical and residential buildings on the west side of Crosstown Avenue and Main Street will help create a landmark at this intersection.

Consideration of the phases of development ensures that at each stage, the spaces feel complete. This timeline allows for flexibility of implementation with respect to finances and resources.



Large planters along Crosstown Avenue could serve many purposes: marking drop-off zones, providing rest areas, and visually marking the space as a pedestrian-oriented zone. These planters show the potential dual purpose, incorporating seating into their design.



Road Bump-out

Road bump-outs slow traffic, mark pedestrian crosswalks, and increase vegetation along sidewalks. Bump-outs decrease the length of road that pedestrians have to cross and make pedestrians more visible, rather than crossing from between cars. They can be placed to create roadside parking and drop off zones.



Figure 44: Example of drop-off and pick-up zone

Drop-off and Pick-Up Zones

Designated drop-off zones are important features of age-friendly communities. Those with limited mobility are provided with easy access to services, without requiring a designated handicap parking pass. This road pattern is inclusive for all community members.

Developing Crosstown Avenue Option One

The intersection at Main Street and Crosstown Avenue would benefit from infill development (Figure 45) to improve the streetscape. Crosstown Avenue would become more pedestrian friendly with the addition of bump-out planters. With further development, bump outs could mark drop-off and crosswalk zones (Figure 47).

Crosstown Avenue has great potential for mixed-use development to link the commercial and residential buildings that share this street. Developing a commerical property east of the Legion (Figure 48) could accomodate the needs of Arborg's growing population.

There is a site for housing located west of Sunrise Lodge North, on the current rail yard lands. Although Crosstown Avenue holds great potential, these plans could be part of a long term strategy to meet Arborg's future growth.



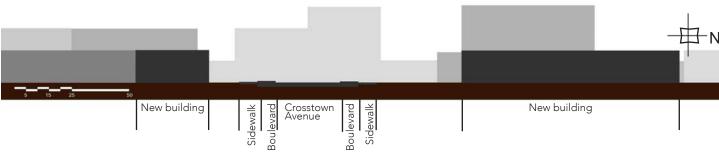
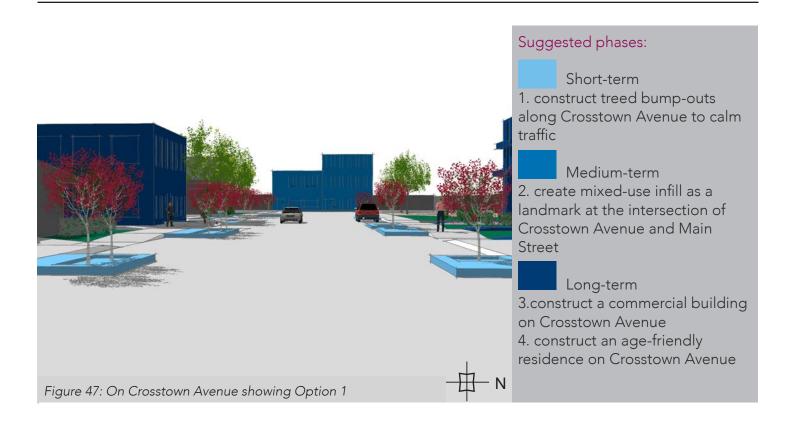


Figure 46: At street level looking east, new development fills the voids of Crosstown Avenue





Developing Crosstown Avenue Option Two

The second recommendation for Crosstown Avenue is to redevelop the Legion property with a large, mixed-use building. The main floor of this new building could house the Legion (Figure 51), and upper floors could be used for commercial or residential space. A new residential building to the east of the Legion could accomodate Arborg's future growth (Figure 49).

The intersection at Main Street and Crosstown Avenue would benefit from infill development to improve the street scape. Crosstown Avenue would become more pedestrian friendly with the addition of bump-out planters. With further development, bumpouts could mark drop-off and cross walk zones accomodate people with limited mobility (Figure 52).

There is a site for housing located west of Sunrise Lodge North, the current rail yard lands. Although Crosstown Avenue holds great potential, these plans could be part of a long term strategy to meet Arborg's future growth.



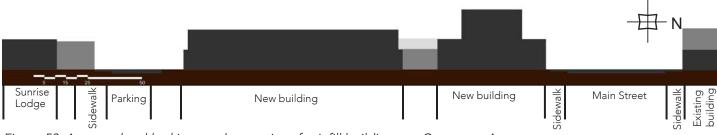


Figure 50: At street level looking south at options for infill buildings on Crosstown Avenue

Figure 51: On Crosstown Avenue showing Option 2 looking towards the rail yards

Suggested phases: Short-term 1. construct treed bump-outs along Crosstown Avenue to calm traffic Medium-term 2. create mixed-use infill as a landmark at the intersection of Crosstown Avenue and Main Street Long-term 3.construct commercial and agefriendly building on Crosstown Avenue 4. redesign the Legion, adding

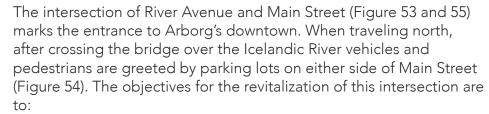
commercial or residential storeys



River and Main Gateway



Figure 53: Map indicating River Avenue and Main Street



- create a visual gateway to downtown Arborg
- create a more inviting pedestrian experience leading to the bridge
- create a landscaped border for the parking lots
- increase commercial and residential densities
- complete the street scape of the intersection

A priority for this area is to visually screen the parking lots and create a more inviting pedestrian route across the Icelandic River. A creative solution is to include a 'parklet', to increase the function of the space and visual appeal in a semi-permanent way.

Consideration of the phases of development ensures that at each stage, the spaces feel complete. This timeline allows for flexibility of implementation with respect to finances and resources.



Figure 54: Main Street, looking north from River Avenue, Arborg, MB



Figure 55: At Main Street and River Avenue looking south-east, Arborg,



Landscaped Parking Lots

A short term option for disguising/beautifying parking lots is to use landscaping to create esthetic appeal. Trees, trellises, bushes and flowers can help a space feel less car oriented and more pedestrian friendly.



Figure 57: Example of weather protection cover

Wind Protection

Arborg residents have commented that windy conditions on the bridge over the Icelandic River are a deterrent to this pedestrian route. Creative solutions such as this one maintain views of the river and also reduces element exposure along pathways.



Parklet

Parklets are micro-parks that take up two or more parking spaces and can inject multiple uses into a small space. Seating, vegetation, bike racks, and even exercise equipment can be installed into a parklet. These spaces can be constructed on wheels to be easily moveable when more space is needed.

River and Main Gateway Option One

The intersection of Main Street and River Avenue is the main entrance into town. Enhancing the streetscape could establish this area as a gateway. The two parking lots on the north side of River Avenue could be landscaped with a vegetation screen of planters and trees (Figure 59). These recommendations enhance the pedestrian experience while walking along this popular pedestrian route (Figure 61).

Covered seating on the corners provides a rest area for pedestrians and also displays community information.

Bump-outs (Figure 62) could be constructed to slow industrial traffic on Main Street and increase the safety of pedestrian crossings. All of these recommendations are short term and do not prevent further development of the site.



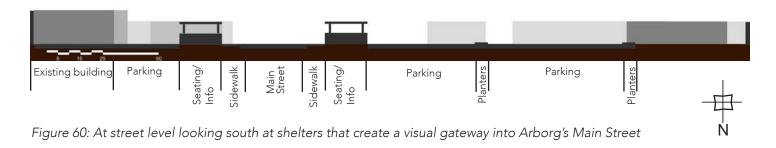


Figure 61: Looking north at Option 1 crossing the bridge

Suggested phases:

Short-term

- 1. plant vegetation to screen parking to enhance entrance to
- 2. provide sheltered space for seating
- 3. provide a centralized community information board
- 4. construct bump-outs to calm traffic along Main Street



Figure 62: On Main Street looking south at Option 1 to River Avenue

River and Main Gateway Option Two

This recommendation suggests the western parking lot at Main Street and River Avenue be transformed into mixed-use buildings (Figrue 63).

Main floor commercial continues the downtown business district towards the river. Parking for the surrounding businesses would be maintained by a surface lot adjacent to the new developments. Second and third floor residential could provide housing in close proximity to local services (Figure 65).

Bump-outs (Figure 66) could be constructed to slow industrial traffic on Main Street and increase the saftey of pedestrian crossings. Covered seating in this location provides a rest area for pedestrians and also displays community information. These recommendations enhance the pedestrian experience while walking along this popular pedestrian route.

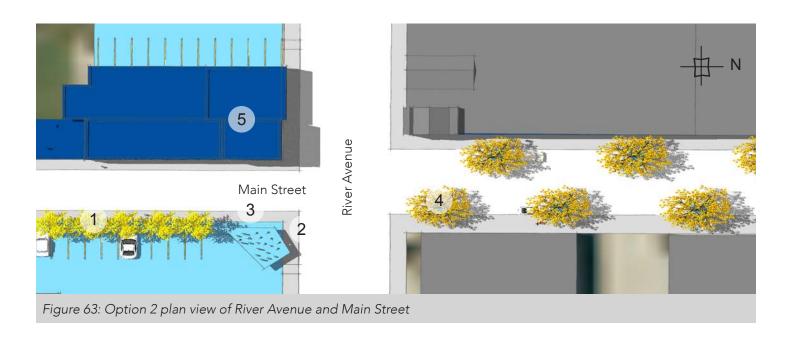




Figure 64: At street level, looking south towards the bridge at increased density

Figure 65: Looking north at Option 2 crossing the bridge

Suggested phases:

Short-term

- 1. plant vegetation to screen parking on the east side of Main Street
- 2. provide sheltered space for seating on the east side of Main
- 3. provide a centralized community information board
- 4. construct bump-outs to calm traffic along Main Street



5. construct mixed use buildings on the northwest corner of Main Street and River Avenue

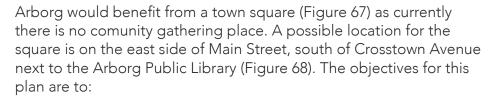


Figure 66: On Main Street looking south at Option 2 towards River Avenue

A Town Square in Arborg



Figure 67: Map indicating town square



- generate an age-friendly space for community functions and recreation
- create a focal point along Main Street
- create a multi-functional space for events
- create a community garden for all ages
- create a pathway from Main Street to new and existing developments



Figure 68: Parking adjacent to the public library, Arborg, MB

The location of the town square along Main Street could add vibrancy to downtown Arborg and become a destination for all to visit and enjoy. The town square will feature a structure that can be used for different community events. Parking will be located within a close vicinity for those traveling by car.

Consideration of the phases of development ensures that at each stage, the spaces feel complete. This time-line allows for flexibility of implementation with respect to finances and resources.



Figure 69: Present community gardens, Arborg, MB



Bandstand

A bandstand allows for multiple uses such as music concerts, live entertainment, dancing, children's activities, farmers' markets, and community events. The bandstand will serve as a focal point in the square which will become a landmark of the town, drawing people into the area.



Public Seating

Places where people like to gather offer ample seating, allowing them to linger and enjoy the surroundings. The availability of seating also makes it an agefriendly environment, not only for older people, but also for children and their parents wanting to have a rest or watch the featured entertainment in the bandstand.



Raised Garden Boxes

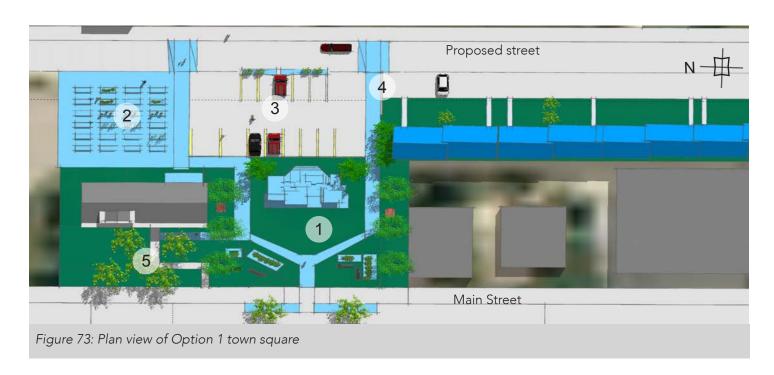
The town square is an ideal place to build a community garden for intergenerational interaction. Raised flower beds allow people with limited mobility to garden. The garden also offers a destination for people along Main Street to come and visit on their lunch hour, or over the weekend with family or friends.

A Town Square in Arborg Option One

A potential location for a town square is on the east side of Main Street, between the library and CIBC Bank; this space is currently a parking lot. This site is well-suited for a town square as activities would flow from the town square to the street. If developed into a town square, the library, a proposed multi-functional structure, a conversation bench, and community garden boxes could be the main features of the space (Figure 73).

Multi-fuctional and accessible structures provide stage space for community events. Access to garden boxes (Figure 75) encourages physical recreation and can facilitate social gatherings. Because of the rectangular shape of the town square (Figure 76), the garden boxes may be sheltered behind the library.

A pathway could link residents to the town square and to Main Street; raised crosswalks could help facilitate this link.



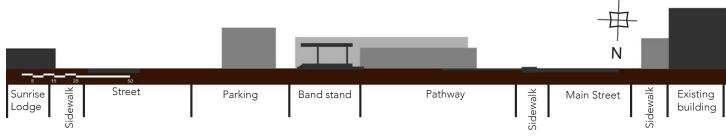


Figure 74: At street level looking south at a town square that links Main Street to future rail yard development

Figure 75: In the rail yards looking south at Option 1 town square

Short-term

1. create a rectangular town square adjacent to and encompassing the library

- 2. provide a space for community gardens east of the library
- 3. compensate for lost parking with a new lot in the rail yards
- 4. link Main Street to the rail yards via pathways
- 5. increase vegetation on the site



Figure 76: On Main Street in front of the library looking east at Option 1

A Town Square in Arborg Option Two

An alternative recommendation for a town square is to extend the footprint from Main Street to Sunrise Lodge. A fan-shaped area could offer large areas to gather and smaller intimate areas to sit and visit with friends (Figure 77).

A multi-functional accessible structure and community garden (Figure 79) could be the focal point of the space. Locating the community garden within the town square helps ensure visibility of gardeners and populates the space.

Parking could be located behind the library, providing access to Main Street yet giving priority to the town square. This site is wellsuited for a town square as activities would flow from the town square to the street (Figure 80).



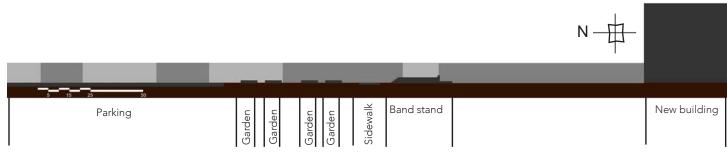


Figure 78: At street level looking east at a community garden in the town square

Figure 79: In the rail yards looking south at Option 2 town square

Short-term

- 1. create a town square adjacent to the library and fanning into the rail yards
- 2. provide a space for community gardens within the town square
- 3. compensate for lost parking with a new lot in the rail yards
- 4. link Main Street to the rail yards via pathways
- 5. increase vegetation on the site



Figure 80 : On Main Street in front of the library looking east to Option 2 town square

Future Focus Areas



Figure 81: Map indicates future focus areas



Figure 82: Arborg Curling Club parking lot, Arborg, MB



Figure 83: North rail yards, Arborg,

In addition to our proposed four focus areaswe have identified three long-term considerations (Figure 81). These considerations could be important for the future growth of Arborg but it is beyond the scope of this project to consider each in detail.

Stronger connections with the surrounding region

municipalities could benefit from sharing age-friendly resources

Recreation complex parking lots

- this parking lot is vast in size and has potential to be a multi-use space (Figure 82)
- landscaping efforts are present and could be enhanced

Development of north rail yards

- the rail yards north of Crosstown Avenue remain vacant (Figure
- as this area requires remediation, this project is long-term

Final Consultation and Feedback

On Tuesday, December 4th, 2012, we presented our ideas to approximately 20 community leaders and residents, at the Arborg Age-Friendly Clubhouse. After the presentation, a community representative facilitated an interactive discussion. From this, we received insightful feedback including:

Rail yards:

- south rail yards is a busy area; currently used for overflow parking
- service vehicles require access to the Bargain Store and Post Office
- sewer and water lines run along the west side of the rail yards
- expressed preference for housing development north of Crosstown Avenue because of concerns stated above
- recognized that creative housing solution could be applied to meet current needs
- recognized the benefit of development in south rail yards because it is close to amenities
- agreed that the space is unattractive and something needs to be done
- confirmed that pathways would increase the pedestrian accessibility and connectivity
- further stressed the need for affordable housing and rental options

Crosstown

- agreed that bump-outs along Crosstown Avenue could be implemented as a method for traffic calming
- recongnized the need for drop-off and pick-up areas in front of senior residences
- supported the idea of residential housing combined with the existing Legion, as it is financially unstable
- identified that remediation efforts are required for infill development north of Crosstown Avenue in the rail yards

River and Main

- agreed with the idea to make the intersection of Main Street and River Avenue more welcoming
- identified that vegetation screening could improve the look of the two parking lots as you enter town
- supported the notion of creating pedestrain crossings on Main Street

Town Square

- recognized the need for a meeting place for all ages and abilities
- welcomed a place for community events to occur including "Bands on Main" or a farmers market
- suggested additional uses such as a possible skating rink and a place for the Arborg Christmas tree
- identified that the acquisition of land from CIBC may dictate the boundaries of the town square
- maintenance of the town square could be costly and may not provide revenue

Participation in the facilitated discussion (Figure 84) demonstrated the community's interest to strengthen Arborg's age-friendly initiatives. Attendees were impressed with our understanding of the needs of Arborg and how we applied the information given. Residents appreciated a 'fresh set of eyes'. The feedback provided from this session will help guide community leaders in their continued efforts towards an age-friendly Arborg.



Figure 84: Final presentation at the Arborg Age Friendly Club, Arborg, MB

Conclusion

Arborg's slogan, "a tradition with a future" captures Arborg's spirit as a small town that values community, growth and prosperity. Arborg's expected population increase is prompting civic leaders, community organizations and residents to reflect on how the built environment will accomodate this new growth.

We hope that this preliminary work prompts further discussion and leads to future age-friendly plans for Arborg. Throughout this project, we have learned that the residents and community leaders of Arborg have a strong interest to further enhance their community and have built a good foundation to do so. This is evident through the support of this project.

This project could not have been completed without the ongoing help and guidance from Dr. Richard Milgrom, Department of City Planning, University of Manitoba, and Pat McCallum, Arborg-Bifrost Community Development Corporation. We would also like to thank, the Community Research Alliance for funding the project, Connie Newman from Manitoba Seniors Centres for connecting us to Arborg, and Brodie Lister, teaching-assistant to Dr. Milgrom, for his continual support. Lastly, the Town of Arborg for sharing their insightful and firsthand knowledge of Aborg that assisted us in forming our ideas.

Figure List

- Figure 1: Community consultation tool; source Rebecca Copping, 2012
- Figure 2: Model of Arborg; source Erika Blackie, Rebecca Copping, Gabrielle Donoff, Jasreen Sidhu, 2012
- Figure 3: Design idea sketches; source Rebecca Copping, 2012
- Figure 4: Location of Arborg; source Erika Blackie, 2012
- Figure 5: Word graphic of Arborg's services; data source from Town of Arborg website, 2012, graphic produced Gabrielle Donoff, 2012
- Figure 6: Arborg's population; data from Statistics Canada 1996; 2001; 2006; 2011, graphic produced by Gabrielle Donoff, 2012
- Figure 7: Arborg population growth by age and gender; data from Statistics Canada 1996; 2001; 2006; 2011, graphic produced by Erika Blackie, 2012
- Figure 8: Proportion of residents 65 years and older; data from Statistics Canada 1996; 2001; 2006; 2011, graphic produced by Erika Blackie, 2012
- Figure 9: Land use map of Arborg; orthographic photo of Arborg, MB, 2008, graphic produced by Gabrielle Donoff, 2012
- Figure 10: Street section of Main Street looking north; source Jasreen Sidhu, 2012
- Figure 11: Street section of St. Peter Street looking north; source Jasreen Sidhu, 2012
- Figure 12: Seniors' housing, Arborg Manitoba; source, Rebecca Copping, 2012
- Figure 13: Designated seniors' housing, Arborg, MB; source Jasreen Sidhu, 2012
- Figure 14: Single family homes, Arbora, MB; source Erika Blackie, 2012
- Figure 15: Standard parking, Arborg, MB; source Gabrielle Donoff, 2012
- Figure 16: Handi-van, Arborg, MB; source, Gabrielle Donoff, 2012
- Figure 17: Bridge over the Icelandic River, Arborg, MB; source Rebecca Copping, 2012
- Figure 18: Curb cuts, Arborg, MB; source Erika Blackie, 2012
- Figure 19: Stairs are not age-friendly, Arborg, MB; source Rebecca Copping, 2012
- Figure 20: Benches along Main Street, Arborg, MB; source Jasreen Sidhu, 2012
- Figure 21: Public Library on Main Street, Arborg, MB; source Rebecca Copping, 2012
- Figure 22: Age-Friendly Club, Arborg, MB; source Erika Blackie, 2012
- Figure 23: Informal notice board, Arborg, MB; source Gabrielle Donoff, 2012
- Figure 24: Project focus areas; source Rebecca Copping & Gabrielle Donoff, 2012
- Figure 25: Map indicating rail yards; source Rebecca Copping & Gabrielle Donoff, 2012
- Figure 26: Vacant rail yards behind the public library, Arborg, MB; source Jasreen Sidhu, 2012.
- Figure 27: South rail yards behind Sunrise Lodge, Arborg, MB; source Erika Blackie, 2012.
- Figure 28: Example of town houses; source Top of the Annex Townhomes, Toronto, ON, 2012, www.cmhcschl.gc.ca/en/inpr/su/eqho/toantoho/index.cfm
- Figure 29: Ground level covered parking; source Vantage Resort Realty, 2012, www.vantageoceancity.com
- Figure 30: Example of a landscaped zero-grade pathway; www.citytank.org
- Figure 31: Option 1 plan view for rail yard development; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 32: Looking south townhouses are to scale with Arborg's existing infrastructure; graphic by Jasreen Sidhu, 2012
- Figure 33: In rail yards, looking south at Option 1 townhouse development; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 34: At River Avenue looking north at Option 1 town house development; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 35: Option 2 plan view for rail yard development; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 36: Looking south, apartment buildings are to scale with Arborg's existing infrastructure; graphic by Jasreen Sidhu, 2012
- Figure 37: In rail yards looking north at Option 2 apartment development; graphic by Erika Blackie and

Jasreen Sidhu, 2012

Figure 38: In rail yards looking south to Option 2 apartment development; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 39: Map indicating Crosstown Avenue; graphic by Rebecca Copping and Gabrielle Donoff

Figure 40: Looking north from Crosstown Avenue to rail yards, Arborg, MB; source Erika Blackie, 2012.

Figure 41: Looking north-east on Crosstown Avenue to Ingolf Street, Arborg, MB; source Jasreen Sidhu, 2012.

Figure 42: Example of multi-purpose street furniture; source Puczynski street furniture, 2012, www.esi.info

Figure 43: Example of crosswalk bump-outs in Philadelphia, 2012, http://sf.streetsblog.org/category/ cities/philadelphia

Figure 44: Example of a drop off and pick up zone in Adelaide, Australia; source Lost on Campus, lostoncampus.com.au/21202

Figure 45: Option 1 plan view for Crosstown Avenue development; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 46: New development fills the voids of Crosstown Avenue; graphic by Jasreen Sidhu

Figure 47: On Crosstown Avenue showing Option 1; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 48: On Crosstown Avenue showing Option 1, looking towards the rail yards; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 49: Option 2 plan view of Crosstown Avenue; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 50: Options for infill buildings on Crosstown Avenue; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 51: On Crosstown Avenue showing Option 2 looking towards the rail yards; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 52: On Crosstown Avenue showing Option 2; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 53: Map indicating River Avenue and Main Street; graphic by Rebecca Copping and Gabrielle Donoff, 2012

Figure 54: Main Street looking north on River Avenue, Arborg, MB; source Blackie, 2012

Figure 55: At Main Street and River Avenue looking southeast, Arborg, MB; source Blackie, 2012

Figure 56: Example of landscaped parking lot; source UCLA Complete Streets Initiative, 2012, www.its. ucla.edu/research/parklettoolkit.pdf

Figure 57: Example of weather protection cover, Whangarei, New Zealand; source, 2012, rutea. com/2011/11/whangarei.html

Figure 58: Example of parklet; source UCLA Complete Streets Initiative, 2012, www.its.ucla.edu/research/ parklettoolkit.pdf

Figure 59: Option 1 plan view of Crosstown Avenue; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 60: Shelters including seating boards provide a visual gateway into Arborg's Main Street; graphic by Jasreen Sidhu

Figure 61: Looking north at Option 1, crossing the bridge; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 62: On Main Street looking south at Option 1, to River Avenue; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 63: Option 2, plan view of River Avenue and Main Street; graphic by Erika Blackie and Jasreen Sidhu, 2012

Figure 64: Increase density continues the vibrancy of Main Street towards the bridge; graphic produced by Jasreen Sidhu, 2012

Figure 65: Looking north at Option 2 crossing the bridge; graphic by Erika Blackie and Jasreen Sidhu, 2012

- Figure 66: On Main Street looking south at Option 2 towards River Avenue; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 67: Map indicating Town Square; produced by Rebecca Copping and Gabrielle Donoff, 2012
- Figure 68: Parking adjacent to the public library, Arborg, MB; source Erika Blackie, 2012
- Figure 69: Present community gardens, Arborg, MB; source Erika Blackie, 2012
- Figure 70: Example of bandstand, Chicago, Illinois; Dipity, www.dipity.com, 2012
- Figure 71: Example of conversation bench, Chicago, Illinois; source Metropolis Mag, 2012, www. metropolismag.com/pov/tag/furniture
- Figure 72: Example of accessible garden beds in Madrid;, source La Vida Loca in Madrid, www. lavidalocainmadrid.wordpress.com
- Figure 73: Plan view of Option 1 town square; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 74: A town square links Main Street to future rail yard development; graphic by Jasreen Sidhu
- Figure 75: In the rail yards looking south at Option 1 town square; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 76: On Main Street in front of the library looking east at Option 1; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 77: Plan view of Option 2 town square; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 78: A community garden encourages everyday use of the town square; graphic by Jasreen Sidhu Figure 79: In the rail yards looking south at Option 2 town square; graphic by Erika Blackie and Jasreen
- Sidhu, 2012
- Figure 80: On Main Street in front of the library looking east to Option 2 town square; graphic by Erika Blackie and Jasreen Sidhu, 2012
- Figure 81: Map indicating future focus areas; graphic by Rebecca Copping and Gabrielle Donoff, 2012
- Figure 82: Arborg Curling Club parking lot, Arborg, MB; source Erika Blackie 2012
- Figure 83: North rail yards, Arborg MB; source Erika Blackie, 2012
- Figure 84: Final presentation at the Arborg Age-Friendly Club, Arborg, MB; source Rebecca Copping, 2012

Work Cited

- Age-friendly Manitoba. (2011). Age-friendly Manitoba: Arborg. Retrieved from http://www. agefriendlymanitoba.ca/regions/index.cfm?region_id=109
- American Society of Landscape Architects (ASLA). (1976). Barrier free site design. Washington, DC: U.S. Government Printing Office.
- Arborg-Bifrost Community Development Corporation. (2011). Arborg Housing Needs Assessment. [Report].
- Arborg & District Multicultural Heritage Association. (2006). A Historical Overview of Arborg & Area. Retrieved from http://www.arborgheritagevillage.ca/history.htm
- Interlake RHA. (2010). Arborg Personal Care Homes. Retrieved from http://www.irha.mb.ca/default. aspx?cid=1853
- Manitoba Historical Society. (2012). Manitoba Municipalities: Town of Arborg. Retrieved from www.mhs. mb.ca/docs/municipalities/arborg.shtml
- Municipality of Bifrost. (2012). Profile: About the Rural Municipality of Bifrost. Retrieved from http:// rmbifrost.com
- Public Health Agency of Canada. (2009). Age friendly rural and remote communities: A guide. Commissioned by the Federal/Provincial/Territorial Ministers responsible for seniors. Retrieved from: http://www.phac-aspc.gc.ca/seniors-aines/alt-formats/pdf/publications/public/healthy-sante/ age_friendly_rural/AFRRC_en.pdf
- Statistics Canada. (2012). (Code 4681)(table). Census Profile. 2011 Census. Statistics Canada Catalogue no. 98-361-XWE. Ottawa. Released Septmeber 19, 2012.
- Statistics Canada. (2007). Arborg, Manitoba (Code 4618074)(table). 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007
- Statistics Canada. (2001). Arborg, VL (Code4618074)(table). Census of Population, Statistics Canada Catalogue no. 95F0181XDB96001. Ottawa.
- Statistics Canada. (1996). Arborg, VL. (table). Census of Population, Statistics Canada Catalogue no.unavailable. Ottawa.
- Town of Arborg. (2012). Profile. Retrieved from www.townofarborg.com
- World Health Organization (WHO). (2007). Global age-friendly cities: A guide. Retrieved from http://www. who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf