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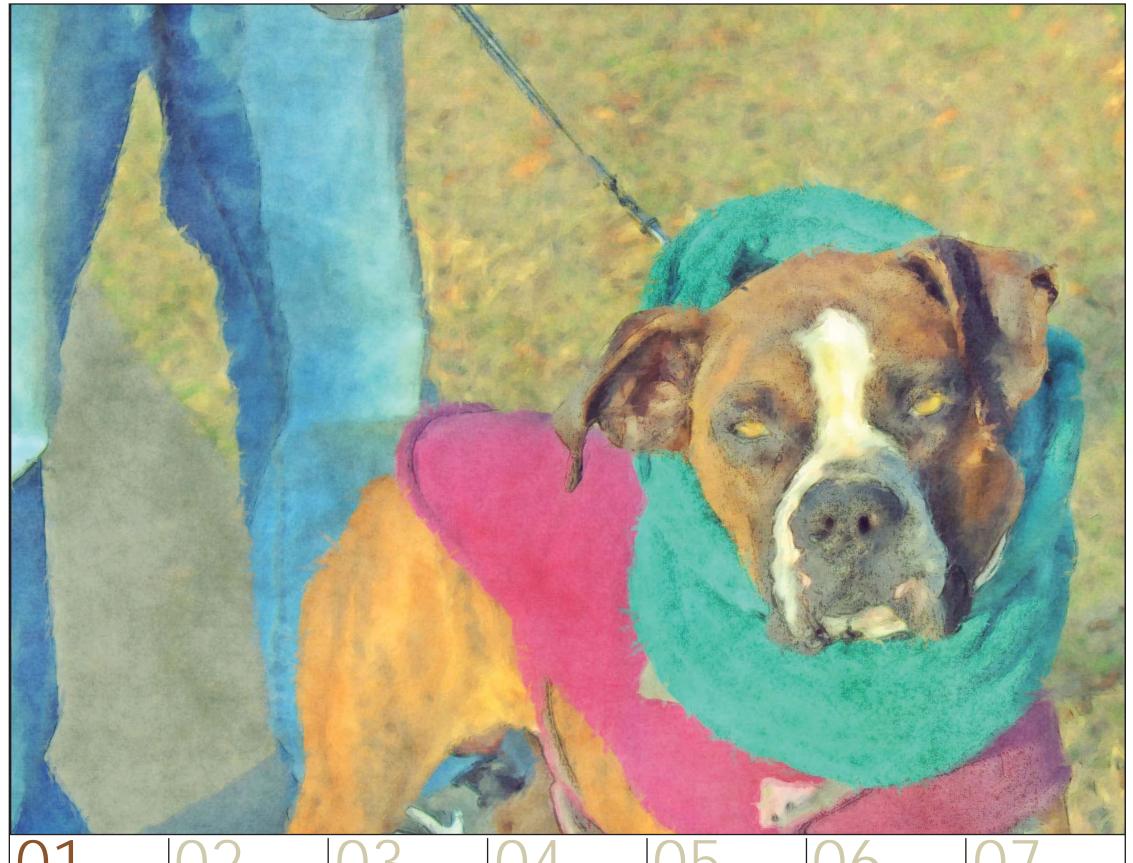


OAK RIDGE NORTH

PUBLIC SPACE MASTER PLAN

"To accomplish great things, we must not only act but also dream. Not only plan but also believe." -Anatole France

Inventory & Analysis



Inventory & **Analysis**

Parks and Open Space

Overall **Walkability**

City Branding

Town Center

Urban **Forestry**

Implementation

Project Overview

Goals, Objectives, & Methodology

The City of Oak Ridge North adopted a Comprehensive Plan in September of 2013 to guide the growth and development of the community over the next 10 to 20 years. Key components of the plan include the need to: 1. enhance community identity, 2. increase walkability, 3. enhance parks and recreation opportunities, and 4. develop a town center.

To implement these goals, the City engaged Burditt Consultants to dig deeper into these subjects to create a Public Space Master Plan that provides the following:

- Facility Improvements
- New Facility Recommendations
- Phased Walking/Biking Plan
- Phased Plan for Branding
- City Center Concept Plan
- Budget Recommendations
- Identify Funding Sources

The City of Oak Ridge North has historically been a "bedroom community" comprised mostly of residential properties. This pattern of development has not provided the City with a downtown or central business district environment, which to visitors can give the impression that Oak Ridge North is merely a neighborhood. The residents have expressed a desire to create a sense of place and identity for the City through development of a town center, gateway monuments and signage, and other amenities.

The Planning Process

The foundation for the development of the Public Space Master Plan is the City's Comprehensive Plan, which guides the vision for the City as a whole. The Comprehensive Plan was reviewed extensively and has been the "guidebook" for all subsequent planning efforts.

Data Collection

The data collection phase included acquisition and review of the following data and documents.:

- Utility and Economic Feasibility Report 2013
- 2014 Aerial Photography
- County Parcel Layers
- Demographic and Regional Trend Reports
- Floodplain and Digital Elevation Models

Inventory

The inventory phase included on-site inspection of all City-owned parks, recreation and open space facilities. Observations during inspection included notation of general condition of amenities, maintenance issues, visible accessibility issues and opportunities for enhancements.

City-owned properties and other lands potentially available for acquisition were evaluated for potential use in future public space developments. Each property was considered for its ability to serve as a park expansion, new park, town center component or connection between public spaces. Each street within Oak Ridge North was evaluated with regards to available right-of-way, opportunities and limitations for development of walking/biking paths.

Stakeholder Input

Stakeholder input is always the most important component of any planning process. Extensive input was gathered during the Comprehensive Plan development and has been used for guidance during the Public Space Plan development. Additional input from the public was gathered through a public workshop.

City Staff and the Planning and Zoning Commission played a key role during the planning process with regular meetings as often as twice a month to discuss plan components. Each meeting kept the

PRECEDENTS







Inventory & O1 Analysis

direction of the plan on course and included indepth discussion regarding each plan component as they developed.

Prioritization - Phase 1

Upon completion of data collection, stakeholder input, and studies of project opportunities; each project was prioritized according to demand, feasibility given schedules, land availability and budgets, and ongoing discussions with the Planning and Zoning Commission. The highest priority was given to development of trails and branding. The first phase of projects includes:

- Development of a walking path along Woodson Rd.
- Development of a gateway monument at Robinson Rd. and Interstate 45
- Develop plans and specifications for signage and monuments city-wide.

Prioritization - Phase 2 and beyond

Additional phases of projects are subject to a number of factors. Walking paths planned along streets south of Robinson Rd. will be implementable at such time as storm water drainage infrastructure is redesigned for curb and gutter systems. Proposed paths to the north of Robinson Rd. can be implemented at such time as budget allows.

Development of a town center will be a project largely driven by a private developer. The town center is planned along possible realigned Robinson Rd. and will therefore be a project triggered at such time as the road project is undertaken.

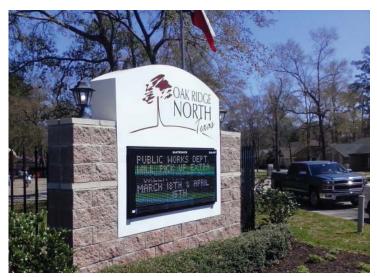
Marilyn Edgar Park is planned for overall improvements that are of somewhat lower priority but add significantly to the quality of life in the community. The proposed improvements lend the project to being undertaken as a whole rather than piecemeal and would be implemented at such time as the City sees fit.

EXISTING CONDITIONS













Growth and Demographics

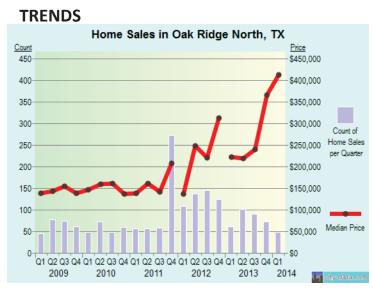
Planning for the Future of Oak Ridge North

The City of Oak Ridge North was incorporated in 1979 from a group of residential subdivisions developed over the previous decade. As a city, Oak Ridge North began with approximately 2,445 residents and has experienced little change in population over the years with a 2012 estimated total of 3,122 residents.

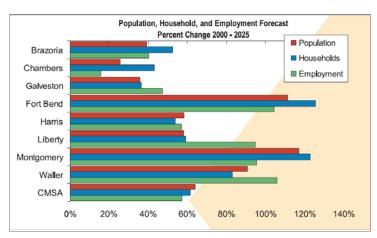
The City is largely a residential community with retail properties along Interstate 45 and areas within the interior of the community, especially Robinson Rd., Hannah Rd, and Blueberry Hill Dr.. Areas to the north, west and south are bounded by The City of Conroe, the City of Shenandoah, The Woodlands Township and the City of Houston's city limits or ETJ thereby limiting geographic expansion to the east.

The adjacent corporate limits and ETJ of The Woodlands Township, City of Houston, City of Shenandoah, and City of Conroe have met with the ETJ of Oak Ridge North. This limits growth to areas to the east of the current City Limits. Areas within the ETJ to the east of town are rich for development and are currently experiencing growth. As these properties are being developed, they are seeking water and sewer services and are expected to be annexed in a piecemeal fashion. There are an approximate 760 acres within the ETJ that could be annexed, 500 of which are either already experiencing development or likely will be in the near future for medium manufacturing, retail and resident uses. It is important to consider these areas during the planning of parks, open space and walkability to ensure continued quality of life as the City grows.

Regional predictions for growth, combined with recent real estate and development plays in the area provide clear indication that development and/or redevelopment is coming in the near future. The



Increasing home values in Oak Ridge North. (source: city-data.com)



The Houston Galveston Area Council (HGAC) predicts more than 100% growth in population in Montgomery County by year 2025. (source: HGAC's 2025 Regional Growth Forecast)

City of Shenandoah City of Shenandoah ETJ City of Conroe ETJ City of Houston ETJ City of Houston ETJ

Houston Galveston Area Council's (HGAC) 2025 Regional Growth Forecast predicts that Montgomery County's population will expand by 100% or more by the year 2025. The Conroe Independent School District reports an average annual increase of 1,500 students per year and expects the trend to continue. Combined with recent increases in home sales and housing starts in the county, along with the influx of companies moving to the area, it is important to plan for the coming growth when considering public amenities.

Inventory & O1 Analysis

With limited room for annexation, Oak Ridge North is most likely going to experience redevelopment of commercial and residential properties within its boundaries as older homes and commercial properties are purchased for renovation or demolition as more people move to the area.

Meeting Lifestyle Needs

The demographic makeup of Oak Ridge North is likely to become a blend of the "Baby Boomer" generation moving into retirement and young professionals moving into the area and raising families. This dynamic will necessitate providing amenities that serve the lifestyle and recreation needs of all parties. Trends in communities across the country indicate that younger and older populations are increasingly more active than those of generations past. Providing opportunities for recreations, shopping and entertainment on par with those found in other communities will be key to maintaining Oak Ridge North as the vibrant community that it is today.

The Baby Boomer generation created the fitness lifestyle and is bringing this mindset with them into retirement. This generation is more active than previous generations and they have a longer life expectancy. Here, by the numbers, is a closer look at the boomers' world:

78.2 million:

Estimated number of boomers

7,918:

Number of people turning 60 each day

330:

Number of people turning 60 each hour

50.8 percent:

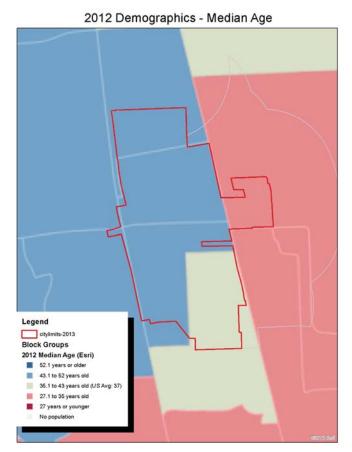
Percentage of boomers who are female

9.1 million:

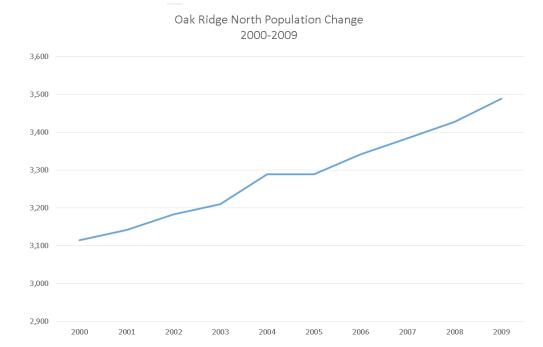
Estimated number of boomers who are black

8 million:

Estimated number of boomers who are Hispanic







Growth and Demographics

Planning for the Future of Oak Ridge North

Planning for the lifestyles of residents in a community is not limited to a given generation. As it turns out, the activities sought after the most by people in the ages 60 years and up are quite frequently the same ones desired by younger generations. Walking, biking, swimming, low-impact exercise, shopping, dining and community events are popular among residents of all ages.

This pattern begs to have a planning process that takes a holistic approach to community planning for the future, including traditional recreation such as parks and related amenities as well as public spaces for retail, dining, civic events and more. This means walking trails should connect to public spaces such as schools, parks and shopping. Pocket parks and passive areas should be planned in public areas such as the future town center.

Aquatics facilities have changed greatly in recent years. Trends in communities across the country are leaning toward features such as beach-entry pools, wave pools and splashpads or spraygrounds.. Splashpad type facilities have a unique value to a community in that they require less maintenance than pools and do not require lifeguard staff.

Other trends in lifestyles and recreation include adding skateparks or skate spots, public art and dog parks.

PRECEDENTS

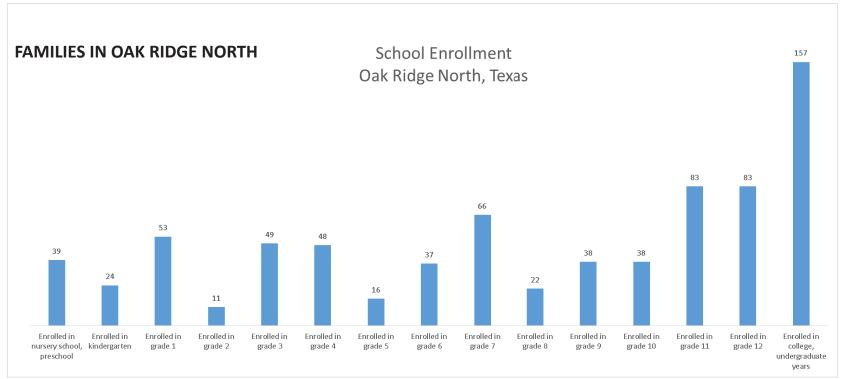


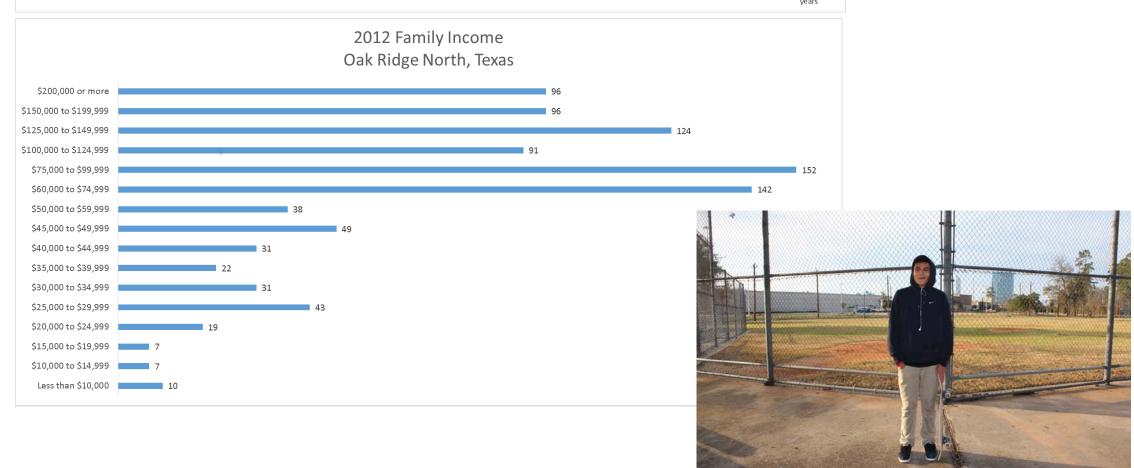






Inventory & 01 Analysis





Stakeholder Input

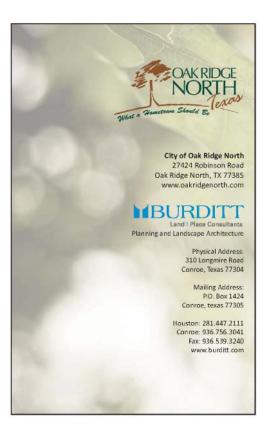
Public Meeting - 4/10/2014

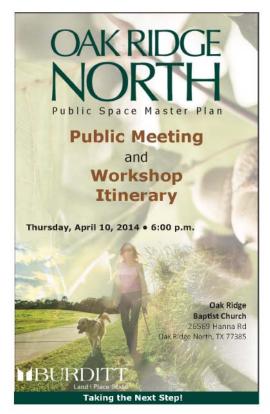
The City of Oak Ridge North has made a strong commitment to both keeping the residents informed, as well as asking for their input with regards to all facets of the City's management. The Comprehensive Plan process involved substantial public input and clearly identified that major priorities for the residents were as follows:

- "Developing a Town Center for Oak Ridge North is an ultimate goal."
- "Completing the installation of gateway and identity features is important."
- "Trails and sidewalks need to be added for residents to have places to walk or ride a bicycle."
- "Attracting new retail and commercial development to the City (preferably higher in quality and character) is important."

In order to gain further insight into residents' opinions and priorities regarding quality of life, a public meeting was held on April 10, 2014. Over 50 residents were in attendance as well as City staff and officials. The meeting began with an introduction to the project and planning process, followed by an open house format where participants visited each booth to discuss the topics for the Public Space Master Plan.

Discussions with citizens at the meeting yielded input similar to that collected in the Comprehensive Plan.







Inventory & 01 Analysis









Citizen Input

Public Meeting - 4/10/2014

Public meeting participants were asked to complete a short questionnaire in order to prioritize subjects related to the following categories:

- Branding & Wayfinding
- Landscape & Tree Preservation
- Parks, Open Space & Walkability
- City Center

Branding and Wayfinding

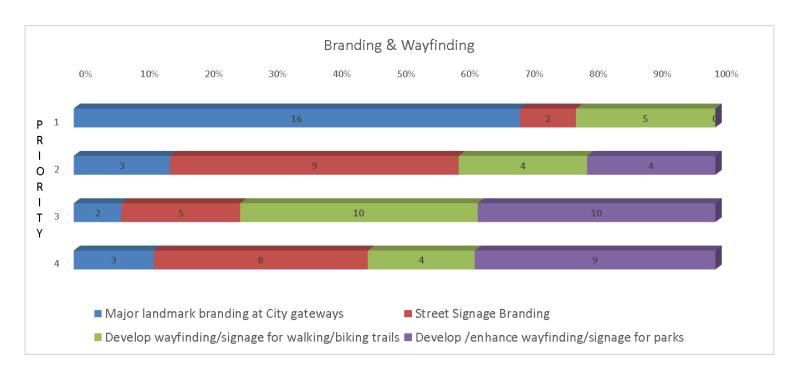
The highest priority item for branding and wayfinding was determined to be development of major landmark monuments/signage at City gateways. Public opinion on other branding priorities varied among participants, however it is clear that signage for streets, trails and parks are somewhat less important.

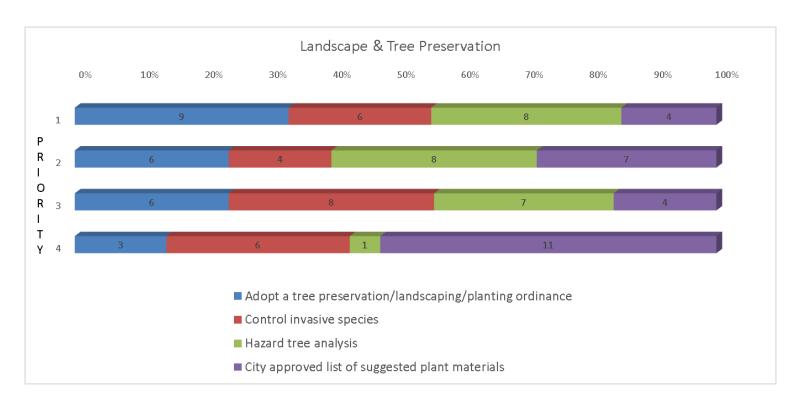
Parks, Open Space and Walkability

Citizens indicated a strong preference for development of walking/biking trails throughout the City just as they had in the Comprehensive Plan. Opinions on the priority of development of parks, expansion of parks were of lesser priority, however varied among participants.

City Center

The results of the questionnaire mimicked once again the strong preference towards a retail-oriented concept for development of a city center, followed by a slightly lower priority preference for event-based development. Just as determined in the Comprehensive Plan, the need to bring retail components into the City is a high priority.



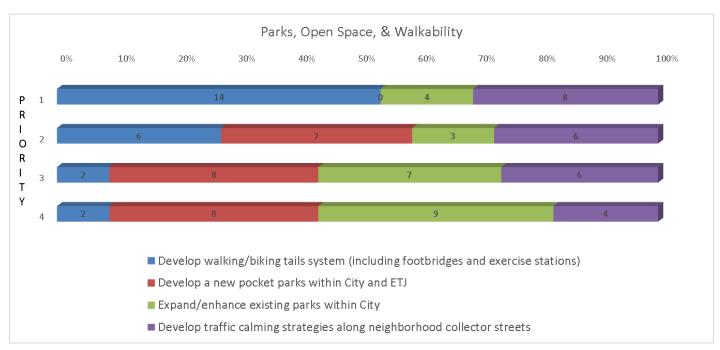


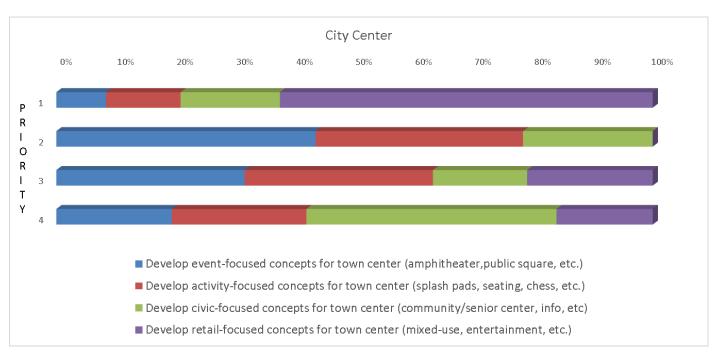
Inventory & O1 Analysis

Landscape and Tree Preservation

The citizens of Oak Ridge North appear to universally agree that the trees in the community are important. How the City should focus on managing its urban forest is a subject of varied opinion, however the two highest-rated priorities were adoption of a tree preservation ordinance and conducting a hazard tree analysis. Both activities will serve to manage a safer, healthier forest. Discussions with citizens and members of the Planning and Zoning Commission indicate the need to consider this topic in greater detail through additional public input and careful consideration of the options. A tree preservation ordinance can help the community retain its cherished trees during future development that is expected to come.







Citizen Input

Comments from Public Meeting - 4/10/2014

PARK & OPEN SPACE

- Don't forget the homeless park in Village of Oak Ridge Grove
- Gathering area
- Pedestrian oriented make it fun
- Pedestrian oriented
- Bikes vs Pedestrian issues
- Trails lower part of City residents will be paying for trails on the north end of town.
- Hike/Bike Trail
- Nature, Bird, Butterfly
- Small playscape or splashpad
- Pedestrian spaces / gather spaces, covered farmer's market, pedestrian mall
- Attraction Nature, bird/butterfly
- People use Teddy Bear Park as a detour when Robinson gets busy – very dangerous
- Teddy Bear park needs place to walk and too many people park there
- Keep parks west of Hannah Rd.

BRANDING & WAYFINDING

- Like the "older traditional" community feel of Oak Ridge and like the Woodlands Look
- Consider historical roots of ORN
- Surveillance system in dual-purpose monuments
- I like the branded street signs, but they are less important.
- There are many more important things to spend budget on then signs.
- The single more important one and least expensive – Landmark Branding at City Gateways
- Historical
- Culture / Historical
- Unique / Stand Apart / Destinations / Not Woodlands – Authentic
- Signage / Landscape lower priority

- Growth is inadequate, lets control the look and feel
- Incorporate history of ORN into monuments and/or logo
- Hometown feel, Traditional / timeless, Bold / Substantial
- Artwork
- Monument surveillance
- Dual purpose monuments could have surveillance camera for security
- 3 businesses willing to donate money to monument structure \$5,000 each for \$15,000 total
- Make retailers more invited be known as more than a speed trap – but do appreciate our police staff
- Artwork at loop going South
- No cookie cutter sign
- Billboard too flashy at entry, belongs at city hall
- Substantial, traditional, attractive
- Traditional, bold gateways
- Downtown feel, timeless, progressive, classic
- Clock tower
- Land locked Need to acquire more land to make room for monuments / wayfinding

LANDSCAPE & TREE PRESERVATION

- Landscape needs ponds, manmade streams, bird/ butterfly sanctuary
- Need bluebonnets, butterfly garden and flower garden.
- "Low Hanging Fruit"
- Trees
- Trees / flowers / splash pads
- Nature plants
- Entrances Color Trees to mark
- Adopt signature tree
- Bluebonnets, paint brush, more wildflowers

- Smaller trees
- Waterway between 2 ponds landscaped
- Trees are very important environmental benefits
- Tree ordinance neighbor removed tree
- Attractive oak tree
- River Birch
- Does not want to be told what to cut down
- Could acquire abandoned lots and houses community garden

CITY CENTER

- Need restaurants, refreshments, coffee, dessert
- Retail would increase traffic jams and parking issues in the center of town.
- Retail is more easily placed along I-45 and Hanna. Better accessibility there.
- Need large multi-use community center with adjacent parking.
- · Retail oriented
- Shops, attractions
- Walking mall
- Retail / Restaurant
- Outdoor mall
- Develop a city center
- Boutique shops / specialty shops / ice cream shops
- Pedestrian mall no cars
- Outside center
- Retail oriented / business oriented
- Attract businesses high end
- Farmers Market
- Covered walk
- Restaurant / Bistro / Boutique
- Miami Beach restaurants
- Loft space above retail, i.e. new Orleans
- Wayfinding warm and inviting to visitors and residents alike

Inventory & O1 Analysis

- A few exist but need many more monuments, especially one in back.
- City Center Family oriented Attract young families
- Town Center priority
- Breakfast and a decent cup of coffee, something to walk to... ice cream, dry cleaners, etc.
- Income Street, retail, boutique, restaurants, development

TRAFFIC & PARKING & SIDEWALKS

- Traffic congestion must be considered
- Lincoln Rd. Area Park n' Ride, Interconnectivity of different modes
- TxDOT fly over into Oak Ridge Accessibility
- Can't get into Oak Ridge.
- Narrow streets, traffic improvements.
- Office Depot open up, traffic congestion
- Traffic speeds
- Traffic high priority
- Traffic issues
- Traffic Issues! Why can't we have more traffic lights to help this issue?
- More street lights
- Entrance on Robinson
- "Block it Off" Robinson Need a North / South Connector
- Toll road Robinson
- Scared for the kids to be in the street
- Speeding issues, school area
- Wider streets
- Parking on street is tough on traffic
- Parking must be adequate, but not dominant
- Parking must be adequate cars in back
- Inadequate parking at Community Center
- Robinson, Maplewood & Busy Streets-Sidewalk Priority
- Bridge at 45 (Oak Ridge)

- Sidewalks Start with Robinson & Maple Wood, continue on to more heavily traveled neighborhood streets.
- Sidewalks Really need a side walk system more than walking trails.
- Sidewalks For the safety of our school kids going to and from bus stops.
- Sidewalk no place for kids to walk
- Schools but no sidewalks
- Need sidewalks
- We need sidewalks
- Pedestrian oriented
- Consider a pedestrian bridge over Hannah Rd

OTHER

- Do not want some HOA's too restrictive
- Don't become another Old Towne Spring
- Develop traffic strategies along neighborhood without speed bumps
- More thought into Robinson Rd?
- What to do with existing Businesses?
- Bigger Community Center
- Senior Activities
- Bond to improve drainage, sidewalk and community center
- Cobblestone pavers
- Put some enforcement in homes needing repair. Too many homes look awful – lack of maintenance and no pride of ownership
- Need community service liaison
- Park next door heavy use
- Love the Christmas Lights, 4th of July parade, safety with active police dept, new trash system
- Community space / center public space / gathering needs, parking at facility
- Exxon economics
- Business planning
- Keep property cleaned up

- Well site fencing / screening
- Screening on railroad
- Accessibility
- Bigger Community Center
- Sales tax opp
- This should have been done 30 yrs ago
- We pay higher tax base than the Woodlands –
 Where does it go they offer more amenities with a lower tax base
- What happened to bowling alley?
- Need stuff that fits the demographic
- Need something to attract the younger demo
- Robinson frontage housing rain flooding, sidewalk issues
- Underground storm
- Painted cross walk
- Town Feel
- Nice stable
- Develop activity focused concepts for town center
- Color on entrances.

Summary of Proposed Action Items & Probable Costs

The following pages detail a number of projects identified to meet the needs identified through stakeholder input and take advantage of opportunities available within the community. Priority projects were planned to a level of detail to identify a probable level of investment on an order of magnitude appropriate for a planning level document. Final cost projections would need to be determined through a design process at the time of implementation.

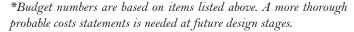
Budgetary numbers on charts are for constructions only. An additional 15-20% of construction should be added to each project for the purposes of consultant fees, geo-tech reports and surveys depending on scope of work.

PRIORITY PROJECTS IDENTIFIED

- New Sign and Monument Concepts
- Woodson Rd. Trail
- Marilyn Edgar Park Improvements
- Town Center Park
- New "Regional" Park to East
- City-Wide Trail System

Probable costs statements are based on the 2015 costs for labor and materials. These numbers may change.

| Marilyn Edgar Park Improvement | | | | | |
|--------------------------------|---------------|--|--|--|--|
| Item | Probable Cost | | | | |
| Parking (49,00sf) | \$294,000 | | | | |
| Playground Equipment | \$175,000 | | | | |
| Monument Sign | \$20,000 | | | | |
| Demolition | \$30,000 | | | | |
| Picnic Area | \$12,000 | | | | |
| Detention/Dog Park | \$50,000 | | | | |
| New Foot Bridge (1) | \$12,000 | | | | |
| New Trail (2,700lf) | \$67,500 | | | | |
| Splash Pad/Pool | \$185,000 | | | | |
| Remodel | | | | | |
| Landscape & Irrigation | \$95,000 | | | | |
| Road Bridge | \$100,000 | | | | |
| Lighting | \$48,000 | | | | |
| Site Furnishings | \$84,300 | | | | |



| Woodson Rd. Trail | | | | | |
|---------------------------|---------------|--|--|--|--|
| Item | Probable Cost | | | | |
| Trail Construction | \$124,000 | | | | |
| Landscape and Lighting | \$75,500 | | | | |
| Site Furnishings | \$6,000 | | | | |





Inventory & 01 Analysis

| | Trail Construction Costs | | | | | | | | |
|-------|--------------------------|---------------------------|-------------------------|-------------------------|----------|------------------------|-------------------|----------|---------------------------|
| Phase | Trail Segment | Road Type | Proposed Lenth (ft.) | Proposed Width (ft.) | Material | Unit Cost (\$/SqFt) | Probable Costs | *Misc. | Landscaping & Lighting |
| I | Woodson Rd. | Local Collector | 3,325 | 6 | Concrete | \$5.00 | \$99,750 | \$30,250 | \$75,500 |
| II | Maplewood | Neighborhood Collector | 4,393 | 5 | Concrete | \$5.00 | \$109,825 | \$25,000 | N/A |
| II | Blueberry Hill | Neighborhood Collector | 3,037 | 5 | Concrete | \$5.00 | \$75,925 | \$23,700 | N/A |
| II | Hillside Dr. | Local Street | 1,991 | 5 | Concrete | \$5.00 | \$49,775 | \$16,500 | N/A |
| II | DD#6/School | Other | 8,509 | 6 | Concrete | \$5.00 | \$255,270 | \$29,400 | \$110,000 |
| III | Harlan | Local Street | 4,312 | 5 | Concrete | \$5.00 | \$107,800 | \$30,800 | N/A |
| III | Patsy | Neighborhood Collector | 2,748 | 5 | Concrete | \$5.00 | \$68,700 | \$20,800 | N/A |

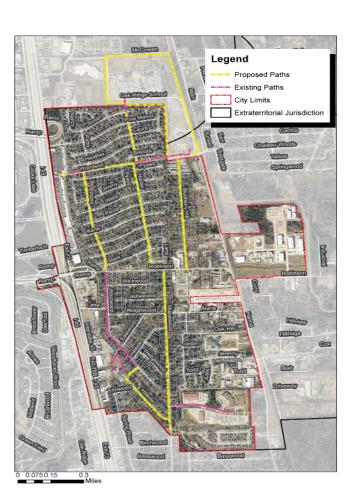
^{*}Miscellaneous items include but not limited to demolition, ramps and culverts, does not include professional fees, surveys, and geo-tech reports.

| Wayfinding and Signage | | | | | |
|------------------------|--------------------|--|--|--|--|
| Item | Probable Cost ea. | | | | |
| Gateway Monument | \$285,000 | | | | |
| District Monument | \$25,000 | | | | |
| Secondary Monument | \$27,000 | | | | |
| Secondary Entry | \$21,000 | | | | |
| Monument | | | | | |
| Wall Sign | \$3,000 | | | | |
| Wayfinding Sign | \$3,000 | | | | |
| Educational Signage | \$2,500 to \$3,500 | | | | |
| Mile Markers | \$500 | | | | |
| City Limits Signs | \$3,000 | | | | |

^{*} Probable costs may vary pending materials, lighting and construction methods.







Parks and Open Space



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Inventory & **Analysis**

02

Parks and **Open Space**

03

Overall **Walkability**

04

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Town Center

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Urban **Forestry**

07

Implementation

Parks and Open Space Planning

Priorities & Opportunities

The Benefits of Parks and Open Space

Parks and open space are key components contributing to the quality of life for any community. These elements of the public domain provide spaces for recreation and exercise, as well improve aesthetics and ecological services such as mitigating stormwater runoff, cleaning the air we breathe and providing wildlife habitat in the urban environment. Studies have even shown that parks can increase the property values of homes in a community. "The real estate market consistently demonstrates that many people are willing to pay a larger amount for a property located close to parks and open space areas than for a home that does not offer this amenity," writes John L. Crompton, a professor at Texas A&M University who has published extensive research on parks and recreation

Park Standards

Traditional park and recreation planning techniques have used standards established by the National Recreation and Parks Association (NRPA) to determine the quantity and type of amenities a city should provide. An example of such standards commonly provided by the NRPA is the overall recommendation for park acreage by population. The NRPA suggests a minimum of 6.25 to 10.5 acres of park land per 1,000 population. This standard would suggest that the City of Oak Ridge North should provide 18.75 to 31.5 acres of park land for its residents. Currently the City provides three parks with a total of approximately 6.03 acres of developed park land. Recent acquisitions of 2.48 acres of land around Marilyn Edgard Park bring the total available park land to 8.51 acres. Additional park additions are planned including the proposed "Plaza District Park" (1.84 acres), and a new regional-sized park in the eastern ETJ (89.38+ acres); offering a possible new total of 95+ acres of parks in the community.

Local Demand

The Demand Assessment phase of plan development, combined with public input gathered during the recent Comprehensive Plan development, yielded evidence of what the citizens of Oak Ridge North would like to see in their parks and open space. Some key priorities for the public input include the followings:

- Upgrades to Marilyn Edgar Park
- More shade at Marilyn Edgar Park
- Add trails and sidewalks (see Walkability section)
- Add more "baby swings" at Teddy Bear Park
- Add a splashpad to the community
- Add pet waste disposal station at Marilyn Edgar Park
- Add dog-friendly water fountain at Marilyn Edgar Park
- Increase amount of parking at Marilyn Edgar Park

Although not an extensive list of wants/needs, combined with an understanding of park and recreation trends and the evaluation of current park resources in the community verifies that these are indeed priorities.

Existing Facilities

The City currently maintains three parks in overall good condition. Marilyn Edgar Park and Teddy Bear Park are both heavily used and have a variety of amenities of varied age and condition. The third park is a small playground park or "Tot Lot" offering a fence-enclosed playground with seating in the southeast area of town.



Teddy Bear Park playground



Parking at Teddy Bear Park is reportedly a regular issue due to limited space.

Parks and Open Space 02

Teddy Bear Park

Teddy Bear Park is feature-rich and has little room for expansion/additions. The park is entirely fenced and offers a variety of play structures, benches, trash receptacles, lighting, restrooms and a large pavilion with picnic tables. Park users have requested an additional swingset for toddlers who are the most common visitors to this park. Other comments include the need for more parking and addressing the issue of "pass-through" traffic from vehicles using the parking lot as a detour off of Robinson Rd.

Teddy Bear Park is considered to be fully developed with little room for additional features. To expand opportunities for both recreation and required parking more space would be needed. Parcels immediately north of the adjacent water treatment facility could allow for future expansion of the park. These parcels should be considered for acquisition if they become available in the future.



The Oak Ridge Grove Dr. Tot Lot offers a secure play area for smaller children.



Properties adjacent to Teddy Bear Park and the water treatment facility could be used to expand the park opportunities should they become available for purchase in the future.

Marilyn Edgar Park

Marilyn Edgar Park is the largest and most feature-rich facility in the community. The park is frequently used and provides approximately 5.1 acres of open space with a baseball/multi-use field, playground, pavilion and picnic areas, swimming pool, tennis court, and walking paths. With acquisition of approximately 2.48 acres of adjacent properties, the City can now expand the park to include additional amenities. The park is well-maintained but could be updated to include high-demand amenities desired by the citizens.

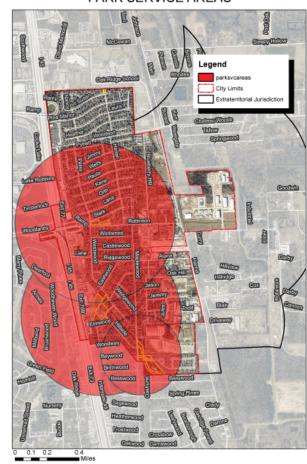
Tot Lot at Oak Ridge Grove Drive

The City owns and maintains a third park in the southern part of the community that offers a fenced playground with benches. The 0.13 acre site is a secure facility for toddlers to play while giving parents the peace of mind that their children will not get lost or run into the street. This park is relatively small and primarily serves the immediate neighborhood of Oak Ridge Grove. Suggested additions include the installation of a picnic table and grill for small family outings.

Park Service Areas

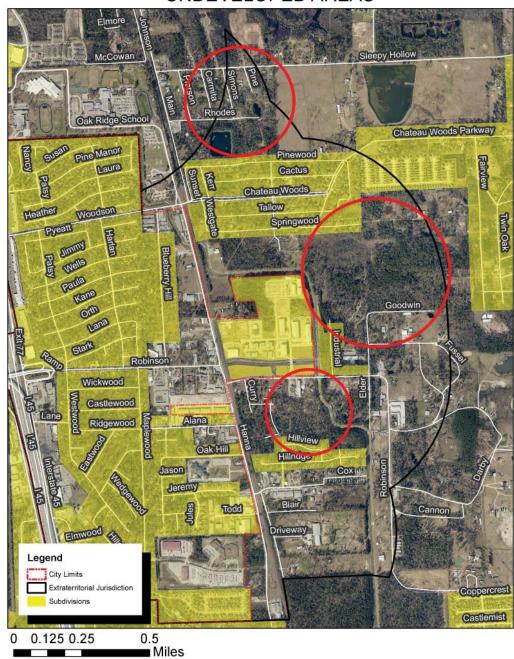
Park service areas represent the distance in radius that a park generally provides recreation opportunities for a community. Marilyn Edgar Park and Teddy Bear Park operate as "community parks" and have been assigned a service radius of 1/2 mile (12-15 minute walk). The "Tot Lot" has been assigned a 1/4 mile (5 minute walk) service radius. These distances have been modified from NRPA standards to consider the size of the community and general layout of streets and neighborhoods. The underserved areas of the community include Oak Ridge North 10 and unincorporated areas within the eastern ETJ.

PARK SERVICE AREAS



Parks and Open Space Planning

UNDEVELOPED AREAS



Undeveloped areas identified within the eastern ETJ of Oak Ridge North offer opportunities to expand recreation and open space for residents. The largest of the three areas (generally identified by red circles) represents approximately 112 acres of land that could be utilized for a large, regional recreation area comprised of forested areas, hiking trails and other spaces for outdoor activities.

Floodplain and Wetlands



FEMA Floodplain Maps and the National Wetlands Inventory indicate a significant area of land in the eastern ETJ that is largely within the 100 year floodplain and contains areas of temporary or seasonally flooded wetlands. Such areas are less suitable for development, however can be utilized for outdoor recreation through the creation of trails, parking areas, and open spaces.

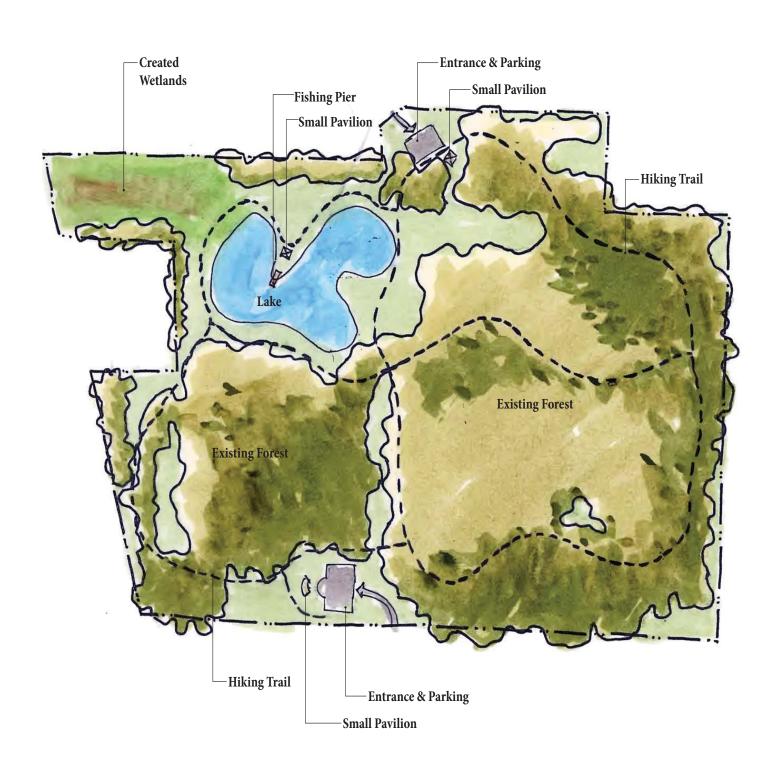
Parks and Open Space 02

Priorities & Opportunities

Given the jurisdictional limits of Oak Ridge North and adjacent communities, it is important to plan the remaining undeveloped areas for the overall quality of life of residents as the community reaches build-out.



84+ acres in the eastern extraterritorial jurisdiction could provide a "regional" scaled park for outdoor activities including, hiking, fishing, and passive recreation.



Parks and Open Space Planning

Marilyn Edgar Park Improvements

Marilyn Edgar Park has sufficient space to provide a number of additional amenities and improvements with the recent acquisition of adjacent properties. With citizen priorities including walking paths, more parking and upgrading the park modern features; there are opportunities to accommodate these needs.

Parking

Parking at Marilyn Edgar Park has been reported to be inadequate according to both City staff and park users. Additional parking space can be provided by re-routing the existing parking lot and entry along the southern edge of the park and through the two additional lots, also improving the overall flow of traffic and pedestrian safety.

Walking Paths

Currently there is approximately 1,100 feet (2/10ths mile) of walking paths within Marilyn Edgar Park. Expansion of the park into the adjacent City-owned property to the Northwest would allow for an additional 800 to 900 feet of pathways, bringing the total length to over 1/4 mile. This would require the addition of one or more pedestrian bridges across the drainage ditch separating the properties. The additional path and bridge(s) would connect the isolated areas of Oak Ridge North 03 along Spring Pines Drive to the rest of the community.

Dog Park

Many citizens walk their dogs in Oak Ridge North, as evidenced by discussions with citizens at the public meeting and in the parks and community. Dog parks are becoming increasingly popular as a way to provide off-leash recreation for dogs and their owners. These facilities can be as simple as a fenced area dedicated to our canine companions or a feature rich park with obstacle courses, trails, swimming ponds, seating areas, washing stations, pet waste disposal facilities and more. Given the likely need for additional stormwater detention due

to parking expansion, a dog park offers a compatible land use that can serve as an amenity on dry days while providing required detention for rain events.

Aquatics Upgrades

The pool at Marilyn Edgar Park has been around for many years and serves as the home facility for the Oak Ridge North Otters, the local swim team. The swimming program during summer months is managed by the local YMCA, with relatively low visitation.

The pool is in good working condition, however it is somewhat dated in terms of the features offered when compared to aquatics facilities in other communities. Such features as "kiddie pools" and traditional deep end separation for use with diving boards are no longer considered popular. Newer facilities in other communities are providing features such as splashpads/spraygrounds and "beach entry" style pools to attract a wider variety of users. Splashpads can be developed to work with existing water treatment equipment and can be scaled to any size desired. The facilities can be left un-fenced for year round access, as they do not require staff for lifeguarding and other management. Beach entry style pools are popular for families with younger children and mature citizens who tend to find access



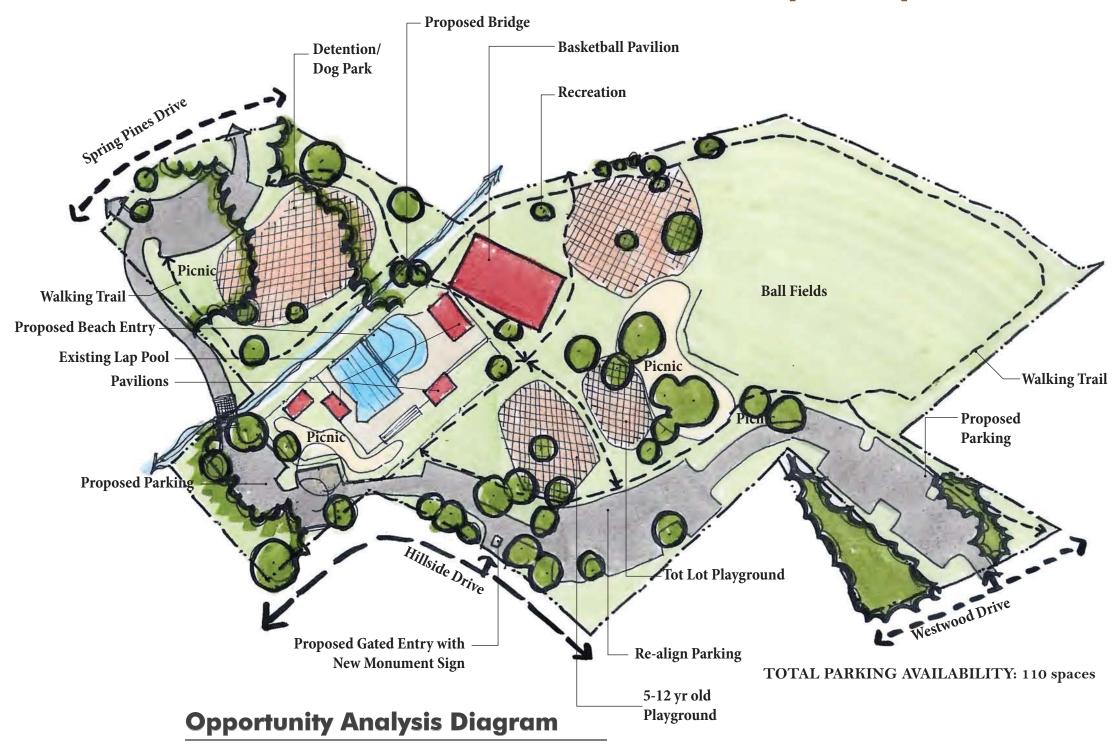


The existing pool at Marilyn Edgar Park can be retrofitted to include a beach entry area while still accommodating traditional swimming activities. These types of pools are gaining popularity, especially for younger children and seniors.



Splash pads are a very popular addition to aquatics facilities and can be scaled from a single feature to a wide range of sprayers, dumpers and other components.

Parks and Open Space 02



PROBABLE COSTS:

Parking: \$300,000

Playground Equipment: \$175,000

Monument Sign: \$20,000 Demolition: \$30,000 Picnic Area: \$12,000 **Detention/Dog Park:** \$50,000 **New Foot Bridge:** \$12,000

New Trail: \$67,250

Splash Pad/Pool Remodel: \$185,000 Landscape & Irrigation:: \$95,000 **Road Bridge:** \$100,000 **Lighting:** \$48,000

Site Furnishing: \$84,300

Priority Projects

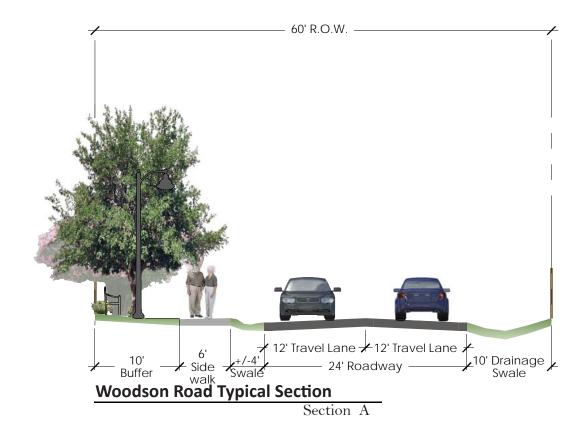
Woodson Road Walking Path

The planning team, Planning and Zoning Commission, and City staff have worked together to identify priority projects to implement in the first year upon adoption of the Public Space Master Plan. This project was chosen as one that met the highest priority need identified through public input in the Comprehensive Plan as well as this planning process. Additionally, the project can be implemented using available land and is budgeted for the 2015 fiscal year.

The highest priority identified was "walkability" within the community. Woodson Road currently has a partial walking trail that is aging and in disrepair. Woodson Road has substantial right-of-way to accomodate a new walking path that meets current standards and would create connections between shopping, neighborhoods and schools from east to west.

The proposed alignment is a 3,300 foot long pathway, 6 foot wide, along the north side of the road. The pathway is planned to meander slightly along its length and have trees planted intermittently to create shade and traffic calming. A few trash receptacles would be installed along the way and possibly some educational signage about the trees in the community along with urban wildlife attractions such as bird houses for Bluebirds and Purple Martins.

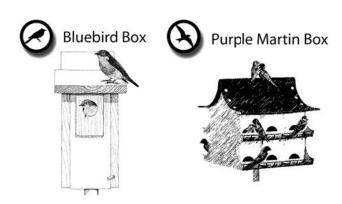
The estimated budget for the Woodson Road Walking Path, including concrete path installation, landscaping, lighting, trees and site furnishing is approximately \$205,500. Additional considerations should be made for a lighting scheme along the pathway. There are a great many choices for lighting to consider including traditional electrical, solar options, style of lighting standards (poles and fixtures) and level of lighting needed. These items are typically decided upon during the design development phase of the project during implementation.



ACCENT SHRUB GROUPINGS:

BEAUTYBERRY
CORALBERRY
YAUPON HOLLY
SHADE-FRIENDLY GRASS & WILDFLOWER MIX

THROUGHOUT





Educational Signage

Parks and Open Space 02



Woodson Road Area Diagram







Overall Walkability



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Implementation

Planning for Walkability

Pedestrian Paths and Trails

Defining Walkability

Walkability is defined in many ways, but is almost always based on three principles:

- Physical Access
- Places
- Proximity

"Physical Access" refers to the infrastructure available to facilitate safe pedestrian travel to a destination. This can take the form of sidewalks, trails, open space and corridors.

"Places" refers to the presence of public destinations such as schools, work, shopping, food service, parks and other recreational activities.

"Proximity" refers to the walkable distance to destinations. An acceptable distance to a variety of destinations would be approximately one mile or 10 to 15 minute walk from a given location.

The Need

The City of Oak Ridge North, largely a residential community, has very limited area dedicated to pedestrian and other non-vehicular transportation. Currently there are 6,800 ft. of sidewalks and bike lanes within the community. The public input gathered during the development of the Comprehensive Plan, as well as that gained from the Public Space Planning Meeting indicate a strong desire by the public to have more opportunities for walking and biking throughout the community. Numerous citizens expressed concerns over safety when having to walk or ride bikes in the streets to exercise or visit other areas of the community.

A citizen survey conducted during the Comprehensive Plan development process indicated that 60% of respondents regarded adding more trails and other places to ride and walk within the community as either "important" or "very important". Also noted in the survey is that 65% of respondents regarded improved pedestrian mobility (sidewalks and trails) as being either "important" or "very important".

Across the State of Texas communities are increasingly finding that pedestrian pathways are a critical component of any parks and recreation system. Providing connections between neighborhoods, schools, parks and shopping areas not only allows for non-vehicular transportation, but offers safe recreation opportunities for an increasingly more active population.

Opportunities

In communities that were originally designed and built without sidewalks or trails, it can sometimes be a challenge to find available space for such facilities. In these cases one must evaluate all public space to identify areas for sidewalks, paths and bike lanes. Local collector and arterial streets within Oak Ridge North offer the most implementable opportunities for adding pedestrian pathways due to available right-of-way that is sufficient to install a path. Woodson Rd. and Robinson Rd. are prime candidates for a 6' path running the full length of the roads within the City limits.

Additional paths can be created on neighborhood collector streets and local streets provided with conditions varying in each case. Streets to the north of Robinson Rd. are built with curb and gutter pavement that utilizes underground stormwater management. In these areas, right-of-ways are capable of supporting 5' sidewalks installed immediately adjacent to the curb. This is a common practice in many communities where space is at a premium.

Neighborhoods to the south of Robinson Rd. are built with open ditch systems that would have to be converted to curb and gutter to accommodate paths.



Existing walking/bike lane along Westwood Dr. is delineated by colored and stamped concrete.

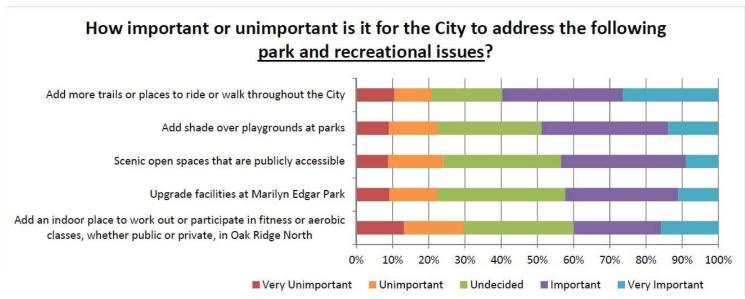


The trail within Marilyn Edgar Park is a well-used facility that can be expanded along with other proposed improvements to the park.



The existing foot bridge across Drainage Ditch #6 connects the high school to area neighborhoods.

Overall O3 Walkability



The citizen survey conducted during the Comprehensive Plan development indicated that 60% of respondents regarded adding more trails and places to ride or walk as being either "important" or "very important".

*source: Oak Ridge North Comprehensive Plan 2013



Existing walking path along Woodson Rd.

How important or unimportant is it for the City to address the following transportation issues? Traffic congestion along Robinson Rd. Traffic congestion at Robinson Rd. and Hanna Rd. Traffic congestion on clover leaf at IH-45 and Robinson Rd. Divert east/west cut-through traffic off Robinson Rd. Improved pedestrian mobility (sidewalks or trails)

The citizen survey conducted during the Comprehensive Plan development indicated that approximately 65% of respondents regarded improved pedestrian mobility (sidewalks or trails) as being "important" or "very important".

■ Very Unimportant ■ Unimportant ■ Undecided ■ Important ■ Very Important



Walking/Biking trail along a drainage corridor in Jersey Village, Texas. Such a trail would work well within Oak Ridge North.

Planning for Walkability

Pedestrian Paths and Trails

Pedestrian paths can also be installed in areas that are often under-utilized in the community. The City of Oak Ridge North has a system of drainage ditches managed by the Montgomery County Drainage Districts. Drainage Ditch #6, in the northern area of the community offers an opportunity to expand walkability and connect schools and neighborhoods to the proposed Woodson Rd. path. Agreements with the Drainage District would allow the City to build and maintain a 6' path along the top of the bank, thereby further increasing mobility through the community.

Phased Development

Phase I

Most communities develop their trail systems in a phased manner, prioritized by utility, cost and available space. The Woodson Rd. trail is planned as a first phase project, as the space is available, and it's a major thoroughfare through the community. Estimated costs for installation of the trail, landscape, irrigation and site furnishings are approximately \$205,500. Additional consideration should be made for landscape improvements along the path. Lighting has been considered by the Planning & Zoning Commission, and details would be vetted out during the design process. There are a great many options for light poles and fixtures, electrical systems such as solar options, and associated costs. A lighting plan would likely include

saftety-level lighting standards at 80 foot intervals along the paths.

Phase II & III

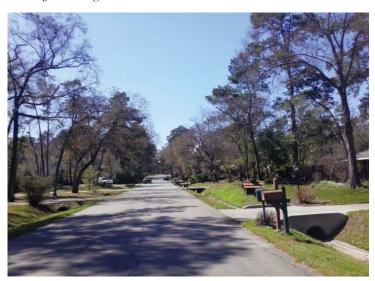
The second phase of proposed paths in the community is planned to include Maplewood Dr. and Hillside Dr., streets that would require curb and gutter conversion, and Blueberry Hill Dr. The Drainage Ditch #6 alignment is also planned during this phase as an option that could extend all the way around the high school property in addition to along the ditch, thereby creating a jogging loop. It should be noted that high school students currently run the full length of Harlan Ln. and Maplewood Dr. on a daily basis. Remaining proposed trails include Harlan Ln. and Patsy Ln. Harlan Ln. and Patsy Ln. are planned for installation of sidewalks that would connect neighborhoods to Robinson Rd. during this phase.

Phase IV

Robinson Rd. has a high probability of being redeveloped and realigned to deal with regional traffic issues. The South Montgomery County Regional Mobility Study, ongoing as of the writing of this document, will ultimately determine the future of Robinson Rd.; thereby triggering the opportunity to implement a pedestrian path as a part of that design process. Possible funding sources could include a Tax Increment Reinvestment Zone (TIRZ) to assist with improvements along this critical thoroughfare.



View of Drainage Ditch #6.



Typical open ditch street south of Robinson Rd..

| Trail Construction Costs | | | | | | | | | |
|--------------------------|----------------|------------------------|-------------------------|-------------------------|----------|------------------------|-------------------|----------|------------------------|
| Phase | Trail Segment | Road Type | Proposed Lenth (ft.) | Proposed Width (ft.) | Material | Unit Cost (\$/SqFt) | Probable Costs | *Misc. | Landscaping & Lighting |
| I | Woodson Rd. | Local Collector | 3,325 | 6 | Concrete | \$5.00 | \$99,750 | \$30,250 | \$75,500 |
| II | Maplewood | Neighborhood Collector | 4,393 | 5 | Concrete | \$5.00 | \$109,825 | \$25,000 | N/A |
| II | Blueberry Hill | Neighborhood Collector | 3,037 | 5 | Concrete | \$5.00 | \$75,925 | \$23,700 | N/A |
| II | Hillside Dr. | Local Street | 1,991 | 5 | Concrete | \$5.00 | \$49,775 | \$16,500 | N/A |
| II | DD#6/School | Other | 8,509 | 6 | Concrete | \$5.00 | \$255,270 | \$29,400 | \$110,000 |
| III | Harlan | Local Street | 4,312 | 5 | Concrete | \$5.00 | \$107,800 | \$30,800 | N/A |
| III | Patsy | Neighborhood Collector | 2,748 | 5 | Concrete | \$5.00 | \$68,700 | \$20,800 | N/A |

*Miscellaneous items include but not limited to demolition, ramps and culverts, does not include professional fees, surveys, and geo-tech reports.

Overall O3 Walkability



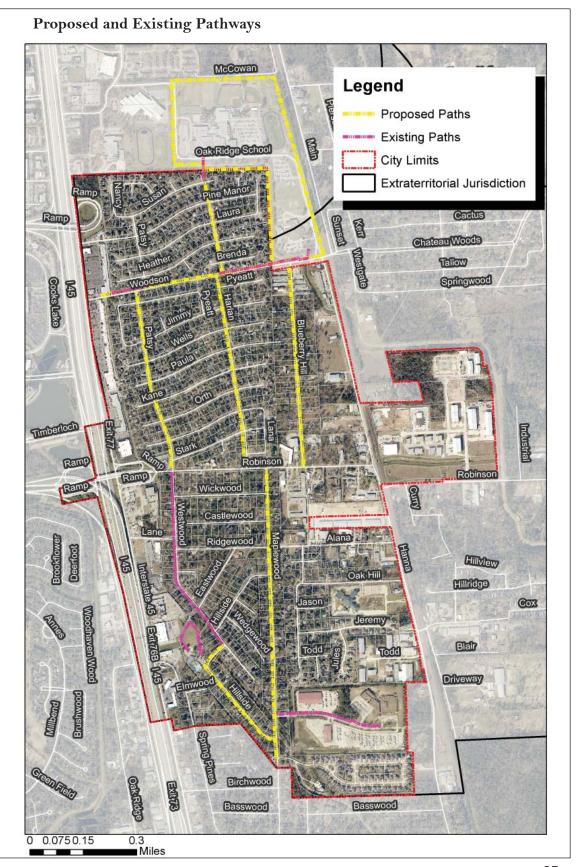
A solar lighting project along a walking trail in Visalia, California. The installation included 30 lights along the 3,600' trail at approximately \$4,000 each. The City reports long-term savings since there are no electricity bills, as well as other costs such as trenching, wiring and connecting to the electricity grid.

Public demand, available space, trends in recreation and affordability make pedestrian paths and trails a high priority for the City of Oak Ridge North. These connections will serve to connect the community and provide opportunities for healthy recreation.

Phase I planned paths should be implemented in the first year with plans to implement Phase II & III as funds become available, Phase III trails will need to be considered as a component of an overall drainage and paving study for areas south of Robinson Rd. at a future date. Phase IV development of the Robinson Rd. trail will be implemented in coordination with the redevelopment and/or realignment of Robinson Rd.

Low Impact Development Considerations

Low Impact Development (LID) strategies should be considered during implementation of projects. Technologies such as solar lighting, rainwater catchment and reuse, permeable pavement and other tools can conserve water and energy and reduce storm water runoff.



City Branding



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Implementation

Community Identity

Gateway Monuments and Signage

A comprehensive system of signage is essential not only to the identity of a city, but an important tool for assisting residents and visitor alike when navigating through the community. Signs not only contribute information and vitality to the community, but if well designed, can improve the character and flavor of Oak Ridge North. All permanent and temporary signs can be designed so they are compatible with the character that the City wants to portray.

Gateway Monuments

Gateway monuments are the most visible component of a wayfinding system. These monuments announce the arrival into a community and often are the first impression a visitor has when driving into the city. Gateways should be strategically placed to have the most visibility and scaled appropriately. Gateways typically set the standard for what materials and language will be used in secondary and tertiary levels of signage used in other areas of the community. The gateway monuments should be placed at key intersections where the majority of traffic enters the community. The primary entrance into Oak Ridge North is via Robinson Rd. at Interstate 45. A gateway at this node will experience the most visibility by the most people.

Secondary Monuments

Secondary monuments typically mark the location or arrival at key facilities, districts, parks or other community features. These monuments are typically placed in areas that are not subject to change. These monuments follow suit with the gateway monuments with regards to architectural language and materials and are scaled down to a more human scale. Key locations for secondary monuments in Oak Ridge North include the arrival into the Plaza District and Marilyn Edgar Park.

Tertiary Signage

Tertiary signage is composed of smaller signs that mark the location of such features as City limits, smaller parks, trail heads and other amenities. These signs may be directional or informational. These are often pole-mounted signs including the relative description or labelling along with the City logo. Color schemes will follow suit with higher level signage and monuments.

Tertiary signs often include additional features such as mile markers along a trail or educational kiosks within a park or other public space. Mile marker signs may include a low profile stone base with a folded metal with etched lettering indicating the distance achieved. Educational signs may include a low profile stone base with a single post attachment to hold a 24"x36" framed plexi-glass rendered sign as shown on the following page.

Existing Signage and Monuments

The existing wayfinding signage and monuments within Oak Ridge North are of varied age and condition, some of the structures should be planned for replacement or refinished. The existing entrance signs at Pine Manor Dr. and Woodson Rd. are dated and should be replaced. The existing sign/monument on Robinson Rd. at Teddy Bear Park is in good condition and will be incorporated into the proposed wayfinding plan. The Marilyn Edgar Park entrance sign is planned for replacement as a component of overall redevelopment of the park. The existing clock tower at City Hall is planned for inclusion in the proposed Town Center. This monument is a landmark in Oak Ridge North, and is in good condition.

Precedent monuments within Oak Ridge North







City O4

Secondary Signage Concepts

Secondary signage concept are proposed for approaches to key areas of the community such as Marilyn Edgar Park and the proposed Plaza District. Other future parks and community spaces can follow the pattern of materials and style.



Secondary signage concept for Marilyn Edgar Park. These monuments are scaled for use at select locations in the City that are not subject to change such as parks, City facilities and other key locations.



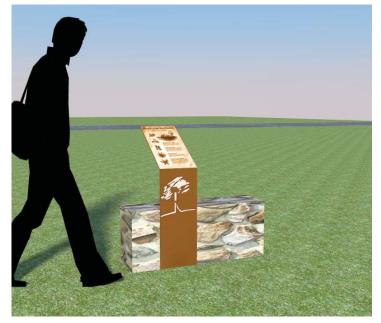
Tertiary water plant wall signage concept.



District signage concept for the Plaza District following the language and materials planned for the gateway entrance monument.



Tertiary city limits welcome signage concept to replace the existing gateways signage.



Smaller scale monuments can be used to mark intersections at trail heads or to direct traffic within the town center.



The existing sign along Woodson Rd. should be considered for replacement during development of the proposed trail along this corridor.

Community Identity

Gateway Monuments and Signage

All public input to date has indicated a strong desire to give the City of Oak Ridge North a stronger sense of identity. Citizens have asked for improvements that will mark the gateway entrances to the community and for visitors to know when they have arrived. Historically it has been somewhat difficult at times for people to visually recognize where Oak Ridge North is located, leaving the City lost amidst the surround development. Providing monuments and signage can significantly improve visibility and even attract businesses to the area.

Extensive discussions with the Planning and Zoning Commission, as well as the public input gathered through this planning effort and past work, has made it clear that the citizens want "the job done right" when it comes to planning gateway entrances and secondary and tertiary signage. Materials and architectural language should fit the style of the community and be designed and built in an affordable yet high-quality manner.

The City has chosen the most logical location for an entrance monument at the intersection of Interstate 45 and Robinson Rd. The monument would be located within the TXDoT right-of-way for maximum visibility from both the feeder road and the freeway.



Entry Gateway Conceptual Model



Entry Gateway Conceptual Model

City O4



Entry Gateway Conceptual Model

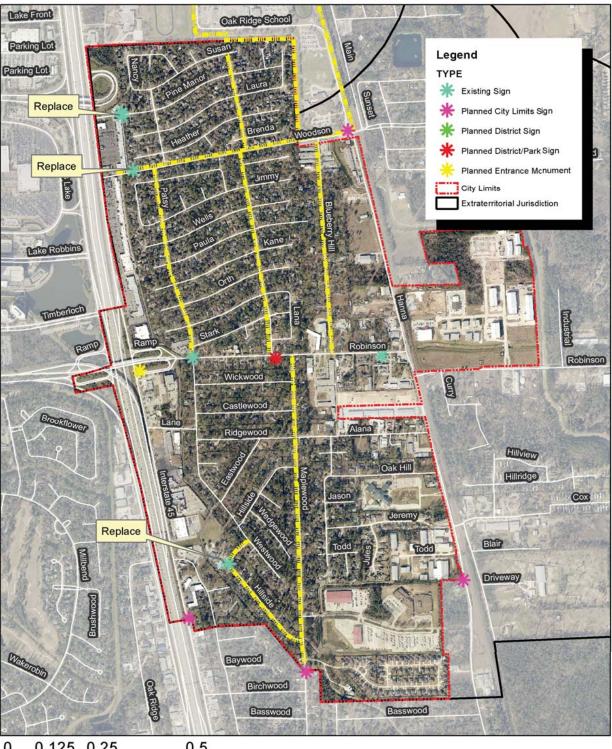
Community Identity

Gateway Monuments and Signage

| Wayfinding and Signage | | | | | |
|------------------------|--------------------|--|--|--|--|
| Item | Probable Cost ea. | | | | |
| Gateway Monument | \$285,000 | | | | |
| District Monument | \$25,000 | | | | |
| Secondary Monument | \$27,000 | | | | |
| Secondary Entry | \$21,000 | | | | |
| Monument | | | | | |
| Wall Sign | \$3,000 | | | | |
| Wayfinding Sign | \$3,000 | | | | |
| Educational Signage | \$2,500 to \$3,500 | | | | |
| Mile Markers | \$500 | | | | |
| City Limits Signs | \$3,000 | | | | |

^{*} Probable costs may vary pending materials, lighting and construction methods.

WAYFINDING PLAN



0 0.125 0.25 0.5 Miles

City O4





Mile markers are very popular among walkers and joggers and could be installed along proposed trails at select intervals.

Proposed Wayfinding signage and City Limits markers to be installed at special intersections and in the rights-of-way at entrances to the community. These markers have a logo placard that welcomes visitors to the community.



Proposed Wayfinding Family allowing for a variety of signage scenarios and combinations.

Town Center



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Implementation

Creating a Sense of Place

Town Center Concept

The Need

The citizen input gathered during the Comprehensive Plan development indicated a strong desire by the community to have a town center. The City of Oak Ridge North grew out of a group of neighborhoods unlike traditional cities, thereby never having a true central business district. Not having a town center where civic activities are held, shopping is conducted and other activities occur can leave a community feeling disconnected.

Discussions and surveys conducted during the Public Space Planning Workshop strongly indicated that citizens would be in favor of developing a town center with a retail-oriented approach. Businesses such as ice cream shops, boutiques, bistro dining, and a general pedestrian atmosphere were the types of features mentioned most often. This type of development describes the very same intent outlined in the allowed uses for the Plaza District within Oak Ridge North's Zoning Ordinance.

The Opportunity

The Comprehensive Plan shows a concept for a potential town center within the Plaza District that utilizes properties currently owned by the City and adjacent properties along Robinson Rd. Knowing that there is potential for Robinson Rd. to be realigned in the future, certain assumptions were made as to what the most feasible solution would be for a town center.

The most likely scenario for redevelopment of Robinson Rd. would involve straightening the intersection across Hannah Rd. and the railroad track to be in alignment with the section of Robinson Rd. east of the railroad track. Given the need to create a curve in the road to accomplish this, a future Robinson Rd. alignment would likely cut through the existing City-owned property where City Hall and the Public Works facilities are. The future roadway would most likely include four lanes of traffic and a median through most of it's length on the east side of the City.

Numerous development scenarios were studied to determine the most feasible solution for achieving the City's goals for a town center while ensuring that adequate space is available for parking, appropriate sized businesses and both pedestrian and vehicular traffic flow. The concept developed through these studies seeks to maximize utilization of properties already owned by the City with the understanding that the chosen developer would be able to incorporate adjacent private properties in a phased manner as they become available.

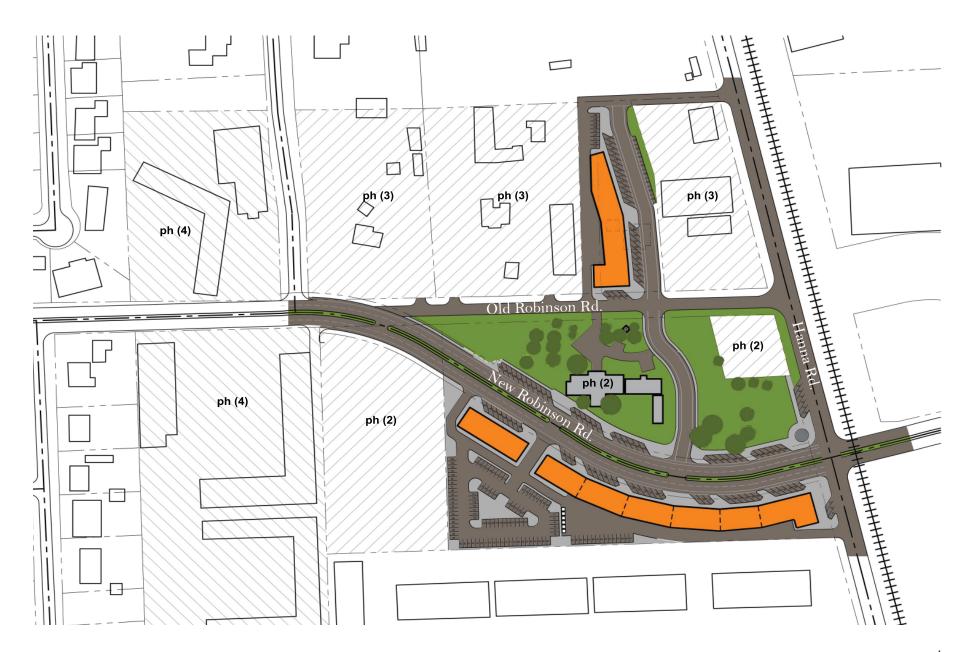
Phase 1

The first phase of development would be triggered at such time that Robinson Rd. undergoes a realignment. This phase would largely focus on areas south of the new Robinson Rd. with approximately 39,700 gross square feet of retail space at a maximum, while meeting or exceeding the required parking spaces as dictated in the Zoning Ordinance. An additional 15,800 gross square feet of retail space is planned for a parcel north of Robinson Rd. The existing City Hall would remain at its current location during this phase and space nearby would be largely passive, landscaped areas.

The confluence of old and new Robinson Rd. alignments would create a triangular park area ideal for seating, an entrance monument, possible even a gazebo or other small structure.

A new road would be introduced that runs north-south from the center of the town center and then connects eastward to Hannah Rd., thereby creating a pattern of circulation and facilitating access to various retail spaces. Both Old Robinson Rd. and New Robinson Rd. would be planned for on-street parking in addition to traditional parking lots within the town center. Optionally a two-floor parking structure could be utilized to reduce the parking footprint and create opportunities for additional floor area or open space.

Town O5



Town Center Concept Phase 1



| Unit | GSF | Story | Description | Parking Ratio | Parking | |
|------|-----------|-------|-------------|---------------|---|----------|
| 1 | 32,056.00 | 1 | Retail | 3.5/1000 GSF | 112.2 | |
| 2 | 7,600.00 | 1 | Retail | 3.5/1000 GSF | 26.6 | |
| 3 | 15,806.00 | 1 | Retail | 3.5/1000 GSF | 55.3 | |
| | | | | | 22.1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2. | |
| | 55,462.00 | | | | 194.1 | required |
| | | | | | 239 | provided |
| | | | | | | |

Creating a Sense of Place



| Unit | GSF | Story | Description | Parking Ratio | Parking | Unit | GSF | Story | Description | Parking Ratio | Parking Parkin |
|------|-----------|-------|-------------|---------------|---------|------|------------|-------|-------------|---------------|--|
| 1 | 32,056.00 | 1 | Retail | 3.5/1000 GSF | 112.2 | 7 | 15,806.00 | 1 | Retail | 3.5/1000 GSF | 55.3 |
| 2 | 7,600.00 | 1 | Retail | 3.5/1000 GSF | 26.6 | | | | | | _ |
| 3 | 30,233.00 | 1 | Retail | 3.5/1000 GSF | 105.8 | | 140,582.00 | | | | 492 required |
| 4 | 17,950.00 | 1 | Retail | 3.5/1000 GSF | 62.8 | | | | | | 492 provided |
| 5 | 27,078.00 | 1 | Retail | 3.5/1000 GSF | 94.8 | | | | | | Service Services |
| 6 | 9.859.00 | 1 | Retail | 3.5/1000 GSF | 34.5 | | | | | | |



Town O5

Phase 2

The second phase of the town center seeks to expand retail space and parking further as land becomes available for acquisition. In this phase the City Hall is planned for redevelopment at a new location near the intersection of Old Robinson Rd. and Hannah Rd. on the easternmost side of the existing City-owned parcel. This phase assumes the possible relocation of the firestation and subsequent acquisition of said land for incorporation into the town center.

At buildout of Phase 2, a total of 140,582 gross square feet of retail space could be available while still meeting the parking requirement.

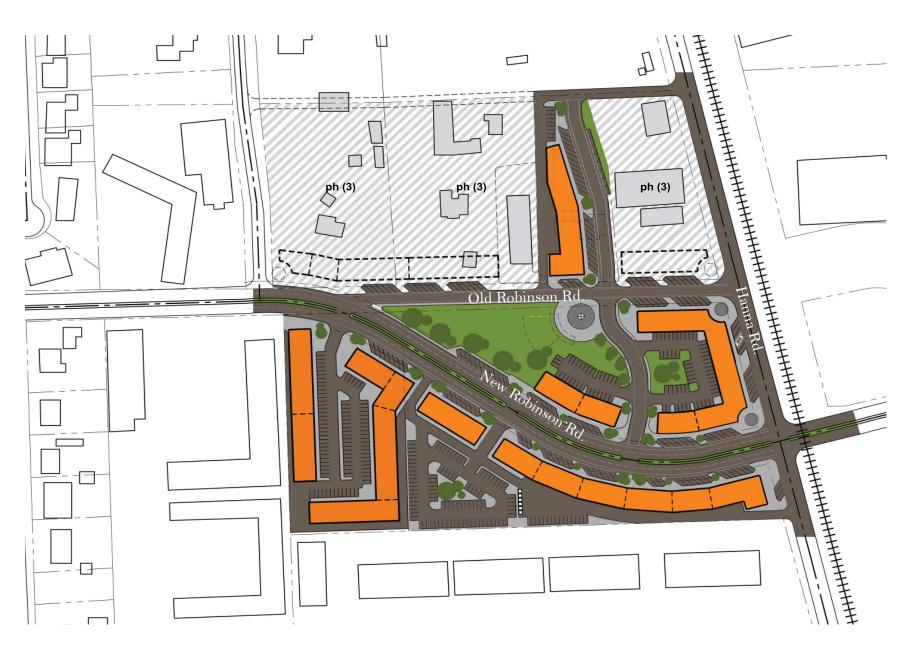
At Phase 2, the town center has reached a capacity to serve a substantial number of appropriately sized businesses with smooth circulation throughout. The former location of City Hall now becomes an open plaza area complete with landscape improvements, seating and other amenities. The space will be adequate for hosting community events and will serve as the central meeting area within the district.

Phase 3

The third phase of development of the town center assumes a gross total floor area of approximately 173,603 square feet of retail and/or civic space. Parking requirements will be met at this phase. Additional areas within the Plaza District could also be developed, should the properties become available, and are shown as potential areas for future development.

"Each on-street parking spot that is lost costs an adjacent business about \$10,000 a year in sales."

- National Main Street Program



Town Center Concept Phase 3

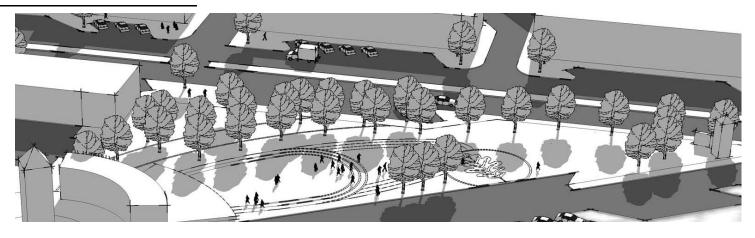


Town O5



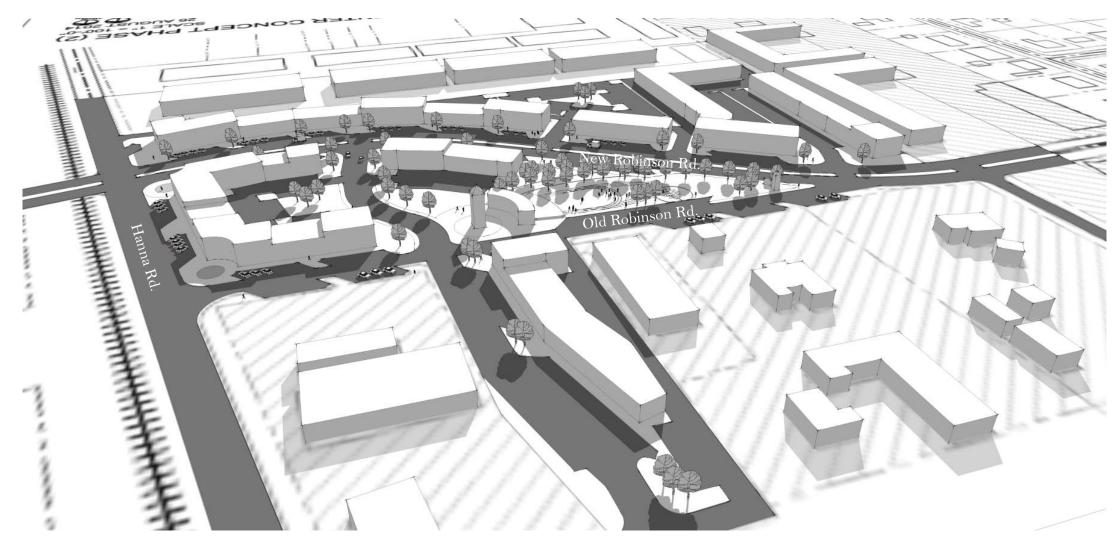
Town Center Concept Facing Northwest

The urban park in the proposed Town Center will offer public space for events and passive recreation. The proposed park will serve as a high-visibility entrance to the Town Center and include an amphitheatre, sunken plaza area and a splashpad along with decorative landscaping, site furnishings and lighting.



Creating a Sense of Place

Town Center Model



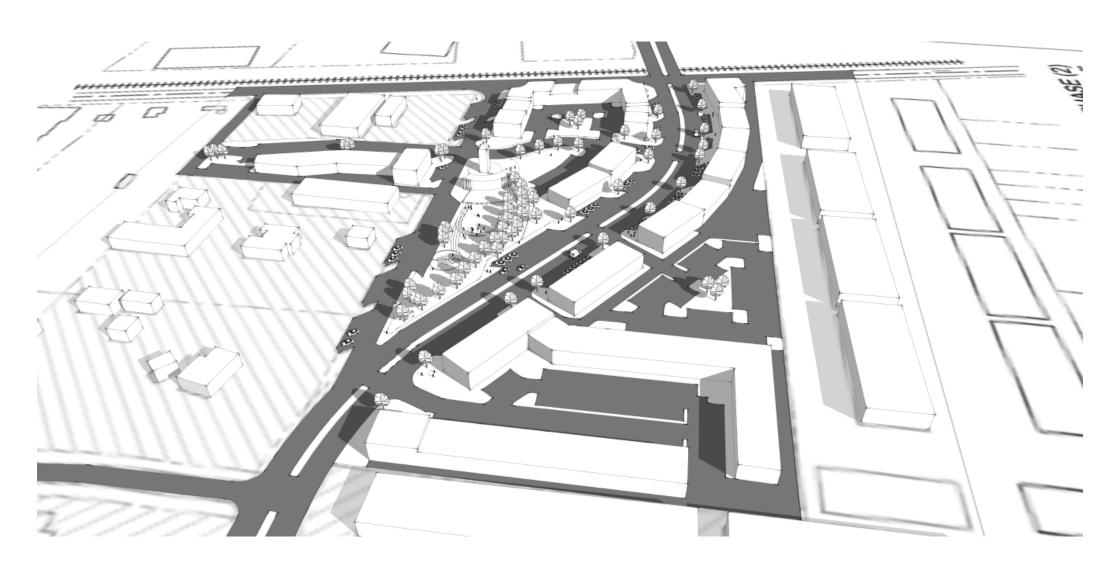
Town Center Concept Facing South







Town O5



Town Center Concept Facing East

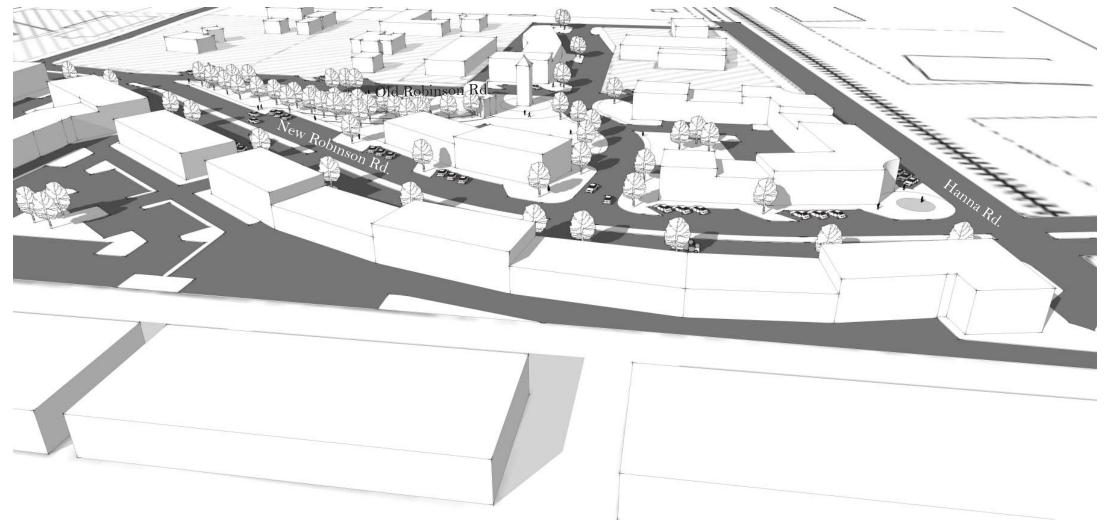






Creating a Sense of Place

Town Center Model



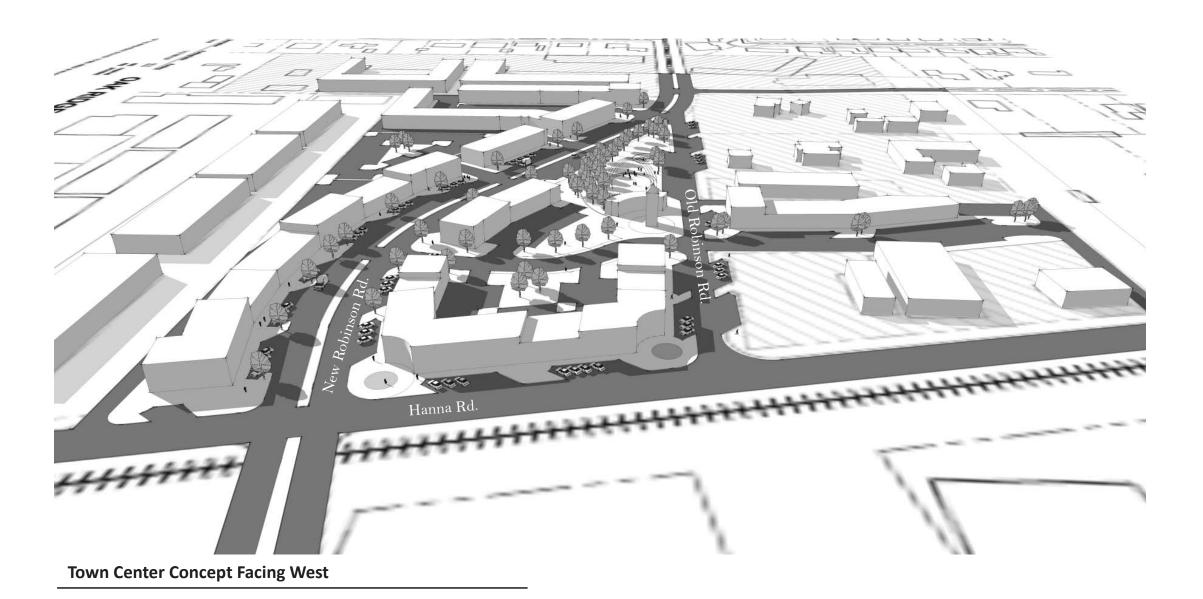
Town Center Concept Facing North







${\overset{\rm Town}{\text{center}}}~05$









Urban Forestry



Inventory & **Analysis**

Parks and Open Space

Overall **Walkability**

City Branding

Town Center

Urban **Forestry**

Implementation

Tree Preservation Recommendations

Planning for Growth and Redevelopment

The City of Oak Ridge North has recognized that the trees are a vital component of the community that provide improved quality of life, increased property values, shade and reduced cooling costs, ecological benefits, and even it's namesake. The primary approach to tree protection identified by the City is to address the following objectives:

- 1. The City will control trees within the right-of-way.
- 2. Trees within front, side and rear lots shall be protected (outside the building envelope identified within the Zoning Ordinance).
- 3. Trees larger than 6 inches in diameter shall be protected.

With the understanding that the community will experience change over time as new properties develop and existing homesites are redeveloped over time, it has become important to consider the impacts of such development on the landscape. The City has asked Burditt Consultants to evaluate current ordinances and development processes as well as assess the condition and makeup of the urban forest. The results of these investigations have resulted in a series of recommendations for moving forward to a future tree protection ordinance that fits the needs of the community.

Tree ordinances are becoming increasingly popular as a tool to guide development in a manner that does not drastically change the landscape, but rather encourages the type of development that the citizens value.

The Urban Forest

The City of Oak Ridge North truly is a community within a forest. With an approximate 42% tree canopy cover within the City Limits, the trees are a valuable asset to the people who live here. The forest is primarily comprised of mature hardwood

and pine species that provide substantial benefits in the form of shading and cooling, stormwater runoff reduction, pollution control and overall improved quality of life. Maintaining the health and longevity of the urban forest is a priority to residents and should be addressed in a proactive manner.

Support for a Policy

Policies that affect the community's trees are a subject of great importance to a wide variety of stakeholders. Tree ordinances, depending on how they are developed can apply to trees within the public realm and private property and the effect of the ordinance may be felt by residents, commercial developers, home builders, as well as visitors to the community.

Developing a tree protection ordinance is an important step for a Oak Ridge North in the long-term management its urban forest. Getting ahead of any land use change is vital to gaining public support for such a policy and allows for input and participation from stakeholders in the community.

The process for developing the ordinance should be as transparent as possible, involving significant interaction with stakeholders through public meetings, surveys, focus groups and other venues to explain the intent of the policy and document the concerns of all parties.

What type of ordinance do we need?

The most effective tree ordinance for the City of Oak Ridge North must consider the nature of development and/or redevelopment likely to happen. While not wanting to hinder economic development or infringe upon private property rights, the City should consider a policy that governs the removal of trees on both public and property within reasonable limits. The City has a zoning policy that currently

controls the layout and use of property including building setbacks. As building setbacks are already protected from development, these areas are ideal for tree protection, and a policy to protect trees within the setback areas is the least intrusive.

The majority of trees within the City are larger, mature trees thereby indicating that the focus of tree protection might be best suited to protection of trees of a certain size. Many communities specify protected trees as those of a minimum size (i.e.: 6 inches or larger in diameter). Such a policy needs to require the developer/landowner to provide a plan for the site that includes the location, size and types of trees, and whether they will be preserved or removed. This plan can then be evaluated by the City to determine the feasibility of the plan for tree protection and/or removal and any mitigation that will be required. This type of plan is generally called a *Tree Disposition Plan*.

Key Components of a Tree Ordinance for the City of Oak Ridge North

Right-of-Way Trees

All public trees are afforded protection in the ordinance and it is a violation to prune, remove, injure, or plant a public tree. No attachments (wire, rope, sign, or nail) to public trees, tree supports, shrubs or plants in public places are permitted.

Private Trees

All trees 6 inches in diameter (19 inches circumference) or larger will be protected within the established yard of real property. Established yard is defined as the area between the property line and the building line on a lot. Required yards for each zoning district are defined in the zoning code. If any portion of the tree is located in the yard, then the entire tree is protected.

Urban O6

A Tree Disposition Plan must be submitted to the City for review prior to removal of any protected tree. The Tree Disposition Plan seeks to avoid mechanical injury to tree roots, trunks, or branches; the compaction of soil; and changes to existing grade, which may expose or suffocate tree roots. The plan must show the following:

- 1. Tree Survey of the property that depicts all protected trees (6 inches diameter or larger) on the site and adjacent street area, and on any adjacent sites if more than 30% of the critical root zone is on the building site. This survey must include locations, species, sizes (circumference or diameter), and approximate critical root zones,
- 2. Copy of the proposed building activity, (can be included on the above survey), this should include the site plan and also any other activity that could impact the trees or their roots, such as drain, water and sewer lines, and
- 3. Location of tree protection fencing and other mitigative measures to protect trees during construction.

The Building Inspector will review plans and inspect the property prior to issue of a tree removal permit.

Replacement Trees

The replacement of protected trees removed for construction will be made on an inch-per-inch basis. Replacement trees will be a minimum of three inches (3") in diameter and of a species from the list of "Recommended Trees Species for Oak Ridge North Canopy Trees". An alternative to planting replacement trees on site is to pay \$100 per diameter inch into the Tree Mitigation Bank to fund tree planting on public property.

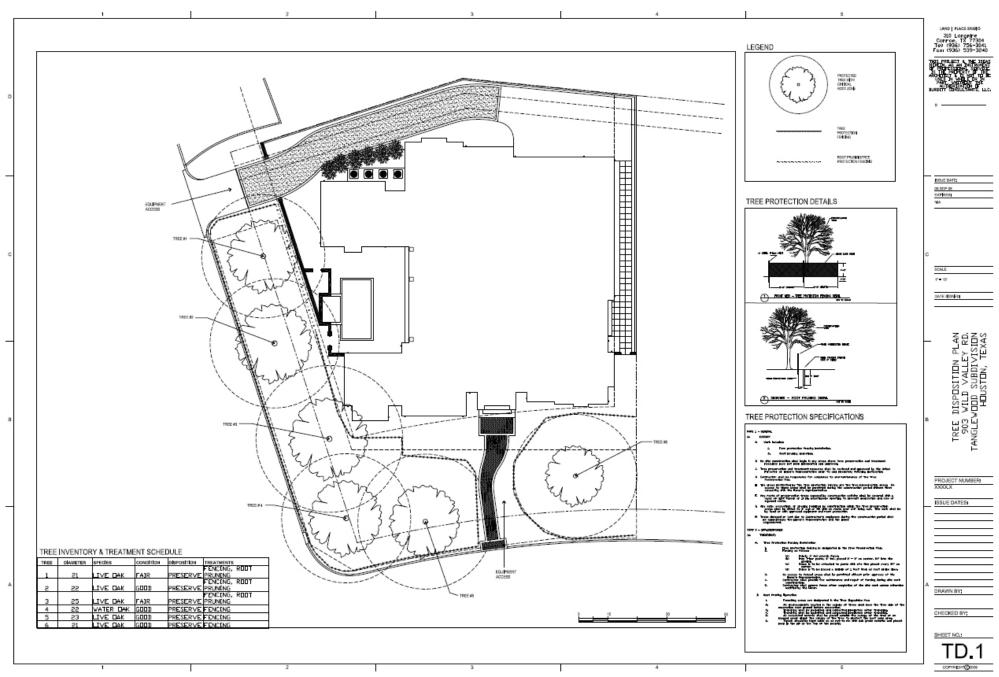
| Recommended Tree Species for Oak Ridge North | | | | | | |
|--|-----------------------|--|--|--|--|--|
| Canopy Trees | | | | | | |
| Botanical Name | Common Name | | | | | |
| Acer barbatum | Texas Sugar Maple | | | | | |
| Acer rubrum | Red Maple | | | | | |
| Betula nigra | River Birch | | | | | |
| Carya aquatica | Water Hickory | | | | | |
| Carya texana | Black Hickory | | | | | |
| Carya illinoensis | Pecan | | | | | |
| Fraxinus americana | White Ash | | | | | |
| Fraxinus pennsylvanica | Green Ash | | | | | |
| Fraxinus texensis | Texas Ash | | | | | |
| Ilex opaca | American Holly | | | | | |
| Juglans nigra | Black Walnut | | | | | |
| Juniperus virginiana | Eastern redcedar | | | | | |
| Liquidambar styraciflua | Sweetgum | | | | | |
| Magnolia grandiflora | Southern Magnolia | | | | | |
| Nyssa sylvatica | Black Gum | | | | | |
| Pinus elliottii | Slash Pine | | | | | |
| Pinus taeda | Loblolly Pine | | | | | |
| Platanus mexicana | Mexican Sycamore | | | | | |
| Platanus occidentalis | Sycamore | | | | | |
| Quercus acutissima | Sawtooth Oak | | | | | |
| Quercus alba | White Oak | | | | | |
| Quercus falcata | Southern Red Oak | | | | | |
| Quercus laurifolia | Laurel Oak | | | | | |
| Quercus lyrata | Overcup Oak | | | | | |
| Quercus macrocarpa | Bur Oak | | | | | |
| Quercus michauxii | Swamp Chestnut Oak | | | | | |
| Quercus muehlenbergii | Chinkapin Oak | | | | | |
| Quercus nigra | Water Oak | | | | | |
| Quercus nutallii | Nuttall Oak | | | | | |
| Quercus phellos | Willow Oak | | | | | |
| Quercus polymorpha | Monterrey Oak | | | | | |
| Quercus shumardii | Shumard Oak | | | | | |
| Quercus stellata | Post Oak | | | | | |
| Quercus virginiana | Live Oak | | | | | |
| Salix nigra | Black Willow | | | | | |
| Taxodium distichum | Baldcypress | | | | | |
| Taxodium mucronatum | Montezuma Baldcypress | | | | | |
| Ulmus alata | Winged Elm | | | | | |
| Ulmus americana | American Elm | | | | | |
| Ulmus crassifolia | Cedar Elm | | | | | |
| Ulmus parvifolia | Lacebark Elm | | | | | |
| | Drake Elm | | | | | |
| Ulmus parvifolia var drakii | Drake Elm | | | | | |

| Recommended Tree Species for Oak Ridge North | | | | | |
|--|--------------------|--|--|--|--|
| Understory Trees | | | | | |
| Botanical Name | Common Name | | | | |
| Bumelia lanuginosa | Gum Bumelia | | | | |
| Cercis canadensis | Redbud | | | | |
| Crataegus spp. | Hawthorn | | | | |
| Diospyros texana | Texas Persimmon | | | | |
| Diospyros virginiana | Eastern Persimmon | | | | |
| Ehretia anacua | Anaqua | | | | |
| Ilex vomitoria | Yaupon | | | | |
| Lagerstroemia indica | Crape Myrtle | | | | |
| Magnolia virginiana | Sweetbay | | | | |
| Morus rubra | White Mulberry | | | | |
| Myrica cerifera | Southern Waxmyrtle | | | | |
| Pistacia chinensis | Chinese Pistache | | | | |
| Prunus caroliniana | Cherry Laurel | | | | |
| Prunus mexicana | Mexican Plum | | | | |
| Prunus serotina | Black Cherry | | | | |
| Rhus copallina | Shining Sumac | | | | |
| Vaccinium arboreum | Farkleberry | | | | |
| Viburnum rufidulum | Rusty Blackhaw | | | | |

Most municipal tree ordinances are drafted such that every possible tree protection/removal situation is addressed in the language. This approach leads to an overly complex policy that creates confusion for residents, developers and City officials alike. The approach described herein is to treat residential and commercial properties in the same manner, utilizing the existing Zoning Ordinance to define the areas were trees are protected. Public trees are protected during development and will require consideration of the proposed construction activity to determine whether or not to remove a given tree. This determination can be made by the Building Inspector, Planning and Zoning Commission, or other entity that the City deems appropriate. Drafting of the ordinance should be a transparent process that includes public input to solidify the goals of the City and the desires of its residents, businesses and other stakeholders.

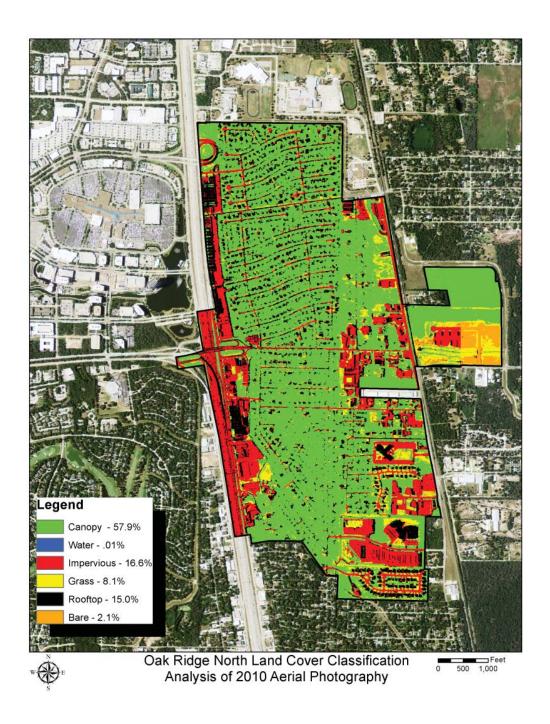
Tree Preservation Recommendations

Planning for Growth and Redevelopment

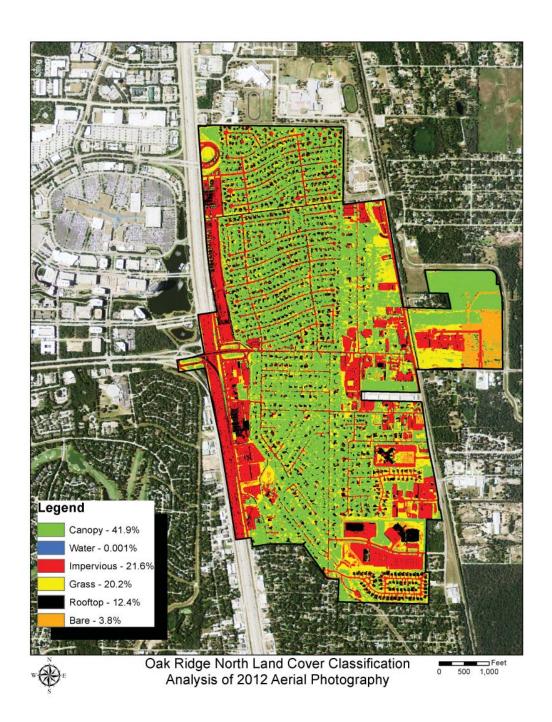


Examples of a Tree Disposition Plan submitted during the redevelopment of a property in Piney Point Village, Texas. Key elements of the plan include a proposed site plan, the locations of trees and their root zones, planned tree protection treatments such as fencing, and specifications for treatment installation.

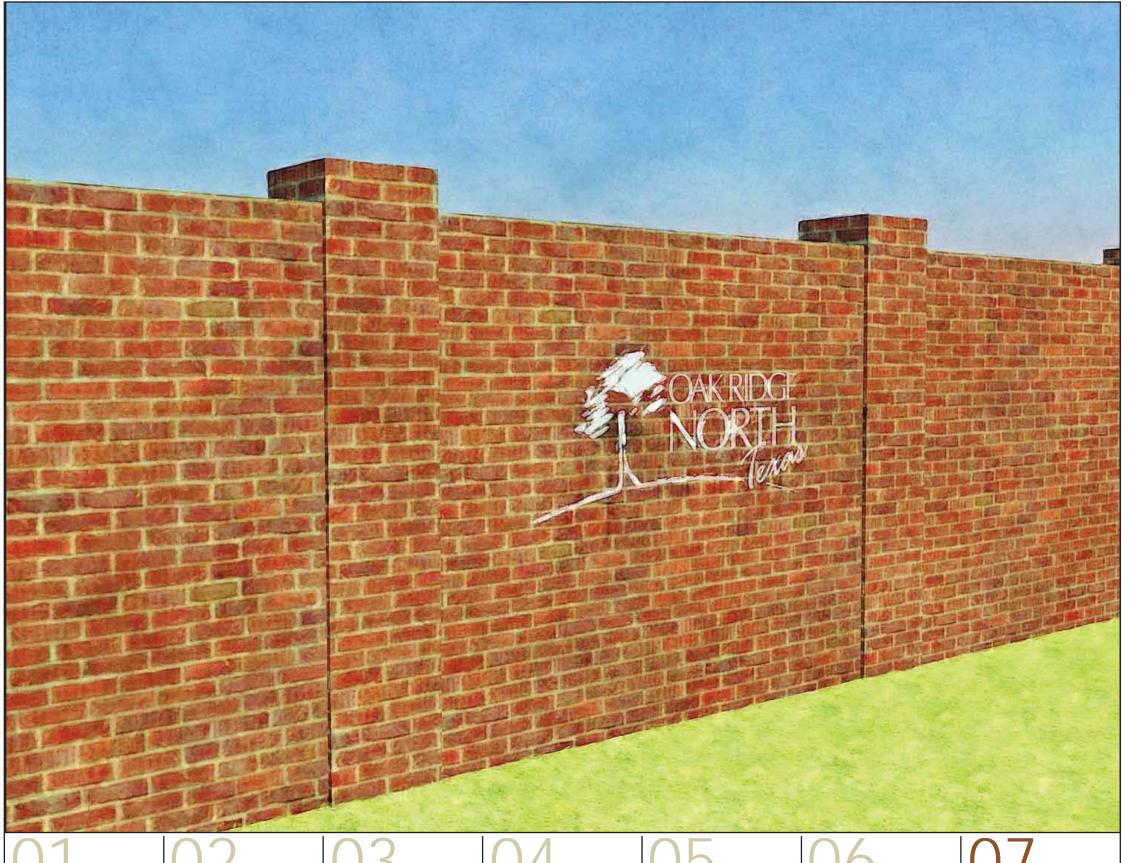
Urban O6 Forestry



A tree canopy analysis was conducted using Geographic Information Systems (GIS) software to classify aerial photography from 2010 and 2012. The results indicate a small loss of canopy due to multiple factors. The development within the industrial areas to the east is responsible for some of the loss while the remaining losses are likely due to the 2011 drought. Overall the canopy is healthy and relatively full with 41.9% coverage; much higher than ;most communities.



Implementation



Inventory & **Analysis**

Parks and **Open Space**

Overall Walkability

City Branding

Town Center

Urban **Forestry**

Implementation

Funding Opportunities

Grant Programs

As the City continues with improvements and additions to the parks system, funding is often the key player in the decision making process. The following are a variety of State and Federal grant programs available to aid cities in the enhancement of parks and recreation facilities and other public space projects.

Community Development Block Grants

The Department of Housing and Urban Development (HUD) provides assistance to communities across the nation for a wide range of activities through the Community Development Block Grants Program. These funds are often distributed to individual communities by the state as match-grants to fund projects supporting economic development and improved quality of life. Texas Parks and Wildlife Department awards grants from this program annually to develop and enhance parks and open space.

Transportation Equity Act (SAFETEA-LU) - Recreation Trails Program

The Transportation Safety Act, also known as the Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU), provides for the distribution of funds from the Federal Highway Administration (FHWA). The Federal Highway Administration is the largest source of funding for shared use paths, trails and related projects. The Recreational Trails Program, an assistance program to FHWA, distributes funds for a range of activities including:

- Maintenance and restoration of existing trails.
- Development and rehabilitation of trailside and trailhead facilities and trail linkages.
- Purchase and lease of trail construction and maintenance equipment.

- Construction of new trails (with restrictions for new trails on Federal lands).
- Acquisition of easements or property for trails.
- Assessment of trail conditions for accessibility and maintenance.
- Development and dissemination of publications and operation of educational programs to promote safety and environmental protection related to trails (including supporting non-law enforcement trail safety and trail use monitoring patrol programs, and providing trail-related training) (limited to 5 percent of a State's funds).
- State administrative costs related to this program (limited to 7 percent of a State's funds).

TRPA Grants Program

The Texas Recreation and Parks Account (TRPA) is funded by a portion of Texas sales tax received on select sporting goods. These grants are awarded to applicants annually at varied levels depending on project type and available resources for the funding cycle. These funds are administered by the Texas Parks and Wildlife Department's Recreation Grants Branch for five programs including the following:

- 1. Outdoor Recreation
 - 2. Indoor Recreation (facility)
 - 3. Small Community
 - 4. Regional
 - 5. Community Outdoor Outreach Program

Land and Water Conservation Fund

The Land and Water Conservation Fund is a program of the National Park Service that provides matching grants to local governments for acquisition of park land and development of park facilities.

Recreation Trails Program

The Recreation Trails Program (RTP) provides funds to the states to develop and maintain recreational trails and trail-related facilities for both non motorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration.

http://www.fhwa.dot.gov/environment/rectrails/ http://www.fhwa.dot.gov/environment/rectrails/rtpstate.htm

Land and Water Conservation Fund

This grant provide up to 50 percent reimbursement for outdoor recreation projects. Federal money is administered by the state in cooperation with the National Park Service.

http://www.nps.gov/ncrc/programs/lwcf/index.

L.L. Bean Conservation and Recreation Grants

"Based on L.L.Bean's heritage and ongoing commitment to ensuring quality outdoor experiences for our customers, we've chosen conservation and outdoor recreation as the primary focus of our corporate charitable giving program. We look to local, state, regional and national organizations to help our customers enjoy the outdoors in a responsible manner."

http://www.llbean.com/customerService/aboutLLBean/charitable_giving.html?nav=ln

Environmental Protection Agency Environmental Education Grants

The Grants Program sponsored by EPA's Environmental Education Division (EED), Office of Children's Health Protection and Environmental Education, supports environmental education projects that enhance the public's awareness, knowledge, and skills to help people make informed decisions that affect environmental quality. http://www.epa.gov/enviroed/grants.html

Timing of Implementation

The proposed projects identified in this plan were developed with consideration of the scale, available funds and "larger picture" processes happening in the community and region. Smaller projects such as the Woodson Road Trail have been planned for early implementation in the 2015 Fiscal Year. Other projects are dependent on a variety of factors such as the need to redesign and convert stormwater to an underground system to develop trails south of Robinson Rd. The South Montgomery County Regional Mobility Plan is still under development at the time of this document's publishing, however preliminary comments from the committee indicate that Robinson Rd. redevelopment is likely, however this project is one of a number of them in the plan that will require significant design and funding efforts prior to implementation. Therefore, proposed projects in the Public Space Master Plan such as the Town Center are dependent on timing of the mobility plan projects.





