



American Planning Association
Florida Chapter



HIGH SCHOOL PRESENTATION
FACILITATOR GUIDE



TABLE OF CONTENTS

TABLE OF CONTENTS

Project Description	2
Audience	2
Content Areas	2
Needs	2
Audience Learning Needs: High School	2
Preparation	3
Reach Out	3
Power Point Presentation	4
Materials	4
Agenda	5
Module Treatments/Interactions	6
Module 00: Introduction	6
Module 01: Key To The Community	10
Module 02: As The Planner Sees It	16
Module 03: Future In The Planning Process	23
Appendix A: Glossary	28
Appendix B: Common Questions, Answers & Resources for the Facilitator	30
Appendix C: As the Planner Sees It - Role Play Packet	41
Appendix D: Common Core Standards Mapped to Activity	79

PROJECT DESCRIPTION

Brandon King and Brent Baltzer are pleased to partner with the American Planning Association (APA Florida) to create a 45-minute instructor led training (ILT) piece, to be delivered face to face in Florida high schools.

This training will include:

- A PPT presentation
- Detailed facilitator guide
- Handouts, posters, and other print media

AUDIENCE

- High School

CONTENT AREAS

- Infrastructure
- Transportation
- Land Use
- Environment

NEEDS

The APA Florida has identified the need for a ready-made curriculum that can be easily adapted for giving 30-45 minute presentations at high schools to promote interest in the planning professions, as well as raise awareness about the planning process and roles that students can play within that process.

AUDIENCE LEARNING NEEDS: HIGH SCHOOL

This group is reaching the point where they can analyze problems and begin using data/resources to support their decisions in solving them. They can benefit from direct instruction, but also by engaging with case-studies and scenarios, where they can start coming up with their own solutions, followed by critically discussing them later.



PREPARATION

The following set of guiding materials will help you to be effective in the typical Florida High School classroom as facilitators for the planning curriculum that follows. To help get you started, the following section will help you to reach out to educators, prepare materials, provide an agenda, and guide you through follow-up that will help to extend the learning experience for your high school audience. Let's get started!

REACH OUT

Before you are ready to start preparing for entering a classroom, the first step is to reach out to teachers at local schools that you can visit. It may be helpful to research the teachers in the High School. Below you will find an example email template that you can use to help you to reach out to faculty and staff at your local schools. Do not forget to attach the Common Core Standards Mapped to Activity: High School Grade Band document to the email (See Appendix D). It is important to call attention to how the activities in your presentation will map to the curriculum requirements of the school that you are visiting. Teachers are often pressed to address these standards in the span of the school day, so approaching them with this in mind will help them to justify setting their other activities aside for your visit.

Please replace the text in red with the appropriate information.

Dear (Insert Teacher's Name),

I hope that you are having a great week! My name is (Planner Name) and I work with the local planning association. Part of my job is to help educate the community about the planning process and encourage community members to participate in it, including High School students that may be looking to the future and are considering potential careers or are interested in becoming more involved in their own community. I am writing to see if you would be open to having me visit your school/class for approximately 30-45 minutes. In this time, I would walk them through a few engaging activities that will help them discover more about what I do as a planner and understand more about how communities are planned. The activities that we will go through also address the Common Core Standards as mapped in the attached document to each activity that we will be doing.

Please feel free to contact me with any questions.

I look forward to hearing from you and hopefully meeting some of your students!

Best,

(Planner Email Signature)

(Attach: "HS_CCS_Mapped_to_Activity.pdf")



POWER POINT PRESENTATION

POWER POINT PRESENTATION

In addition to the printed materials that are listed below, this curriculum includes a PPT template. This template is meant to be customized and includes several sections that should be completed by you before coming to your presentation. The template includes some guidance on what to include. Please make sure to review this and use your best judgement on what suits the needs of your presentation. Some of the items asked for include:

- Information about you and your local planning office.
- Local maps or other content that is more recognizable to your audience than the place holder images included.

MATERIALS

The following list of materials should be gathered/printed before you attend any presentation. These are suggested essentials for your presentation but you should feel free to add elements depending on the context of your presentation and the school environment that you will be presenting in.

- Power Point on Flash Drive (this needs to be customized before arriving)
- 1 Facilitator Guide
- 1 Role Play Packet for each student
- Colored markers
- 1 Land Use poster for the front of the room
- 1 Land Use Map (individual size) for each student
- 1 set of Brochures, business cards, and other promotional materials from your local office for each student



POWER POINT PRESENTATION

AGENDA

In order to help plan on the amount of time that your presentation will take, the following agenda provides you a high-level guide. The agenda lays out a list of modules and the estimated times for each module. The first time presenting any curriculum it may be a good idea to allow a little bit of extra time. With this in mind, you can always borrow time from the extension activities to keep your presentation within the amount of time that the school has allotted you. As with any presentation, preparedness and practice will make you a more effective facilitator and keep the class moving fluidly, but you always have the built-in flexibility of the extensions to adapt and spend time where you feel is best for that particular presentation.

Total Time: 30-50 min.

- Module 00: Introduction
 - **Time:** 5 min.
- Module 01: Key to the Community
 - **Time:** 8-10 min. + 3-5 min Extension
- Module 02: As the Planner Sees It
 - **Time:** 15 min. + 5 min Extension
- Module 03: Future in the Planning Process & Wrap Up
 - **Time:** 5-10 min.



MODULE TREATMENTS/INTERACTIONS

MODULE 00: INTRODUCTION

Time: 5 min.

This opening sequence provides a general introduction of the APA Florida, presenter, and the ILT format.

Performance Objective(s)

Behavioral Outcome(s)

- Learners become oriented towards participating in the ILT activities.
- Learners become acquainted with a planning professional.

Facilitation

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Preparation	<ul style="list-style-type: none">• The hosting teacher should be contacted ahead of time to verify access to a projector and any other resources that might be needed during the visit to the hosting classroom.• You should gather the materials itemized in this facilitator guide ahead of time.• Any posters and handouts that need to be printed should be prepared in advance.• The room should be prepared ahead of time with the necessary posters, supplies, and handouts.• Important: Before arriving, be sure to review the PPT template and fill in any missing information. There are spaces provided for personal information and also to insert graphics such as local land use maps that are referred to later in this guide.	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
State	<p><i>“Hello, and welcome to the Community Planning Experience! My name is (Insert Name) and I’ll be guiding you through a few activities to give you an idea about what community planning is and how you can become involved, either as a student or in the future as a planning professional.</i></p> <p><i>“To get us started, I’d like to tell you a little bit about myself and what I do as a(n) (Insert Title).”</i></p>	
Describe	<p>Suggested topics to cover in 1-2 minutes:</p> <ul style="list-style-type: none"> • Name • Title • Personal information • General and very high-level description of what you do as a planner: <ul style="list-style-type: none"> ◦ Project types you have been involved in (possibly avoid mentioning any specific projects that could be politically charged discussion points) ◦ Types of people you interact with on a daily basis ◦ What you enjoy best about being a planner • What attracted you to planning? <p><i>There are many different kinds of planners:</i></p> <ul style="list-style-type: none"> • Community planners build consensus in the community on how it should grow, and how each piece of land around a city should be used. Some land is used for markets and stores, some for houses, some for factories, some for office buildings or skyscrapers, some for roads and trails, and some for parks and playgrounds. 	<p>Fill in appropriate information on PPT “Bio Slide”</p> <ul style="list-style-type: none"> • PPT • Business Cards, Pamphlets, or other materials related to local planning office

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
	<ul style="list-style-type: none"> • Environmental planners make sure that important natural features of a community are protected. This includes protecting lakes, rivers, and wetlands from pollution. • Transportation planners plan a city's transportation system: roads and highways, railroads, bike paths, and sidewalks. • Other planners might focus on affordable housing (ensuring everyone in the community can buy or rent a place to live), economic development (promoting businesses and creating jobs), and historic preservation (protecting historic buildings from being destroyed)." <p>"So what do they get paid? Let's take a look at what the APA/AICP Planners Salary Survey Summary has to say the distribution looks like"</p> <p>Refer to slide No. 4.</p> <p>"As you can see the median salary is about \$77,000.00 but can be much greater than that."</p> <p>"Whether specialists or generalists, most planners share a common set of skills:</p> <ul style="list-style-type: none"> • involve all affected parties in important planning decisions; • help communities to develop their own vision of the future, preparing plans responsive to shared community objectives; 	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
	<ul style="list-style-type: none"> <i>analyze qualitative and quantitative information to suggest possible solutions to complex problems;</i> <i>evaluate the cost-effectiveness of proposed projects and plans; and present recommendations to public officials and citizen groups in a comprehensive and understandable way."</i> 	
State	<p><i>"Each of you have been given a set of handouts with information and worksheets that we will be using today. Please take those out while we go over the agenda and the expectations for today."</i></p>	
Read	<p>Briefly read through the agenda for the day and ask if there are any questions.</p>	Updated Agenda
State	<p><i>"Now that we have a good idea of what the next 45 minutes will look like, let's take a minute to go over some basic expectations."</i></p>	
Discuss	<ul style="list-style-type: none"> Expectations <ul style="list-style-type: none"> Ask questions. Pay attention. Participate. Be respectful and professional towards other students. Be creative! Have fun! 	



MODULE 01: KEY TO THE COMMUNITY

MODULE 01: KEY TO THE COMMUNITY

Time: 8-10 min. + Extension 3-5 min.

Learners use their own simplified zoned map to develop a key for the land’s use and then come together as a class to review with a poster version of the map.

Performance Objective(s)

Learning Objective(s)

- Understand the basics of planning.
- Understand the balance that planners maintain between population demands, economy, infrastructure, etc.
- Understand the conflicts surrounding land usage (environment vs. economy).

Behavioral Outcome(s)

- Become excited about the planning profession and what planners do.
- Consider entering the planning profession.

Facilitation

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Preparation	<p>Pull out land use poster and tape it to the wall or white board.</p> <p>Pass out Individual Land Use Maps.</p>	<p>Land Use Map Poster</p> <p>Individual Land Use Maps</p>
State	<p><i>“I bet everyone here has seen and used a map before either for school or to get around. They’re useful tools for giving us a bird’s eye view of what’s around us or even the layout of distant places.”</i></p> <p><i>“This map behind me and the ones I’m about to show you are examples of a specific type of map that are used to help plan communities. The one in the poster is a somewhat modified one that we will use in today’s activities, but will help us get the idea about how these maps help us as planners facilitate discussion within communities about how land is used. Which is why we call them land use maps.”</i></p>	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Ask	<i>"How do you think maps are used in community planning?"</i>	
Expect	<ul style="list-style-type: none"> • Decide where businesses go • Decide what businesses go where • Decide where nature preserves and parks go • Plan transportation • Decide where public services can go 	
State	<p><i>"Those are some great ideas about how we use land use maps in planning. In the next activity, we will be working with the maps I will hand out to help decide what categories are coded in the different areas of the map. Then we will come back together using the poster behind me to assign labels to the way that the map has been distributed and talk a little bit about why things may be laid out in this way."</i></p> <p><i>"Say this only if the class does not already sit in groups: "Before we get started, we need to break off into groups of 4-5 students. Please number off as we go around the room from 1 to 6. For example, the first student will say 'one' the next 'two' and so on until we reach 6 and start again. Then all of the ones will move into a group, the twos into another group, and so on."</i></p>	Land Use Map Poster
Ask	<i>"Are you ready? Can you start here for us with 'one' (point to a student to the far left of you) and move like a snake to the right and onto the back of the room with 'two', 'three', and so on."</i>	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Explain	<p><i>"We will take the next 5-6 minutes to work in groups to come up with a key to interpret the maps I have placed at the front of the room and passed out to each group. It's up to you to negotiate what terms you would use to categorize each area and corresponding iconography. You should write this in on the map provided to your group. It may be helpful to work on the recognizable icons first to help you to decide what the rest of the key is showing."</i></p> <p><i>"While you work, try and talk a bit in your group about why things might be organized the way that they are in the community. For example, if there is a water treatment plant it might be located further away from a residential area than say a library. A reason might be because water treatment plants can smell and community members don't need easy access to the facility, while a library is something that everyone should have access to without having to commute large distances."</i></p>	<p>Pass out land use maps, one per group.</p> <p>Tape master land use map at the front of the room or in other very visible and accessible area.</p> <p>Cover labels in the legend. You also have a PPT slide of this map.</p>
Activity	<p>Learners assume the role of a community member as they inductively work to interpret the land use map and create labels for each zone type as they develop a key for others to read the map, using their own copies of the map you have given them. They should pay special attention to the iconography to make the map content more intuitive and begin to internalize the map content, while using critical thinking skills to negotiate why the community might be laid out in the way that it is.</p> <p>This activity will be a central element for the day around which all other activities will revolve. It will create a tangible landscape for the establishment of a hypothetical community that the learners will be given roles and stakes in as the course progresses.</p>	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Facilitation	<p>They have no more than 5-6 minutes to work in their groups before coming back together as a class. Use a timer or clock in the classroom to help keep everyone on task. Provide 2 minute and 1 minute notifications to students so they aren't surprised when the time runs out.</p> <p>Walk around the classroom and ask guiding questions such as:</p> <ul style="list-style-type: none"> • <i>Why do you think this type of community element would be so far from others?</i> • <i>What does that icon resemble?</i> • <i>Are there any features of the way that the map is laid out that you recognize from your community?</i> <p>Point out physical characteristics that make the map recognizably Floridian and ask probing questions about them such as:</p> <ul style="list-style-type: none"> • <i>Do you get to the local beach often?</i> • <i>What's near the coast or bay that you like?</i> • <i>What kinds of activities do you like to do outdoors?</i> • <i>Do you have a favorite park/aquarium/beach/etc.?</i> • <i>What major highways do you have to take to get around?</i> 	
State	<p><i>"I heard a lot of good discussion going on in your groups, well done. Let's all come together and see what we came up with using the large map at the front of the room to help us."</i></p>	
Facilitation	<p>Using the map at the front of the room go through the different colors and icons to ask questions about what they mean and why the map might have the layout that it does.</p>	Participants Guide, Land use map

Review & Summary (3-5 min)

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Facilitation	Using the map at the front of the room go through the different colors and icons to ask questions about what they mean and why the map might have the layout that it does.	Land use maps
Ask	<p>Examples:</p> <ul style="list-style-type: none"> • <i>What do you think that X color and Y icon represent?</i> • <i>Why do you think this type of community element would be so far from /central to others?</i> • <i>What does that icon resemble?</i> • <i>Are there any features of the way that the map is laid out that you recognize from your community?</i> • <i>Thinking of your community, what are some reasons that things like highways run through different types of areas (e.g. commercial, residential, etc.)?</i> 	<p>“Adjust the detail of each topic of discussion to fit the time frame that you have to work with in the class. Ask more ‘why’ questions about the map lay out to develop a more in-depth discussion but do not let it go longer than an additional 5 min.”</p>
Expect	<ul style="list-style-type: none"> • Commercial • Residential • Public Facility • Highways help to alleviate congestion and link things like residential areas to commercial areas where many people have to commute to work. 	
State	<p><i>“This was a really good conversation, it sounds like you all have some great thoughts and a good understanding of the big concepts and elements to the land use map as a planning tool. Let’s take a look at some actual land use maps, including one for our community.”</i></p>	<p>Fill in appropriate image place holders in the PPT for local land use maps.</p>



MODULE 01: KEY TO THE COMMUNITY

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Facilitation	<p>Take the next 1-2 minutes to briefly review 1 or 2 local land use maps, including the actual terminology used in the map's key.</p> <p>Point out if this map is one that uses iconography or not and explain that different planners and communities all have individual conventions for creating these types of documents.</p>	
State	<p><i>"In the next activity we are going to build on that knowledge but by doing some role play activities that will help you to solve some challenges posed by the map at the front of the room."</i></p>	



MODULE 02: AS THE PLANNER SEES IT

MODULE 02: AS THE PLANNER SEES IT

Time: 15 min. + 5 min Extension

Learners engage in a brief case study and role play type activity to get them thinking about their community from the perspective of a planning professional.

Performance Objective(s)

Learning Objective(s)

- Understand the conflicts surrounding land usage (environment vs. economy).
- Understand the impact of a development.
- Understand the decision making process, including legislative levels of the process.
- Understand the balance that planners maintain between population demands, economy, infrastructure, etc.

Behavioral Outcome(s)

- Be excited about the planning profession and what planners do.
- Consider entering the planning profession.
- Become lifelong participants in planning for their community.
- Be comfortable inspiring participation in others.

Facilitation

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Preparation	Make sure to have already passed out the Role Play Packets at the beginning of the presentation. Take some time to look over each role play scenario's contents before arriving at the school. You may have to answer questions from the students about the role play packets and/or the supporting documentation.	Role Play Packets, Land Use Maps

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
State	<p><i>“In the next activity we are going to be assuming different roles of stakeholders within a community as you address a planning challenge that may help to improve the community. In these roles, you will be provided with a role play scenario and assigned a role in that scenario. Each role will have specific supporting materials, such as maps, reports, and data to help you. You will work from the perspective of your assigned role in your group to negotiate a solution for the next 12 minutes.”</i></p> <p><i>“Before we get started, let’s take a look at some of the things that you might encounter as supporting materials in your role play.”</i></p>	
Refer to PPT	<p>Use the PPT examples to briefly describe the items below.</p> <ul style="list-style-type: none"> • Population distribution maps <ul style="list-style-type: none"> ◦ <i>“These maps show concentrations of population density that can aid in decisions about infrastructure and things like highways to connect residents with areas of higher job concentration.”</i> • Land use maps <ul style="list-style-type: none"> ◦ <i>“We have already discussed these and have an idea of how they’re used in planning to help prevent things like urban sprawl.”</i> • Aerial maps <ul style="list-style-type: none"> ◦ <i>Help planners determine what’s on the ground and the surrounding uses.</i> 	<p>PPT</p> <p>Replace the place-holder images with real local images.</p>

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
	<ul style="list-style-type: none"> Demographic data <ul style="list-style-type: none"> <i>Common demographic data we use is population projections, ages, ethnicity, income, travel patterns, employment in specific industries.</i> <i>Population projections are the most important as they help us plan where and how communities will grow (or shrink) over the next decade or two. Help us plan for where to locate homes, schools, parks, roads, transit, etc.</i> Surveys <ul style="list-style-type: none"> <i>“There are many types of surveys and formats for their distribution. They pose simple questions to gather data that can be used to indicate needs, opinions, and even evaluate. They can be used, for example, in deciding whether a community is willing to finance a project.”</i> 	
Explain	<p><i>“Stake holders are people or groups of people in a community with an interest in things like infrastructure and programs that improve how the community functions. For example, residential community members that would like a park for their kids to play in or access to a library within walking distance from their homes.”</i></p> <p><i>“The challenges that you will be posed can result in some changes that we will reflect on the map at the front of the room. You will first read the challenge card and then assume a role in one of three spheres:</i></p> <ul style="list-style-type: none"> Community Residents Government Development Related Businesses 	Land Use Maps, Role Play Packets

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
	<p><i>You will use the resources and information provided with each role to negotiate a solution to the challenge being posed.</i></p> <p>Extension: Include this if you choose to do the 5 minute extension activity.</p> <p><i>“At the end of the time allotted we will come back together to see what you’ve come up with and see how your decisions affect the community map.”</i></p> <p><i>“I’ll be walking around the room to help guide your discussion, answer questions, and be a general resource in your negotiations. Use your time wisely, good luck with your challenge.”</i></p>	
Activity	<p>Students will have 12 minutes to do this activity. Each group is assigned a scenario tied to a land use or planning issue with the map used in a previous activity for a fictional Florida-like community. They are challenged to address an issue that has been chosen to be relevant to them contextually and will be motivated to understand more about it. Each member of the group will given a role to assume that demonstrates a stakeholder perspective to the planning process, being held accountable for participation within the group by reading their role play card and negotiating their way through the scenario task with the other group members.</p>	Land Use Map, Role Play Packets

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
	<p>These packets will use the data gathered to create realistic profiles for the learners to follow and allow them to develop a personal connection to their character as they engage in the role play. This will include titles, educational backgrounds, and insight into their perspectives on the issue or perspectives.</p> <p>They must use critical thinking skills to address the challenge that their scenario presents them but will also be supported with necessary information, parameters, etc. to keep the activity manageable. By engaging in the scenario, they discover more about the planning profession, process, and ways to be involved in it on a deeper level than just reading about it. They are challenged to form opinions and come up with solutions through the discovery process.</p> <p>Each scenario will include any appropriate additional print media or other supporting materials to both make the scenario more realistic and accessible. They can interact with and use this media to investigate further, these artifacts can be taken home with the students to examine in greater detail later if they are interested.</p>	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Facilitate	<p>Set a timer for 12 minutes. Provide 5 minute and 1 minute alerts to the students to help them manage their time better.</p> <p>You should assign a role to each person in the group. At least one role from each category of the scenario needs to be assigned. Several categories have multiple roles available. For example, there might be three different roles for Community Residents. At least one of these needs to be assigned, as well as one from each other category.</p> <p>Walk around the room answering any questions that students might have. Ask guiding questions such as:</p> <ul style="list-style-type: none"> • What kind of need is there for that kind of project? • What motivation do you have given your role play card? • How will this benefit the community? • How does this solution impact other stakeholders? • How does your community handle this kind of situation? <p>Work to keep the students in their own role, rather than trying to approach the situation from their current perspective as a high school student.</p>	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
State	<i>“Wow, what great conversations and innovative solutions! You all did a wonderful job working in your groups.”</i>	
Extension: State	If you choose to add the 5 minute extension, also say “we are going to take the next couple of minutes reviewing what you decided in your groups to another group. Please make sure to briefly tell the other group what your challenge was, what the outcome was, and at least one thing that you learned about the planning process.”	
Extension: Facilitate	Each of the groups present a summary of their scenario and how they addressed the problem to another group for feedback from the other group.	
Extension: State	<i>“I heard a lot of great discussion and innovative solutions being presented. Well done.”</i>	
State	<i>“It seems like we have a much better idea about the planning process and the stakeholders involved. In the next activity we will look at these in more detail and talk about your options for becoming more active participants in your community. We will also talk a bit about opportunities that await those of you who are interested in the planning profession.”</i>	



MODULE 03: FUTURE IN THE PLANNING PROCESS

Time: 5-10 min.

This closing module will bring the whole class back together to start summarizing and making more explicit what the learners have been discovering during the course.

Performance Objective(s)

Learning Objective(s)

- Understand the conflicts surrounding land usage (environment vs. economy).
- Understand the impact of a development.
- Understand decisions making process, including legislative levels of the process.
- Understand the balance that planners maintain between population demands, economy, infrastructure, etc.

Behavioral Outcome(s)

- Be excited about the planning profession and what planners do.
- Consider entering the planning profession.
- Become lifelong participants in planning for their community.
- Be comfortable inspiring participation in others.

Facilitation

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Facilitation	The class takes a step back and begins synthesizing what they learned from being active participants in their fictional community with the help of graphics. The facilitator guide will provide direction on questions to pose and answers to expect when guiding the discussion.	PPT

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Explain	<p>Explain each of the projected graphic organizers and infographics listed below, using the corresponding PPT slide:</p> <p>Spheres of Stakeholders:</p> <p>This infographic should start out mostly blank and be used to help demonstrate spheres involved in the planning process and elements involved in the planning profession. With the help of this infographic, the learners will have the opportunity to bring their opinions developed during the course and their experiences together in an easy to digest way. Diagraming in this way will make more explicit what the learners have been discovering during the course and demonstrate the complexity involved in planning. After asking the guiding questions below, make sure to click on the PPT to reveal the answers (e.g., ask about community residents, get responses, then click to reveal the answers):</p> <ul style="list-style-type: none"> • Community Residents: <i>“What kinds of individuals and groups are residents in the community?”</i> • Development Related Businesses: <i>“What kinds of groups make up development related businesses?”</i> • Government: <i>“What kinds are some examples of government involved in the planning process?”</i> 	PPT: <i>Spheres of Stakeholders</i>

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Expect	<p><i>Spheres of Stake Holders:</i></p> <p><i>Community Residents:</i></p> <ul style="list-style-type: none"> • Individuals • Business owners • Neighborhood Associations • Non-profits organizations (environmental, social service, healthcare, etc.) • Churches • Schools <p><i>Development Related Businesses:</i></p> <ul style="list-style-type: none"> • Developers • Large property owners • Builders • Developers attorneys • Private planning or development consultants <p><i>Government:</i></p> <ul style="list-style-type: none"> • Elected officials – City council, County commission. • Government Departments (Public Works, Utilities, Transportation, Wastewater, Storm Water, Parks and Rec, etc.) • State and Federal agencies 	

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
<p>Explain</p>	<p><i>Planning Process:</i></p> <p>By reviewing the planning process with the use of an infographic, the learners are able to see what they have been doing at a high level and see where their activities fit into this process. This infographic employs iconography that should be familiar from the rest of the day's activities. Be sure to point this out. Click on each icon to reveal text and ask if there are any questions at the end about the process.</p> <ul style="list-style-type: none"> • Pre-application consultation with staff and community management • Applicant submits complete application • Application circulated by staff • Preliminary report to Community Council • Community consultation • Response to applicant by staff • Application revision and resubmission by applicant • Recirculation, consultation, revisions, finalization and staff report • Public meeting at Community Council • Decision by City Council • Opportunity for appeal to Municipal Board • Official Plan amendment/By-law effect <p>Point out that each of their role-plays took place in the Public meeting at Community Council and Decision by City Council phases of the process. Explain that quite a bit of work happens both before and after these processes.</p>	<p>PPT: <i>Planning Process</i></p>

ACTION	EXPLANATION	MATERIALS TO USE/NOTES
Explain	<p><i>Jobs in Planning:</i></p> <p><i>“As you’ve seen in our role-playing activities and overview of the process, there are many types of jobs within the planning profession. These may occur at different levels of government and as consultants to different stakeholders in communities. You’ve encountered several of these in your role-play activities. Here are some examples:</i></p> <ul style="list-style-type: none"> • Land Use Planner: <i>Land Use Planners create programs and plans for land development and usage.</i> • Transportation Planner: <i>A transportation planner is someone who works alongside government agencies to select and develop plans to organize transportation options.</i> • Economic Development Planner: <i>An economic development planner assists in supporting the City’s economic development program and redevelopment activities.</i> • Natural Resources Planner: <i>They are responsible for planning related to the environmental impact of city infrastructure and city policies. They also work to develop city codes and ordinances required to comply with State requirements (BMAP and TMDL).”</i> 	PPT: <i>Jobs in Planning</i>
State	<p><i>“I’ve had a great time working with you all today and getting to know a little bit how you would approach some very real types of challenges that communities face. Thank you so much for having me, I’ve left each you my contact information. Please feel free to reach out to me later. I’ll also make sure that your teacher has access to today’s PPT. I hope that you’ve enjoyed our time together today as much as I have.”</i></p>	



APPENDIX A: GLOSSARY

Use the glossary below to help describe key technical terms related to planning. These descriptions will help to keep them engaged and feel that your presentation is clear.

TERM	DESCRIPTION
<i>Built Environment</i>	Places that have been developed and what that looks like.
<i>Charrette</i>	A meeting that lasts a few days where different experts plan for a project in a neighborhood. Just say meeting with people.
<i>Commute</i>	Your drive to work or school and how long it takes, how long it takes you to get to school or family member to work.
<i>Council or Commission Meeting</i>	Meetings that anyone can go to if they want to see something changed in their community.
<i>Density</i>	How many people or things (e.g., houses) are in a specific area or space.
<i>Development</i>	<ul style="list-style-type: none">• Physical Development: What things look like.• Community Development: How communities work.• Economic Development: Attracting businesses/resources.
<i>Drainage Basin</i>	An area that all drains to a common place.
<i>Environment</i>	The world around us, not just trees.
<i>Florida-friendly Plants</i>	Plants that live well in Florida without a lot of care and are not invasive.
<i>Grid</i>	The use of streets and blocks to arrange the use of land in a city or town.
<i>Invasive Plants</i>	Plants that can damage the environment by taking over an area.
<i>Land Use</i>	The right place to put a certain type of building. You don't want to put a factory next to a house.
<i>Latitude</i>	The lines on a map that go from side to side.
<i>Legend/Key</i>	Something that helps you to read a map.
<i>Local Government</i>	People who make decisions: <ul style="list-style-type: none">• Mayor• Commissioners• Elected officials

TERM	DESCRIPTION
<i>Longitude</i>	The lines on a map that go up and down.
<i>Master Plan</i>	Planning the future for your neighborhood to make it safe and easy to get around.
<i>Native Plants</i>	Plants naturally found in Florida
<i>Natural Hazards</i>	Floods, wildfires, hurricanes that can harm people and the environment. Planners try to minimize the impacts from natural hazards.
<i>Planning</i>	<p>A profession (i.e., people go to university and get a degree in planning) that deals with how land is used in a community to make daily life better. Planning is about creating a good future for our community by working together.</p> <p>Planning means making places better by putting the right things in the right place.</p>
<i>Plat</i>	The framework showing the division of land.
<i>Public Involvement</i>	Describes how you and everyone in your community can participate in decisions about what happens in the community, such as where things go, or what you want to see in the future.
<i>Rural</i>	Out in the country.
<i>Scale</i>	How to draw big things much smaller.
<i>Sewer</i>	Pipes that carry the water from all the drains in your home (Sink, shower, toilet) to be cleaned.
<i>Stakeholder</i>	Someone that is part of the community or has some connection to a place, normally with some kind of community “power”
<i>Transit</i>	Trains, trolleys, and buses that carry groups of people.
<i>Urban</i>	A city or a town.

1. WHAT TYPES OF PLANNING PROFESSIONALS ARE THERE?

Answer:

Planners are facilitators that work to build consensus and provide stakeholders with advice on planning issues that are being proposed.

Many planners are generalists, but some specialize in comprehensive land use, transportation, environmental, public health, economic development, and housing

[what about scale-oriented focuses: urban planner, city-wide planner, regional planner, rural, neighborhood, downtown, parks and rec, etc.]

School planning, emergency management

Urban planners do many types of jobs and are involved in almost any kind of government or private activity which seeks to affect the future or accommodate community change. The majority of planners work in government, and within that category, local government. Planners may also be employed at the state and federal levels. International organizations such as the United Nations and the World Bank also hire planners. Planners may also work with non-profit agencies or in the private sector. Private sector jobs include working for utility companies, law firms, real estate developers, and planning consulting firms.

Most planners work in traditional planning areas such as land use, environmental protection, economic development, transportation, community design, housing, and social planning. Individual planners may still have a wide variety of responsibilities within these specialties. Other planners work in less traditional areas, often with people from other disciplines, such as healthy communities, energy development, or school planning. Some planners become generalists, developing a level of expertise in several substantive areas. Others become specialists and define themselves as transportation planners or environmental planners, for example.

Whether specialists or generalists, most planners share a common set of skills:

- involve all affected parties in important planning decisions;
- help communities to develop their own vision of the future, preparing plans responsive to shared community objectives;
- analyze qualitative and quantitative information to suggest possible solutions to complex problems;
- evaluate the cost-effectiveness of proposed projects and plans; and
- present recommendations to public officials and citizen groups in a comprehensive and understandable way.

JOB TITLES AND DESCRIPTIONS:

- **Land Use Planner:** Land Use Planners create programs and plans for land development and usage. They will usually meet with a developer, public official, or community members/residents to discuss a particular piece of land and what their client wishes to accomplish with it. They will then analyze data about the land in question and then take a look at the plans already created. Based on the data they've collected, they then determine the efficiency, effectiveness, safety of those plans. The Land Use Planner will then submit revisions or new plans for consideration.
- **Transportation Planner:** A transportation planner is someone who works alongside government agencies to select and develop plans to organize transportation options. Transportation routes may be developed for car, walking, bicycling, bussing, rail, or air. A transportation planner is responsible for designing, evaluating and planning the implementation of a state, city or town's transportation mediums, such as highways, roads, subways and streetcars. He must evaluate the various social, economic, environmental, fiscal and land-use factors that go into an area's transportation.
- **Economic Development Planner:** An economic development planner assists in supporting the City's economic development program and redevelopment activities, including efforts focused on the retention and expansion of existing business and efforts to bring in specific targeted businesses to the City; coordinates with City staff and developers to include the preparation of development agreements, develops and executes marketing and business development efforts, coordinates with other County and City agencies, and follows-up on business leads/interested parties.
- **Natural Resources Planner:** Responsible for planning, coordinating, and implementing education, stakeholder outreach, and natural resources programs relating to the health and sustainability of local waterbodies. Leads the environmental impact assessment of city infrastructure and city policies. Develops city codes and ordinances required to comply with State requirements (BMAP and TMDL).

RESOURCES/LINKS:

<https://www.planning.org/jobdescriptions/>

<https://www.planning.org/choosingplanning/>

<https://www.planning.org/kidsandcommunity/whatisplanning/>

<https://www.planning.org/kidsandcommunity/moreplanning/>

<https://www.planning.org/salary/summary/>



APPENDIX B: COMMON QUESTIONS, ANSWERS & RESOURCES FOR THE FACILITATOR

2. WHAT ARE THE PRIMARY RESPONSIBILITIES OF A PLANNER?

Answer:

Get input from stakeholders on the plan for an area/issue; do analysis and research; prepare maps, graphics, reports; make recommendations as to the best plan for an area/issue; implement adopted plans, as appropriate; facilitate dialogue around the issues to get to agreement/consensus.

Help citizens and developers to understand the land development process; provide professional opinions to elected officials regarding the built environment, the growth of the built environment, and the impacts of that growth of the built environment. They can work on the local community level, regional or state level.

RESOURCES/LINKS:

Hillsborough Long Range Transportation Plan: <http://www.planhillsborough.org/2040-lrtp/>

Temple Terrace Comprehensive Plan: <http://www.planhillsborough.org/wp-content/uploads/2017/04/Full-TT-Plan-1.19.16-updated-3.17.pdf>

See pages 8-9 for Hillsborough County Vision for Future Growth and pages 9-10 for Temple Terrace Vision for growth. These maps are used as very broad and general examples of how a community will grow and develop.

Pages 62-64 are the land use categories and land use map for Temple Terrace. This is a small city with minimal categories. Many counties and cities will have dozens more categories.

Almost all of the maps in the Temple Terrace Comp Plan are required by the state of Florida.

Here are special studies: <http://www.planhillsborough.org/planning-commission-reports/>

Transit studies: <http://www.planhillsborough.org/public-transit-plans-studies/>
<https://www.planning.org/ethics/ethicscode.htm>

3. WHAT KIND OF BACKGROUND AND TRAINING IS INVOLVED IN BECOMING A PLANNER?

Answer:

A master's degree in urban or regional planning, environmental planning, urban design, or geography is typically a requirement for a career in city planning. However, some schools offer an undergraduate degree in urban planning. Some positions either require or prefer a candidate that belongs to the American Institute of Certified Planners (AICP). AICP is a voluntary professional certification that individuals can earn by passing an exam after meeting professional experience and education qualifications.

RESOURCES/LINKS:

[http://study.com/articles/Become an Urban Planner Step-by-Step Career Guide.html](http://study.com/articles/Become_an_Urban_Planner_Step-by-Step_Career_Guide.html)

4. HOW DOES SOMEONE BECOME INVOLVED IN PLANNING?

Answer:

- By identifying a problem or an issue with how your community functions (e.g., buses don't run often enough, there are no sidewalks near a school, parks are in disrepair, etc.)
- Reading the news about development in your community (newspapers, internet, etc.)
- Attending community meetings or participating in community outreach in your area about an issue.
- Online surveys
- Volunteering in neighborhood committees, or becoming a community leader or neighborhood organizer
- Getting appointed to a local government board, like a Planning Commission, Historic Board Commission, etc.
- Running for elected office
- A citizen can:
 - Engage as part of an appointed board of the local government
 - Become active in a grassroots community organization
 - Attend local and regional government public meetings

5. WHO ARE THE STAKEHOLDERS INVOLVED IN THE PLANNING PROCESS (COMMUNITY, GOVERNMENT, ETC.) AND WHAT ROLE DO THEY PLAY IN THE PLANNING PROCESS?

Answer: Planners, elected officials, citizens*, landowners, developers, business owners, institutions (schools, churches, etc.) and nonprofit organizations

*Refrain from using this word, it has certain connotations - use community residents or something along those lines. We may also indicate long-time residents v. newcomers for different perspectives; youth, elderly, minorities; renters v. homeowners, etc.

SPHERES: (PLANNERS MOVE IN ALL THREE SPHERES)

1. Citizens (Community Residents) - Set the vision for the community through public workshops, surveys, meetings, etc. They let the planners know what they desire for their community. Planners take those ideas to create policy and code. The vision of the community is constantly changing so planners must be nimble and continuously update and refine plans.

- Individuals
- Business owners
- Neighborhood Associations
- Non-profits organizations (environmental, social service, healthcare, etc.)
- Churches
- Schools

2. Government - Responsible for implementing the vision of the residents. Local government controls the adopted policy and code as well as provides the budget to make the community vision a reality. Lack of funds can slow down implementation. Creative governments can succeed at implementing a vision with a limited budget.

- Elected officials – City council, County commission.
- Government Departments (Public Works, Utilities, Transportation, Wastewater, Stormwater, Parks and Rec, etc.)
- State and Federal agencies

3. Development related businesses - These are the players who are on the ground building and putting the vision in place through development and redevelopment projects.

- Developers
- Large property owners

- Builders
- Developers attorneys
- Private planning or development consultants

Planners are in the middle of all three. They help facilitate communication between the three groups. They help residents develop and refine the community vision, help government develop the policy and code to implement the vision, and work with developers to help them understand the policy and code to improve projects so they match the community vision.

RESOURCES/LINKS:

<https://www.planning.org/ethics/ethicscode.htm> Section A and B

Be conscious of the rights of others; concern for the long-range consequences of present actions; provide timely, adequate, clear, and accurate information on planning issues to all affected persons and to governmental decision makers; give people the opportunity to have a meaningful impact on the development of plans and programs that may affect them. Participation should be broad enough to include those who lack formal organization or influence; plan for the needs of the disadvantaged and to promote racial and economic integration; promote excellence of design and endeavor to conserve and preserve the integrity and heritage of the natural and built environment; deal fairly with all participants in the planning process.

6. HOW CAN A HIGH SCHOOL STUDENT BECOME INVOLVED IN PLANNING? WHAT TYPES OF PLANNING CONCERNS/PROJECTS ARE RELEVANT TO THEM AS STUDENTS AND TEENAGE MEMBERS OF THE COMMUNITY?

Answer: See answer 4

They can also create or join a group/organization at their high school that follows issues that are facing the local government - like a civics club, Key Club, Beta Club, Model United Nations, etc. Even if some of these don't closely follow local "politics", they bring awareness to local, regional and world issues.

- The Scouts– Community projects
- Volunteer opportunities and High School internships with the Planning Commission.
- Volunteer for river or beach clean-ups.

7. WHAT IS THE PLANNING PROCESS IN GENERAL AND AT A HIGH LEVEL?

Answer:

Someone identifies a problem, issue, need, or opportunity.

Gather data and maps, analyze information, identify problems (or SWOT analysis), gather feedback and ideas from the community/elected officials through community engagement, develop a “vision”, formulate alternative solutions, get feedback/direction from community on preferred path, formulate goals and objectives, develop preferred plan, adopt plan, implement plan, monitor plan and refine as needed.

Identify local issues/policies/regulations that may need to be changed to either become more current or have been subject to development pressures (like a water or transportation system that is outdated or over capacity or a policy that is no longer applicable) and find alternative solutions. Study the problem and report data and analysis on the issue. Present opportunities for correction/improvement through a public hearing process. Also, react to requests for development of land - provide an analysis to adopted documents of the compatibility/consistency of the proposed development to the local elected officials for consideration.

RESOURCES/LINKS:

<https://www1.toronto.ca/wps/portal/contentonly?vgnextoid=064d0f1025c21410VgnVCM10000071d60f89RCRD&vgnextchannel=9632acb640c21410VgnVCM10000071d60f89RCRD>

8. WHAT ARE SOME EXAMPLE ELEMENTS THAT A PLANNER IS RESPONSIBLE FOR KEEPING IN BALANCE? WHAT CAN HAPPEN WHEN THESE ELEMENTS BECOME UNBALANCED (INCREASE IN GOVERNMENTAL COSTS, URBAN SPRAWL, ETC.)?

Answer:

Population and housing; population and jobs; population utilities (water, sewer, etc.); population and services (parks, libraries, schools, police, etc.); land use and transportation network; mix/ratios of different land uses and densities;

The adopted land development documents such as the Comprehensive Plan and Land Development Regulations in addition to any other documents such as neighborhood plans, bike and ped plans, economic development initiatives, tourism development strategies (not as common), historic preservation plans, capital improvements plans (as it relates to future growth). Unbalance means conflicting regulatory documents where confusion becomes standard. When documents don't mesh with each other, it is difficult to enforce policy and regulations.

- May have to travel long distances to gain access to resources such as parks, libraries, etc.
- Property may become very expensive, commute times may be long with large amounts of traffic.
- Service and civil workers may be priced out of the community that needs them.
- Natural resource and habitat loss.
- Waste is washed into the environment during storms, storm water is untreated.

9. WHAT WOULD A WELL PLANNED COMMUNITY IN FL LOOK LIKE? IF THERE ARE ANY REAL-LIFE EXAMPLES OR RESOURCES PLEASE FEEL FREE TO INCLUDE THEM.

Answer:

One that is walkable with daily services within close proximity to commercial hubs with mass transit to further less-daily needs. However, because it is so hot and occasionally rainy in Florida people tend to hop in their car even for short distances. Here is our dilemma. This community would have also gone to great lengths to preserve our environmental features such as wetlands and coastal areas and not develop closely to them. There would be rail to service the transfer of goods.

- Some of the new urbanist communities like Disney's Celebration are good examples.
 - Caution: Many are not affordable to the average American. Deeds and covenants restrict what you can do with your property.
- Or Seaside/Watercolors in NW Florida.
- Baldwin Park in Orlando is great.
- Also older historic communities like many of our historic Downtowns (built before the 1940's).
- Examples include Downtown Orlando, Winter Park, Downtown Lakeland, Ybor City, Downtown St. Pete, etc.

RESOURCES/LINKS:

There are several communities in NW Florida in South Walton County that provide the commercial hub surrounded by residential model. However, these have become second homes to the very wealthy and "resort-type" communities because there is no real economy there outside of tourism. If you can work remotely, it may work for you, but it provides a good on-the-ground example of ideal Florida communities. The City of Pensacola also has a similar framework in the downtown where they have the historic commercial corridor with residential near enough and some light transit with a minor-league baseball team/field in the walkable vicinity (entertainment). They also have a port there and office buildings for a live/work environment within a short walking distance.

- Ask students to relate to community examples and compare/contrast.

10. WHAT WOULD A POORLY PLANNED COMMUNITY IN FLORIDA LOOK LIKE? IF THERE ARE ANY REAL-LIFE EXAMPLES OR RESOURCES PLEASE FEEL FREE TO INCLUDE THEM.

Answer:

Strip commercial development along SR 60 in Brandon FL is a good example of badly planned; also suburban residential with no connectivity and near environmental lands (like the Everglades) is another example.

Platted/antiquated subdivisions: Lehigh Acres in Lee County --vast swaths of small lots with no infrastructure, very little retail and services, deficient road network, no sense of place, etc/ Challenges of retrofitting.

Sprawl, as noted above. Unattached development with no sense of community (nothing to identify its character from any other community in the region/state).

Pretty much any suburban striped out street. Dale Mabry Highway in Tampa is a good example. Bad sidewalks, sign clutter, hard to cross the roadway, no landscaping, etc.

There's that suburb in Orlando that is you want to drive to your neighbors house right behind you it requires a 15 minute drive (see link below). Good example of bad planning.

Well planned community could still develop challenges because of a myriad of other factors such as:

- Legislation that drives out business (taxes, limits business types, etc
- Land Development Code can be too onerous on the developer. Can add costs that make new development projects unfeasible.
- Lack of affordable housing
- Some communities only care about attracting more jobs and people but fail to plan adequately for transportation.
- Does infrastructure pay for itself? Suburban communities might feel safe, well planned and laid out, but in the long run the cost of infrastructure replacement and repair is very high and usually doesn't pay for itself in taxes and service fees over the years. Many of Florida's older suburban communities are now suffering the consequences of low density development and low property taxes not being able to keep up with the cost of repairs. Low density development does not use infrastructure efficiently nor pay for itself.

RESOURCES/LINKS:

<http://usa.streetsblog.org/2013/02/28/sprawl-madness-two-houses-share-backyard-separated-by-7-miles-of-roads/>

11. WHAT ARE SOME EXAMPLE SITUATIONS THAT COULD ARISE THAT A PLANNER MIGHT BE INVOLVED IN FINDING SOLUTIONS FOR?

Answer:

A city is losing population to its neighbors despite the fact that there are good jobs and great places in the community. The city wants to know why and what to do about it.

A neighborhood has a lot of kids but not a nearby park, or there is a park but no safe way to get to it.

Environmental degradation: As more of a community is developed there is an increase in the amount of impervious surfaces. Impervious surfaces do not channel storm water towards retention or detention areas and they can pick up pollution in the form of nutrients (e.g. from fertilizers), chemicals (e.g. vehicles on the road), or litter and dump it unfiltered into local waterways.

Roads that are over-capacity, infill development or redevelopment, large-scale master plans for new communities in greenfield situations.

A neighborhood being impacted by crime, environmental degradation, or blight. What solutions can be put in place to turn it around?

A coastal community is being impacted by climate change (such as South Beach). What solutions can be put in place to help protect property? In most of Florida, communities are making it more difficult to build in flood prone areas.

Neighborhood with lack of investment and fleeing population. How do we re-attract jobs and housing?

A community with transportation issues would use planners to figure out the best alternatives.

The city might have an growing industry (tech, healthcare, shipping, etc) but needs better planning to take that to the next level.

12. WHAT TYPES OF TOOLS OR RESOURCES ARE USED IN PLANNING (I.E., LAND USE MAPS)?

Answer:

- Maps, surveys to get input, demographic data like from the census
- Community meetings, town hall meetings, charettes (multi day, design oriented workshops, bring together professionals in multiple fields, studio and workshop type format)
- Aerial photos, historic photos
- Field trips and inventories
- Grants (for funding)
- Software like GIS, Word, Excel, PowerPoint, Publisher/InDesign, Photoshop... Apps like Google Earth, StreetMix, Placemeter, etc., etc.



APPENDIX B: COMMON QUESTIONS, ANSWERS & RESOURCES FOR THE FACILITATOR

- Partnerships and collaborations between stakeholders (public/private, etc.)
- Indicators/Performance Measures (to track progress in implementation)
- Data, data, data! Studies, reports, ESRI GIS programs.
- Local context (show students the local jurisdiction's Comp Plan, how to navigate to it, etc.)

RESOURCES/LINKS:

Land use map:

<http://www.planhillsborough.org/plant-city-alexander-street-land-use-study/>

[http://www.planhillsborough.org/wp-content/uploads/2017/06/North Alexander Street Study Area ELU.pdf](http://www.planhillsborough.org/wp-content/uploads/2017/06/North_Alexander_Street_Study_Area_ELU.pdf)

Hillsborough Long Range Transportation Plan: <http://www.planhillsborough.org/2040-lrtp/>

Temple Terrace Comprehensive Plan: <http://www.planhillsborough.org/wp-content/uploads/2017/04/Full-TT-Plan-1.19.16-updated-3.17.pdf>

See pages 8-9 for Hillsborough County Vision for Future Growth and pages 9-10 for Temple Terrace Vision for growth. These maps are used as very broad and general examples of how a community will grow and develop.

Pages 62-64 are the land use categories and land use map for Temple Terrace. This is a small city with minimal categories. Many counties and cities will have dozens more categories.

Almost all of the maps in the Temple Terrace Comp Plan are required by the state of Florida.

Here are special studies: <http://www.planhillsborough.org/planning-commission-reports/>

Transit studies: <http://www.planhillsborough.org/public-transit-plans-studies/>

<https://www.planning.org/ethics/ethicscode.htm>

Metroquest is a good example to use. They use interactive maps to let people decide where growth will occur. It gets people thinking about the layout of their community. Take a look at some current online surveys.

<http://metroquest.com/case-studies/>

<http://planmaryland.v6.metroquest.com/>

<http://carpentersvillep1.metroquest.com/>

<https://northlawndale.metroquest.com/>

<https://rtcvision.metroquest.com/>

<http://rockyview.v6.metroquest.com/>

<http://www.connectourfuture.org/>



APPENDIX C: AS THE PLANNER SEES IT-ROLE PLAY PACKET (SCENARIO 1: COMMUTE TIMES)

SCENARIO 1: COMMUTE TIMES

Planning Process Phase: Public Meeting & Decision

Roles: Planner, Business owners, Residents, City Council Member, Department of Transportation, and Developer

Objectives:

- Evaluate the problem and determine if any action is necessary.
- Propose solutions to the problem.
- Make a decision about what the city will do moving forward.

DESCRIPTION:

It has come to the attention of the Community Council that community residents are having difficulty reaching the businesses that they frequent or are employed at. A population distribution map and aerial map have been provided to your planning professional to help with evaluating the problem and planning for a solution. Without better access to jobs and businesses, the community is already starting to see an influx in population and growth as businesses and residents that are frustrated by commute times migrate to neighboring communities.

PLANNER

Planners are in the middle of all three spheres that participate in the planning process: Community Residents, Government, and Development Related Businesses. They help facilitate communication between the three groups. They help residents develop and refine the community vision, help government develop the policy and code to implement the vision, and work with developers to help them understand the policy and code to improve projects so they match the community vision.

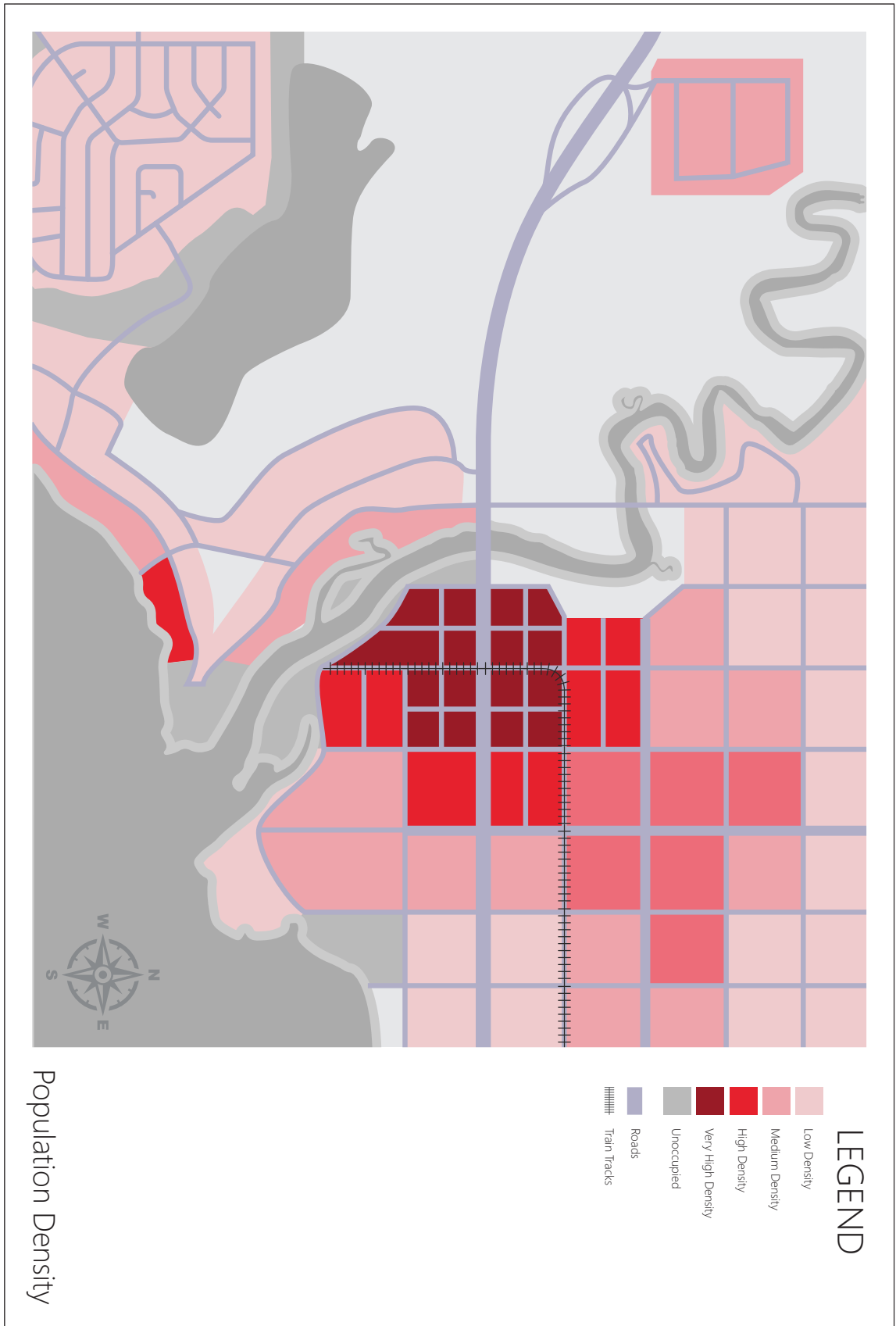
The Planner Code of Ethics states:

“Be conscious of the rights of others; concern for the long-range consequences of present actions; provide timely, adequate, clear, and accurate information on planning issues to all affected persons and to governmental decision makers; give people the opportunity to have a meaningful impact on the development of plans and programs that may affect them. Participation should be broad enough to include those who lack formal organization or influence; plan for the needs of the disadvantaged and to promote racial and economic integration; promote excellence of design and endeavor to conserve and preserve the integrity and heritage of the natural and built environment; deal fairly with all participants in the planning process.”

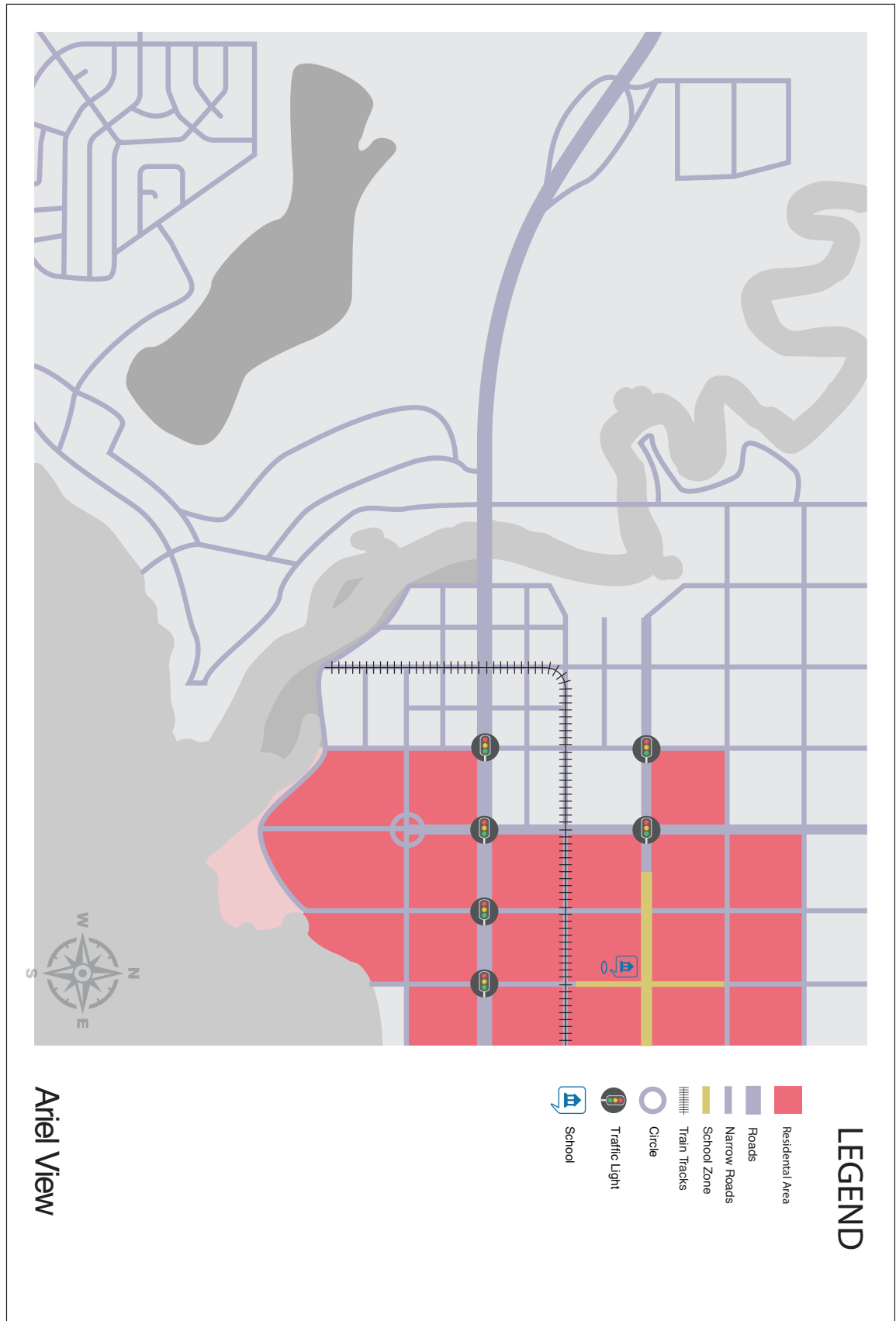
In this scenario, your job is to help the three groups come to an informed decision about how to move forward. You can accomplish this by providing information found in your supporting documentation and advising on solutions.

PLANNER: SUPPORTING ASSETS

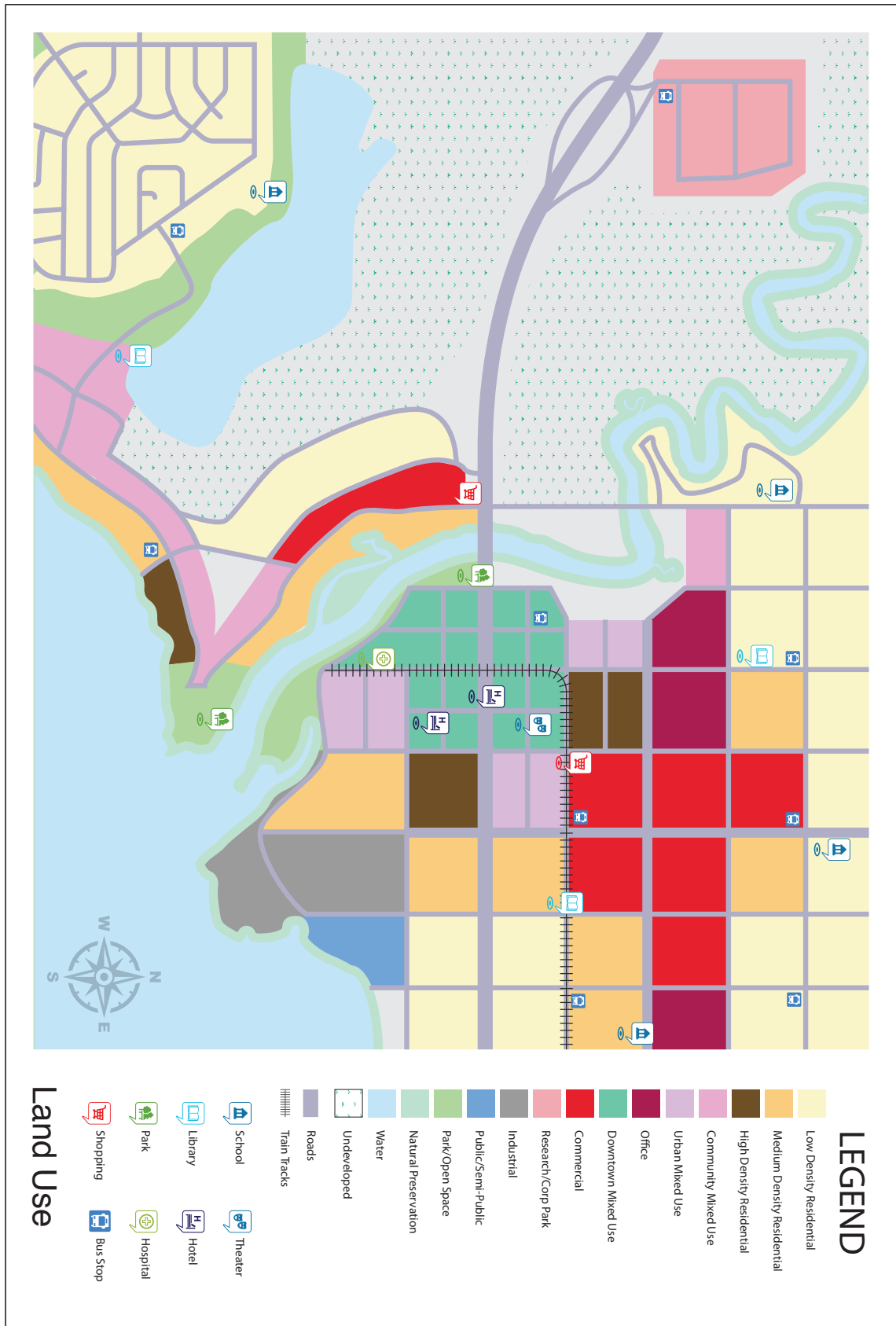
- Population Density Map
- Ariel View Map
- Land Use Map
- Traffic Map
- Vacant Parcels Map



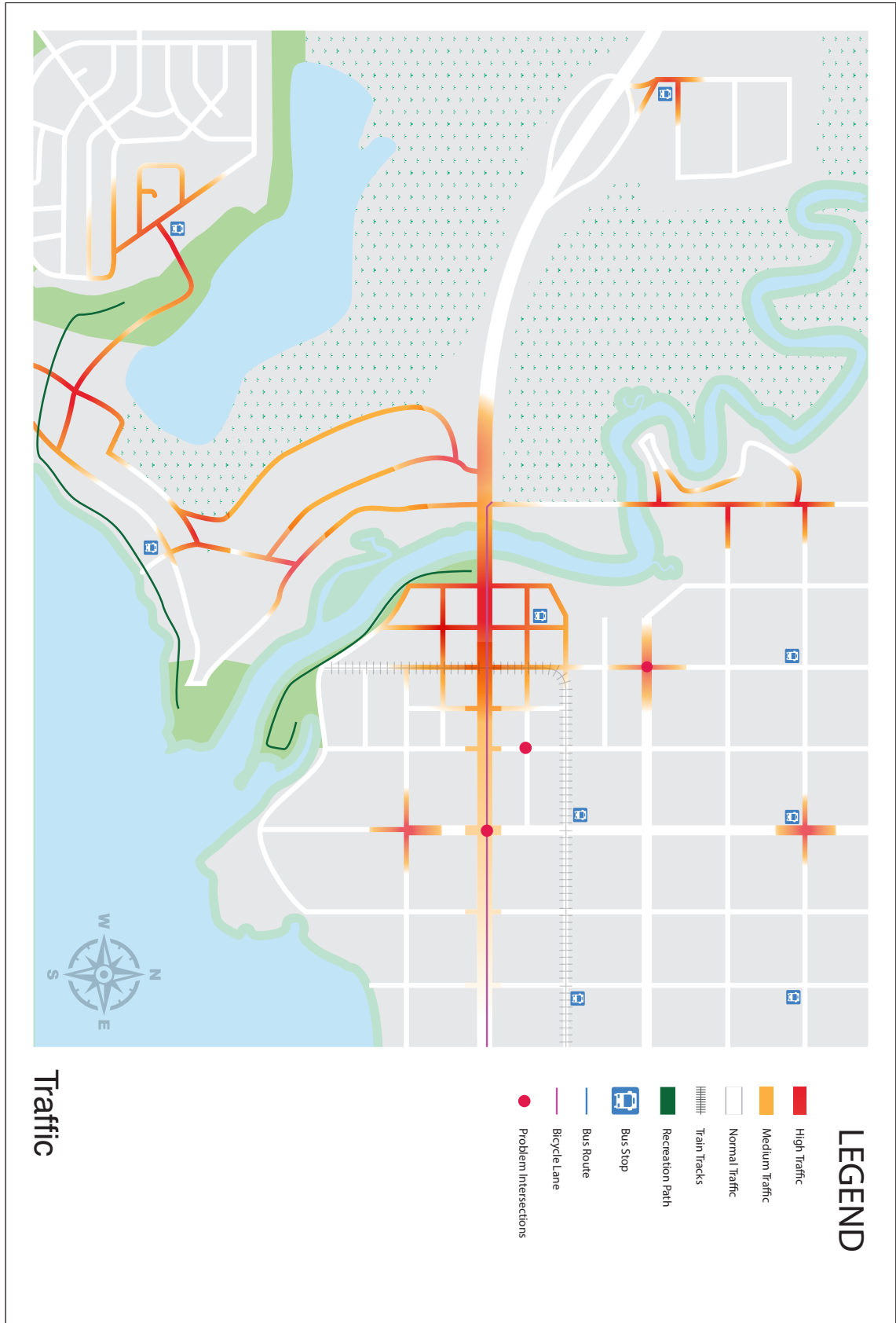
SCENARIO 1: COMMUTE TIMES

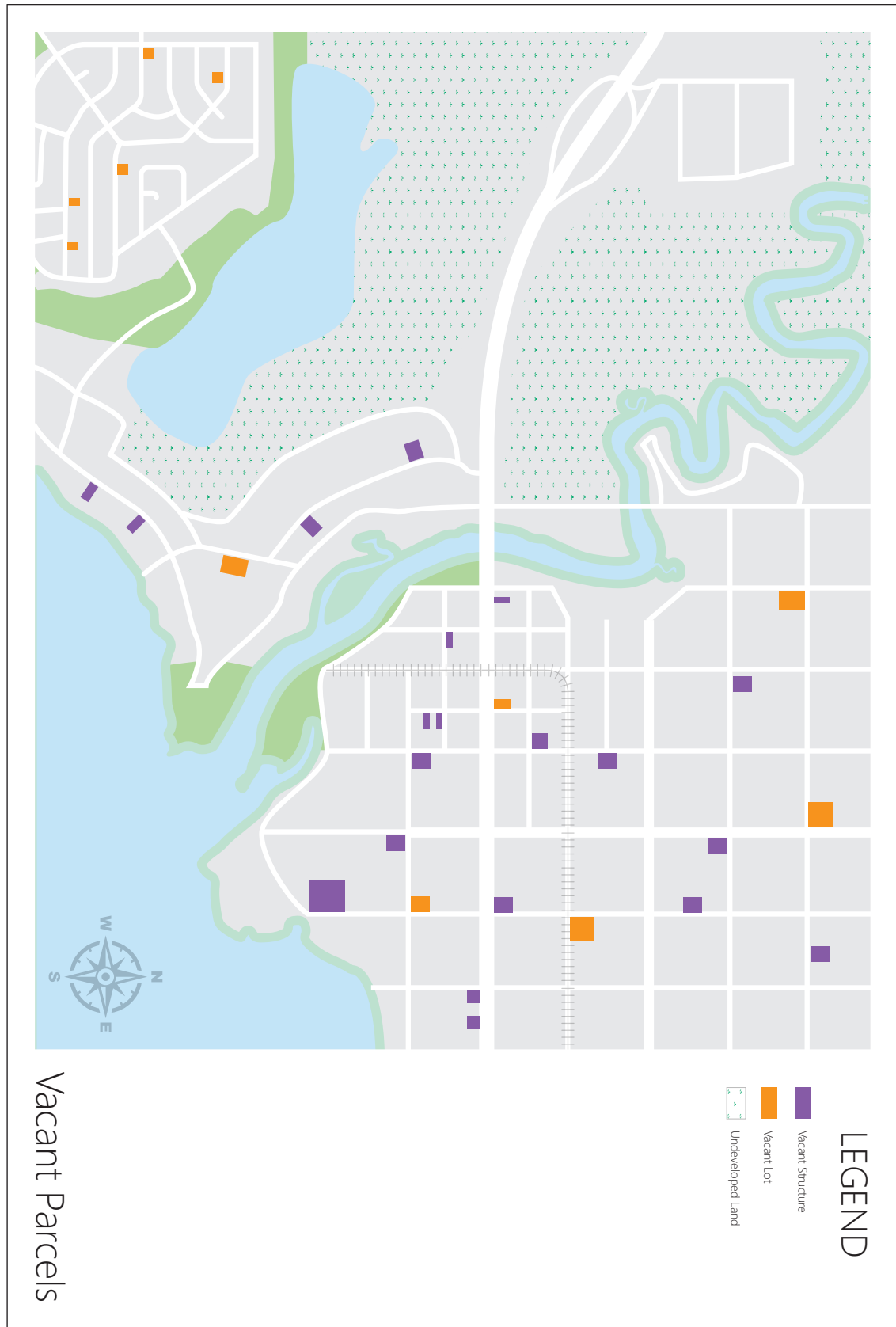


SCENARIO 1: COMMUTE TIMES



SCENARIO 1: COMMUTE TIMES





COMMUNITY RESIDENTS (BUSINESS OWNERS, INDIVIDUALS)

Set the vision for the community through public workshops, surveys, meetings, etc. They let the planners know what they desire for their community. Planners create policy and code based on those ideas. The vision of the community is constantly changing so planners must be nimble and continuously update and refine plans.

BUSINESS OWNERS

In this scenario, you are one of the business owners who is having trouble getting your employees to work and attracting customers to your location. The frequent traffic delays and distance from major motorways that would bring in business pose major problems. This includes problems bringing in shipments of supplies.

Suggested Businesses:

- **Fast Food Restaurant Owner** – Due to traffic congestion, few people visit your restaurant outside of lunchtime when the most people are in your commercial area working. You want better access to your restaurant so customers aren't inconvenienced and because your business depends on a consistently high level of traffic.
- **Clothing Store Owner** – You do most of your business online but have difficulty with both getting shipments out of your location because it takes you too long to reach the airport shipping facility. Shipping vehicles have difficulty reaching your location and there are often delays. You would like to have more retail shoppers in and out of your store, but you believe that the congestion makes it difficult for people to visit your store.
- **Bank President** – Your employees are constantly showing up to work late due to the high volume of traffic and lack of parking in downtown. Between traffic jams and a 15-30 minute search for parking every morning, many of your employees are arriving late. The bank opens at 8:30 am and you cannot afford to have employees showing up late with customers waiting.
- **Marketing Agency Vice President** – Due to the lack of alternative modes of transportation and limited transit service near your business, you are having difficulty filling the entry-level positions because those workers without a car do not have a way to get to the jobs you have available.

RESIDENTS

You work in a commercial area of the city and frequently have to leave your house 2-3 hours early just to reach work on time, despite living within 15 miles of your work location. This is presenting a serious strain on you and your family.

Important Insight:

- Developers have a view that is often unique from other stake holders, like those of community residents, on how a community should look and feel.

GOVERNMENT (CITY COUNCIL MEMBER, DEPT. OF TRANSPORTATION)

Government is responsible for implementing the vision of the residents. Local government controls the adopted policy and code as well as provides the budget to make the community vision happen. Lack of funds can slow down implementation. Creative governments can succeed at implementing a vision with a limited budget.

CITY COUNCIL MEMBER

In this scenario, your job is to use the information you have available to guide the discussion, listen, and evaluate the perspectives of those that you are elected to serve. You are also tasked with proposing solutions, should the problem merit action, that are in the community's best interest.

Important:

- Make use of your advisors and resource documentation.
- Government is responsible for making sure developers are playing by the rules that were established to implement the community vision.

DEPARTMENT OF TRANSPORTATION

The DOT has a limited budget. It can plan for improvements but often those go onto a list and into a queue. It can take 5-10 years or more to get a project built. The DOT also has to deal with right of way acquisition which means sometimes homes need to be purchased and demolished or businesses might be bulldozed to make way for a new roadway. Often times, in a road widening project people will lose part of their front yard or businesses will lose parking. Planners would assist the DOT in finding ways to minimize the impact on a neighborhood.

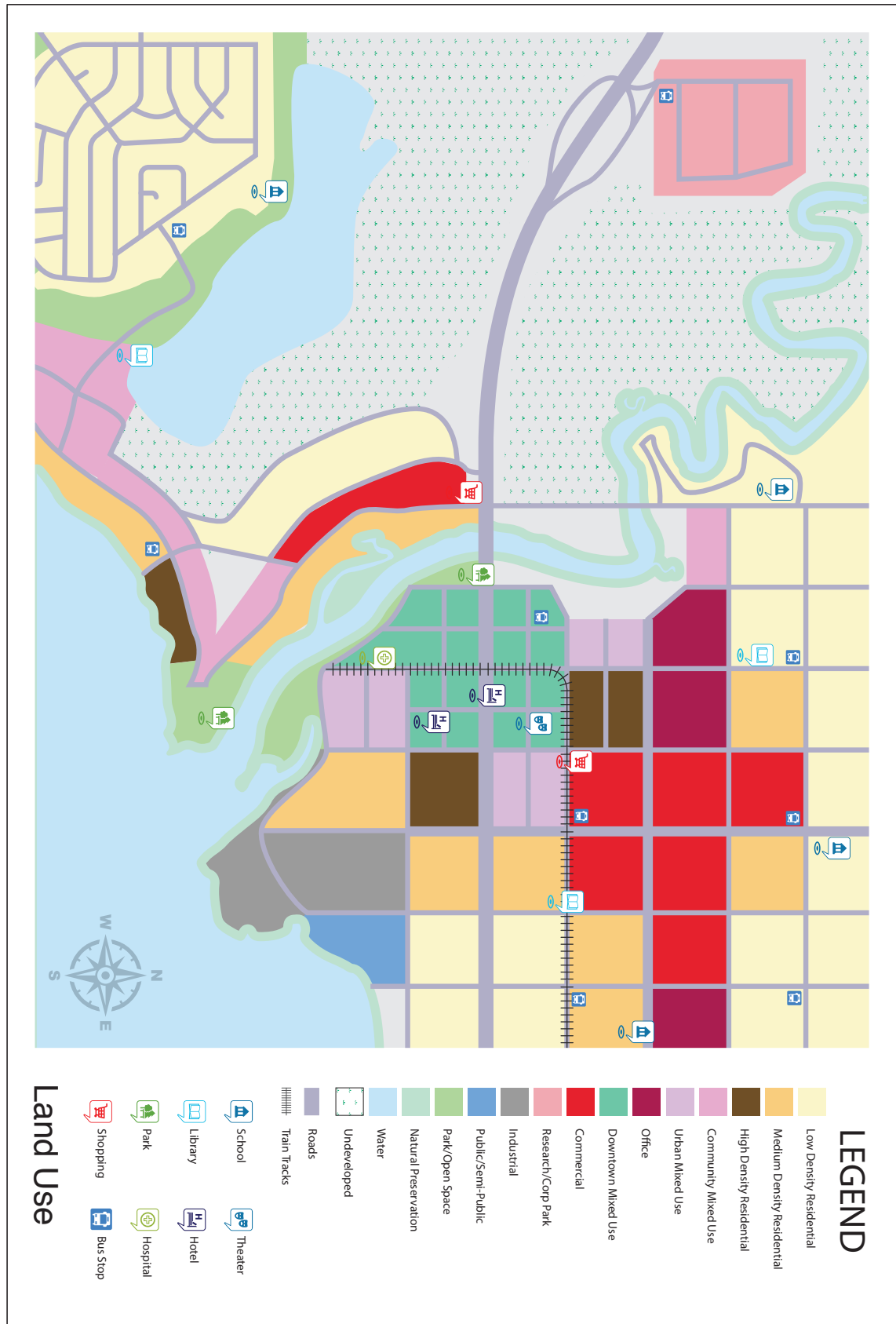
Important Insight:

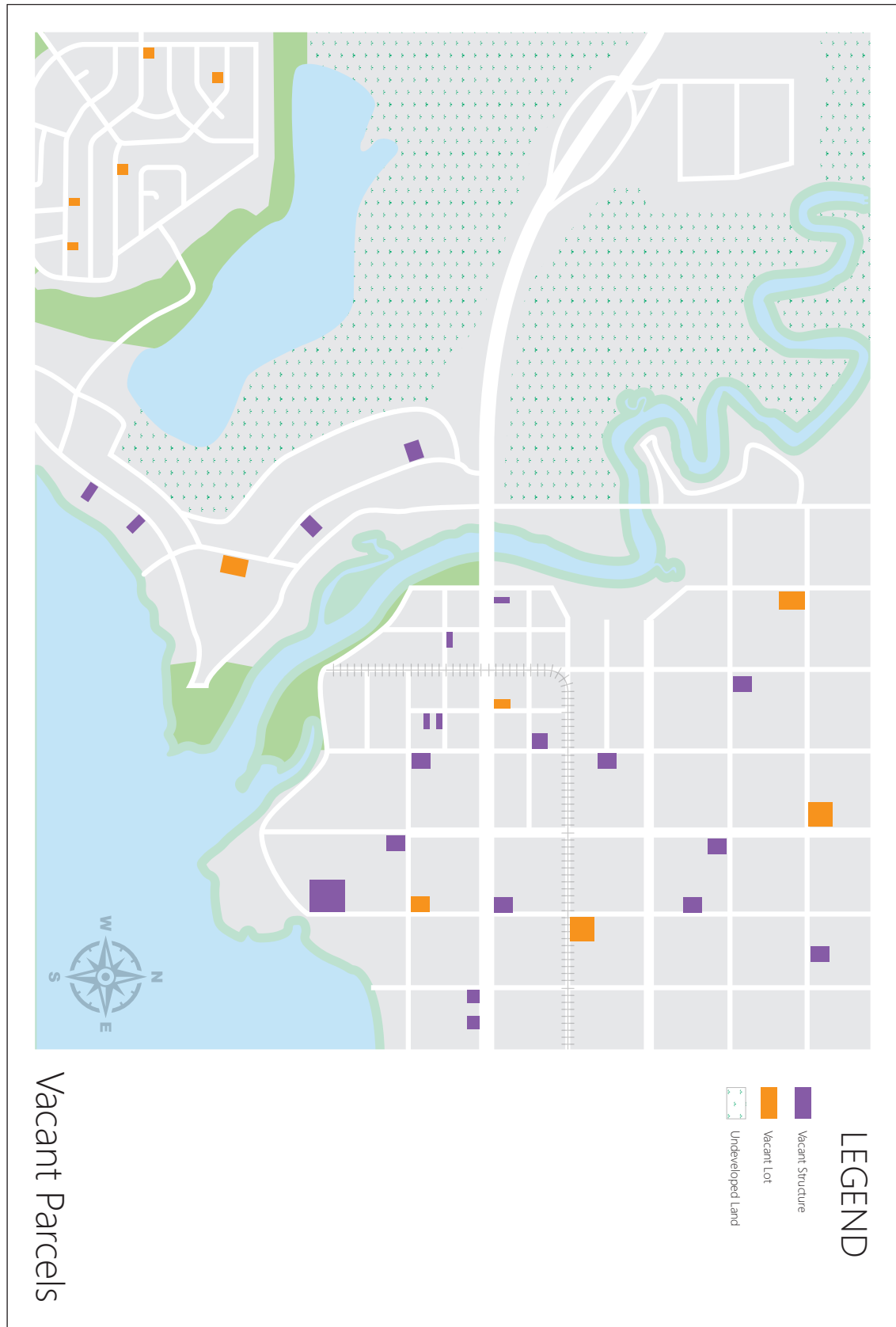
- Imagine that in this role you are in charge of a bank account with limited funds but a surplus of projects that want funding, and you can only spend so much money on much needed improvements.

GOVERNMENT: SUPPORTING ASSETS

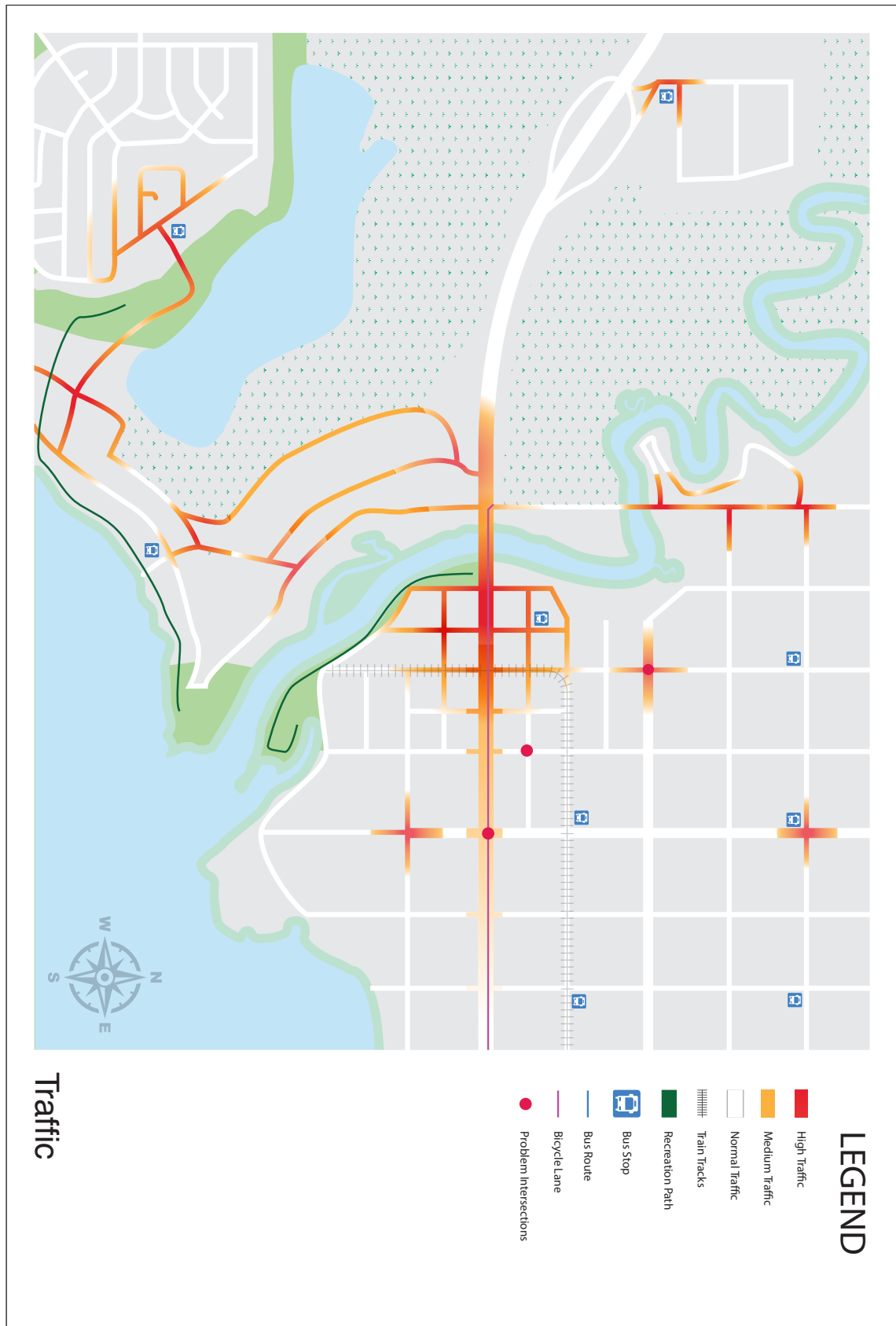
- Land Use Map
- Vacant Parcels Map
- Traffic Map

SCENARIO 1: COMMUTE TIMES





SCENARIO 1: COMMUTE TIMES



DEVELOPMENT RELATED BUSINESSES (DEVELOPER)

These are the players who are on the ground building and putting the vision in place through development and redevelopment projects.

In this scenario you are a representative of a very large land-owner who plans to create a 100-acre mixed use (or some type) development in close proximity to the downtown area. You are concerned about the current transportation limitations and you have enough land to contribute for an extension of an arterial road.

Important Insight:

- Be careful not to oversell projects that will seem outlandish to the government or residents.
- Developers come with passion and many opinions.
- They would hope the local government would pay for road or transit improvements but at the same time typically are against raising property taxes as it might scare potential home buyers into moving away from the area.
- This person should understand that he/she must be responsible to his/her client and/or employer, rather than solely to the requests of the community and government. They need to be in a mind set to represent business, which needs to make a profit to survive. Their return on investment must be considered.
- Developers tend to keep their development plans “close to the vest” until permits are requested. This is so that speculation does not prematurely alter property value or allow another developer to get ahead.

Some potential pitfalls in pitching your solutions include:

- Developers have a view that is often unique from other stake holders, like those of community residents, on how a community should look and feel.
- Land Owner – Owns a parcel along the roadway but traffic flow and access would make it difficult to get traffic in and out. In addition, the local government will not approve the proposed development due to the amount of additional traffic added to an already congested roadway. If your development is built, commute times would increase causing additional strain on the roadway. Existing property residents and businesses are opposed to the traffic and you must also consider the needs to the businesses and/or residents who will be move to your development once it's complete.



SCENARIO 2: THE GREAT OUTDOORS

SCENARIO 2: THE GREAT OUTDOORS

Planning Process Phase: Public Meeting & Decision

Roles: Planner, Community Residents, City Council Member, School Board Member

Objectives:

- Evaluate the problem and determine if any action is necessary.
- Propose solutions to the problem.
- Make a decision about what the city will do moving forward.

DESCRIPTION:

It has come to the attention of the City Council that despite the large concentration of people in surrounding residential areas there are very few places for children to play safely, or outdoor areas for the residents to access. The few parks that do exist are located in a more urban area that is difficult to access and not within walking distance for children.

PLANNER

Planners are in the middle of all three spheres that participate in the planning process: Community Residents, Government, and Development Related Businesses. They help facilitate communication between the three groups. They help residents develop and refine the community vision, help government develop the policy and code to implement the vision, and work with developers to help them understand the policy and code to improve projects so they match the community vision.

The Planner Code of Ethics states:

“Be conscious of the rights of others; concern for the long-range consequences of present actions; provide timely, adequate, clear, and accurate information on planning issues to all affected persons and to governmental decision makers; give people the opportunity to have a meaningful impact on the development of plans and programs that may affect them. Participation should be broad enough to include those who lack formal organization or influence; plan for the needs of the disadvantaged and to promote racial and economic integration; promote excellence of design and endeavor to conserve and preserve the integrity and heritage of the natural and built environment; deal fairly with all participants in the planning process.”

In this scenario, your job is to help the three groups come to an informed decision about how to move forward. You can accomplish this by providing information found in your supporting documentation and advising on solutions.

PLANNER: SUPPORTING ASSETS

- Survey (Graph)
- Parks Map (Population Density)
- Land Use Map
- Vacant Parcels Map

SURVEY

I believe that there should be more spaces for kids to be outside

85%

I don't feel like I can get to an outdoor space in a reasonable amount of time

70%

I think that more outdoor spaces would improve my neighborhood and attract buyers to my area

65%

I think there are sufficient outdoor areas in my community

30%

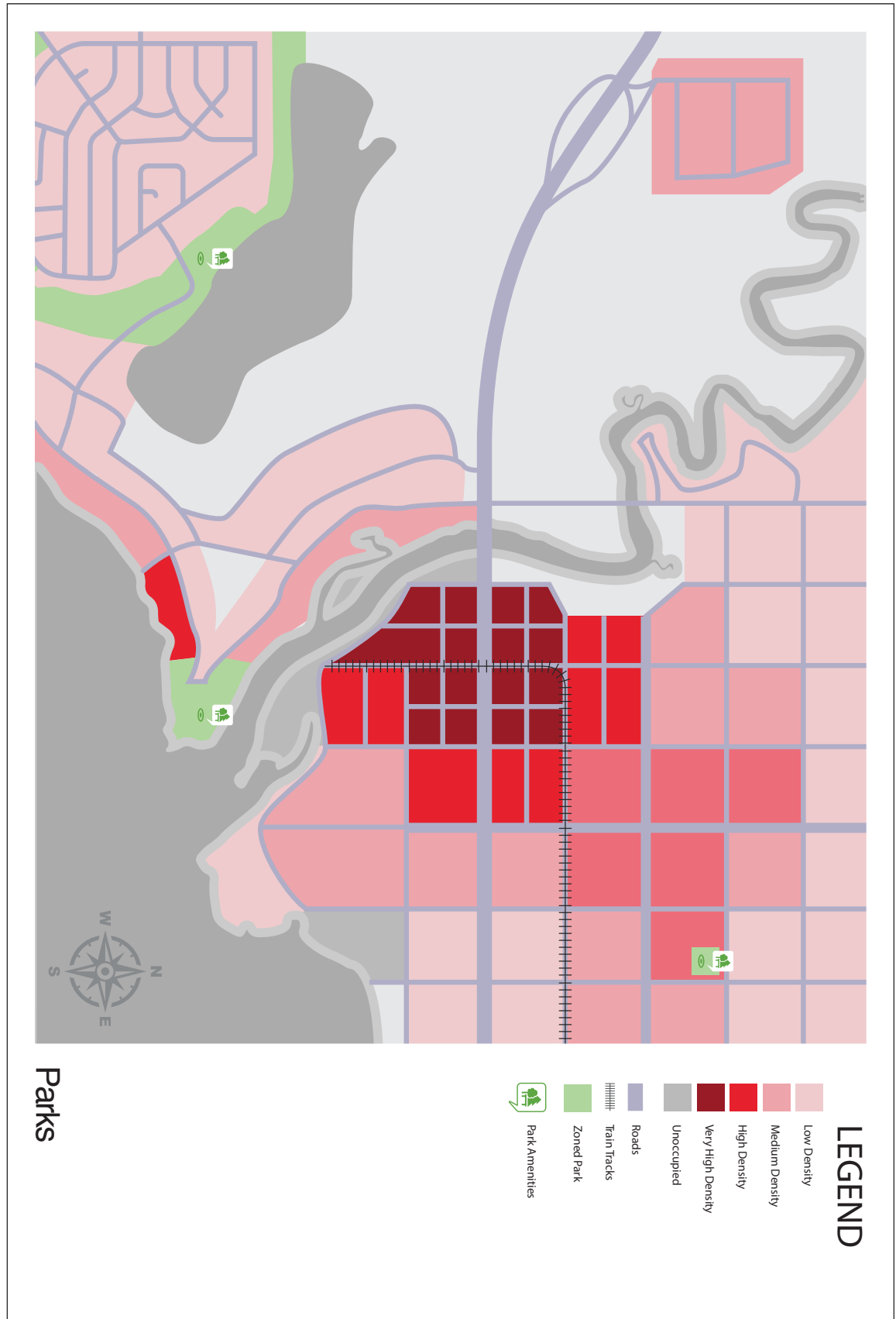
I am comfortable with financing some reasonable additions of public outdoor spaces

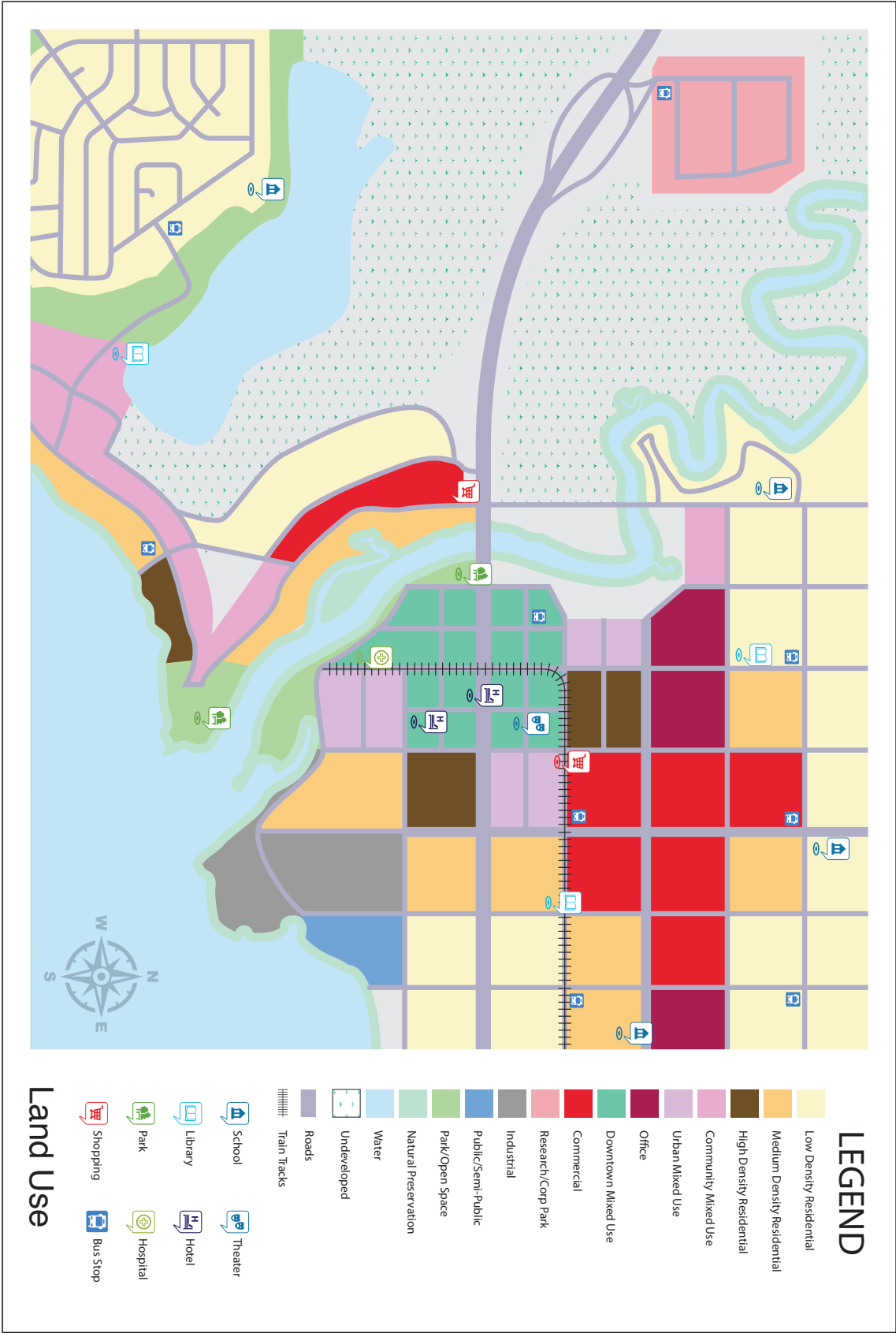
80%

I would prefer a small neighborhood park in my subdivision

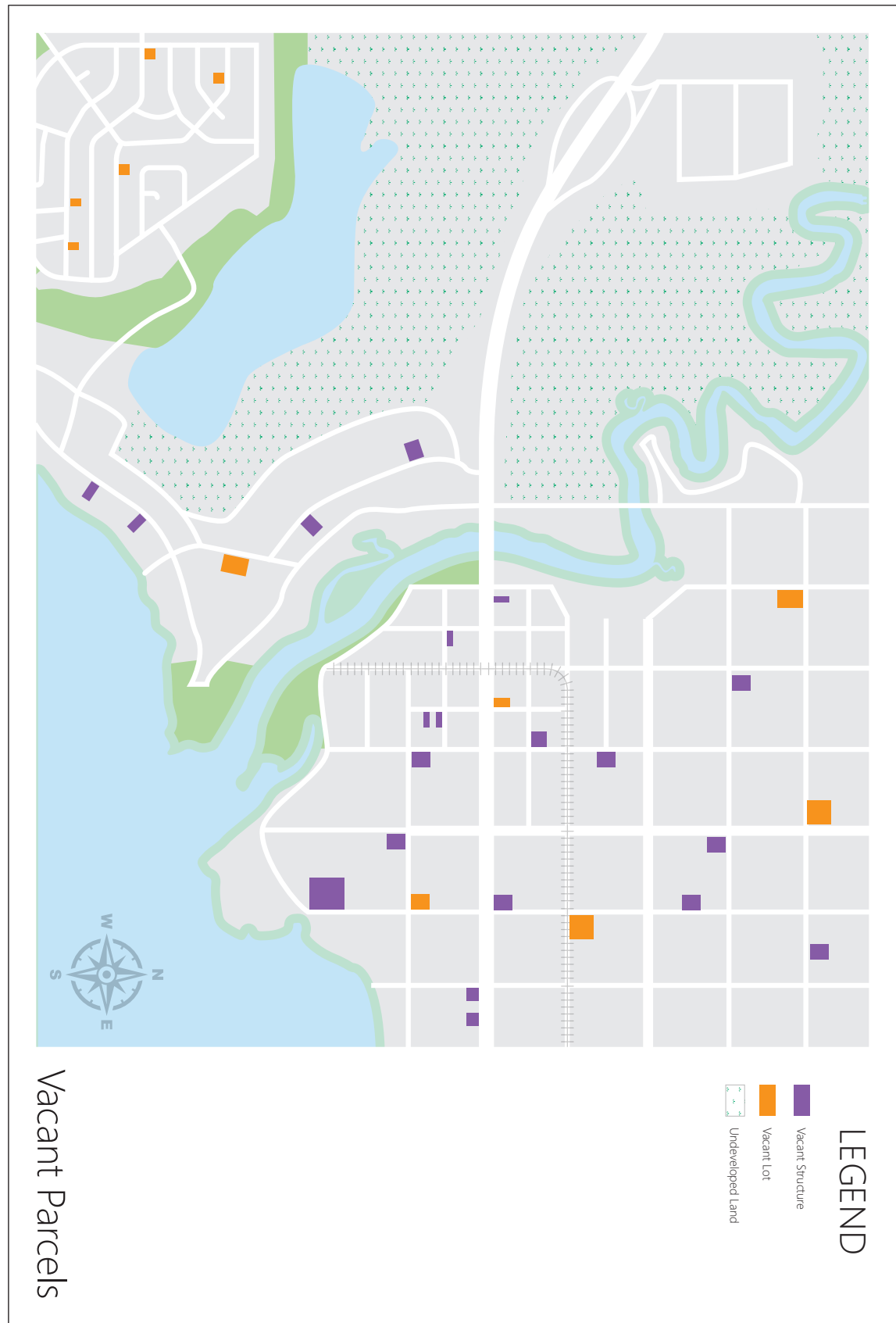
80%

SCENARIO 2: THE GREAT OUTDOORS





SCENARIO 2: THE GREAT OUTDOORS



COMMUNITY RESIDENTS

Set the vision for the community through public workshops, surveys, meetings, etc. They let the planners know what they desire for their community. Planners create policy and code based on those ideas. The vision of the community is constantly changing so planners must be nimble and continuously update and refine plans.

RESIDENTS (PARENTS)

Your kids don't have parks close to your home to play and socialize with other children. You have been asking your City Council member to do something for a couple years. Finally, the City is listening and considering where to locate new parks to serve the growing need for open space and recreation. Planners need your help determining where to put the parks and what kind of amenities the parks should have.

Important Insights:

- Parents typically come to community meetings with passion and ideas.
- Keep in mind how far you would have to travel to get to the closest park.
- Keep in mind whether or not your kids could ride a bike to the closest park.
- Keep in mind the safety of the area and how safely kids can commute to park areas.
- Recall when you were younger:
 - Did you play at a local park?
 - How was that experience for you?
 - If you did not, why not?
 - Could you get to one on your own?



SCENARIO 2: THE GREAT OUTDOORS

GOVERNMENT (CITY COUNCIL)

Government is responsible for implementing the vision of the residents. Local government controls the adopted policy and code as well as provides the budget to make the community vision happen. Lack of funds can slow down implementation. Creative governments can succeed at implementing a vision with a limited budget.

In this scenario, your job is to use the information you have available to guide the discussion, listen, and evaluate the perspectives of those that you are elected to serve. You are also tasked with proposing solutions, should the problem merit action, that are in the community's best interest.

Important Insight:

- Make use of your advisors and resource documentation.

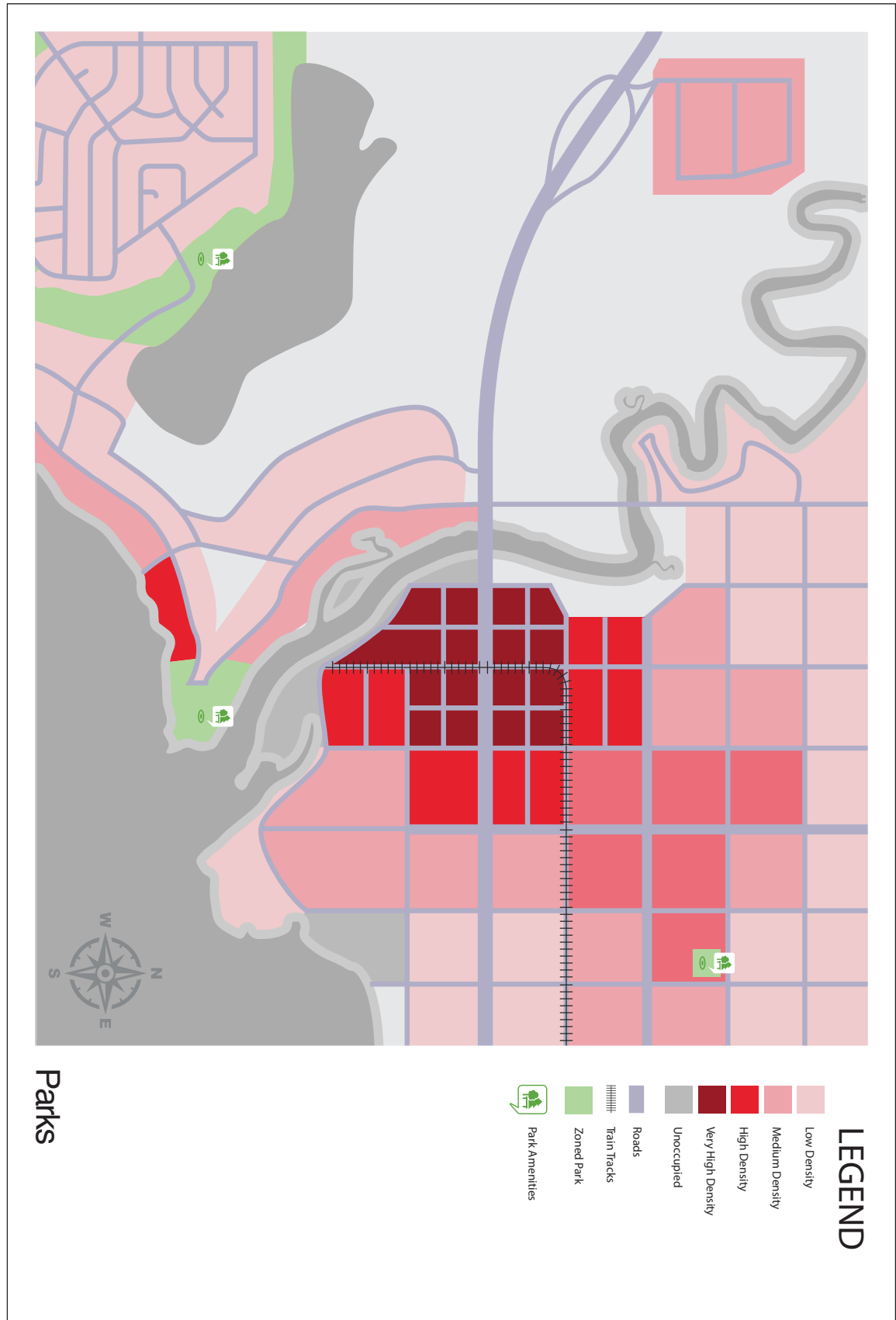
GOVERNMENT: SUPPORTING ASSETS

- Park Amenities (List)
- Parks Map
- Land Use Map
- Vacant Parcels Map

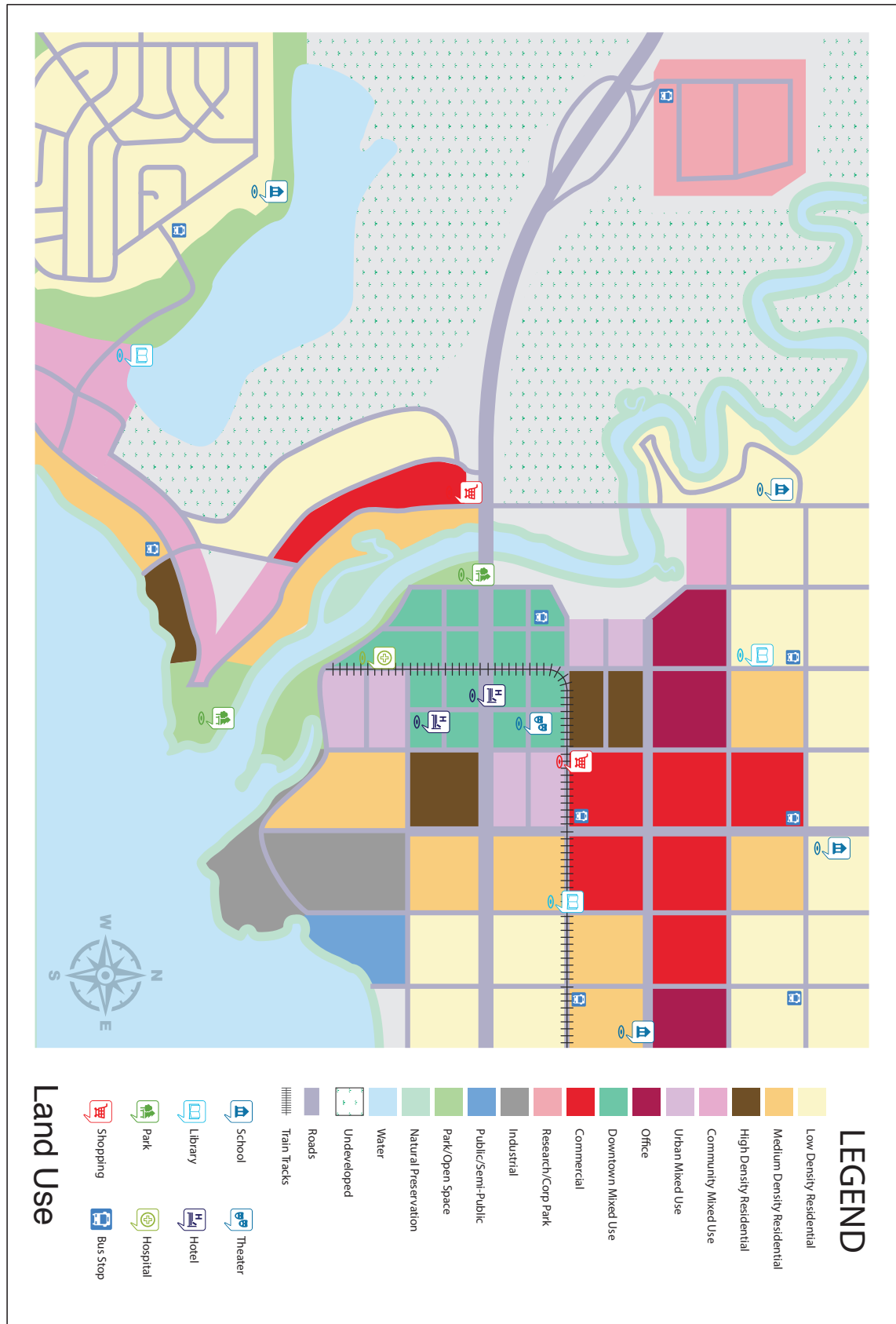
PARK AMENITIES

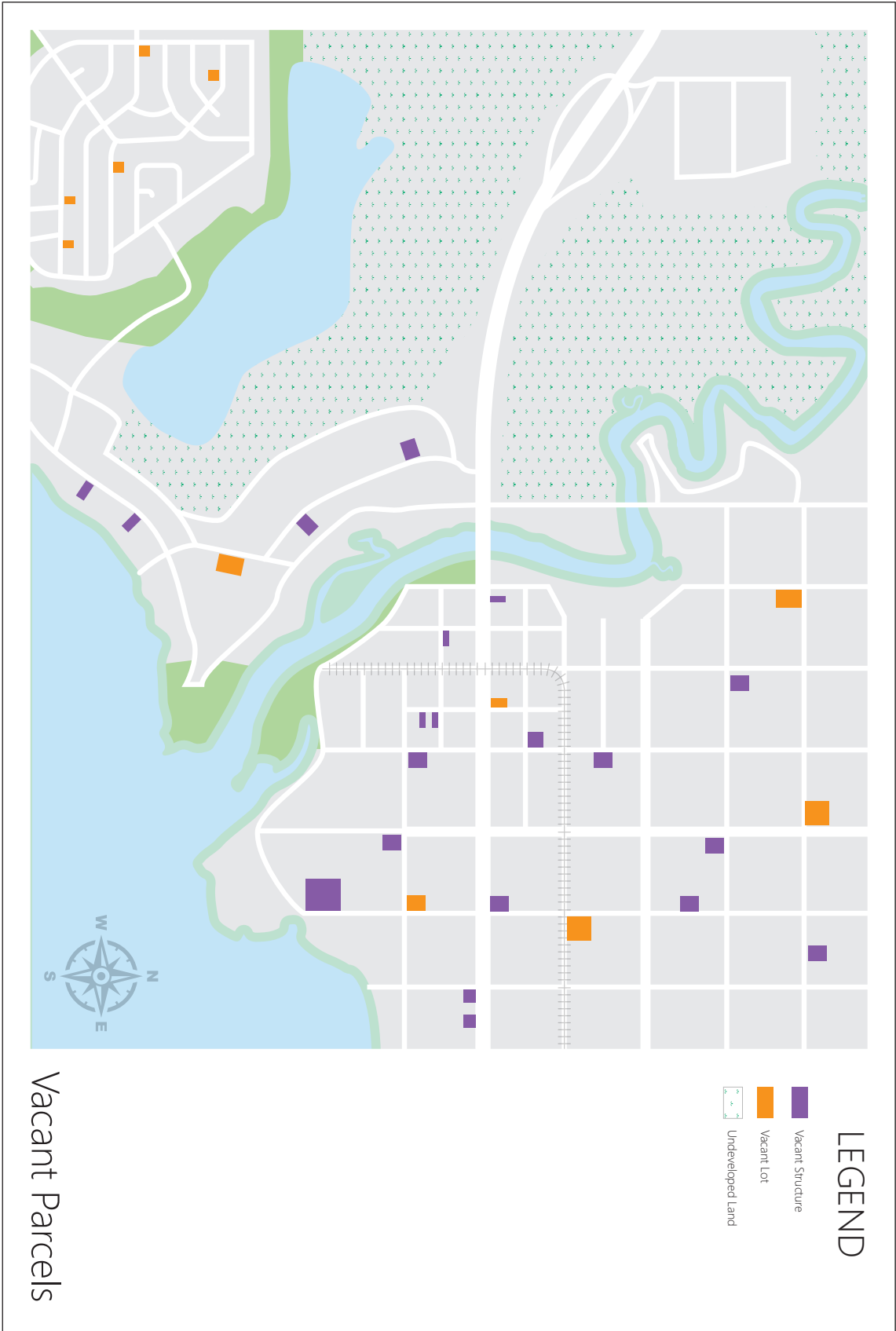
- | | |
|--|---|
| • Little League baseball/softball fields | • Playground equipment (swings, slides, etc.) |
| • Soccer fields | • Lighting |
| • Basketball courts | • Parking |
| • Tennis courts | • Community center |
| • Picnic area/shelters | • Park furniture |
| • Dog Park | • Trash receptacles |
| • Restroom | • Boat ramps |
| • Concession building | • Beach |
| • Amphitheater | • Trails |

SCENARIO 2: THE GREAT OUTDOORS



SCENARIO 2: THE GREAT OUTDOORS







SCENARIO 2: THE GREAT OUTDOORS

SCHOOL BOARD MEMBER

The School Board has received requests from citizens and some City Council members to open their play spaces to the area residents for after school and weekend recreation. As a School Board member, you are concerned about liability and maintenance as well as vandalism at the school play yards when no one is there. You appreciate the needs of the local community for recreation space, and want to find the win for the residents and the school as well.

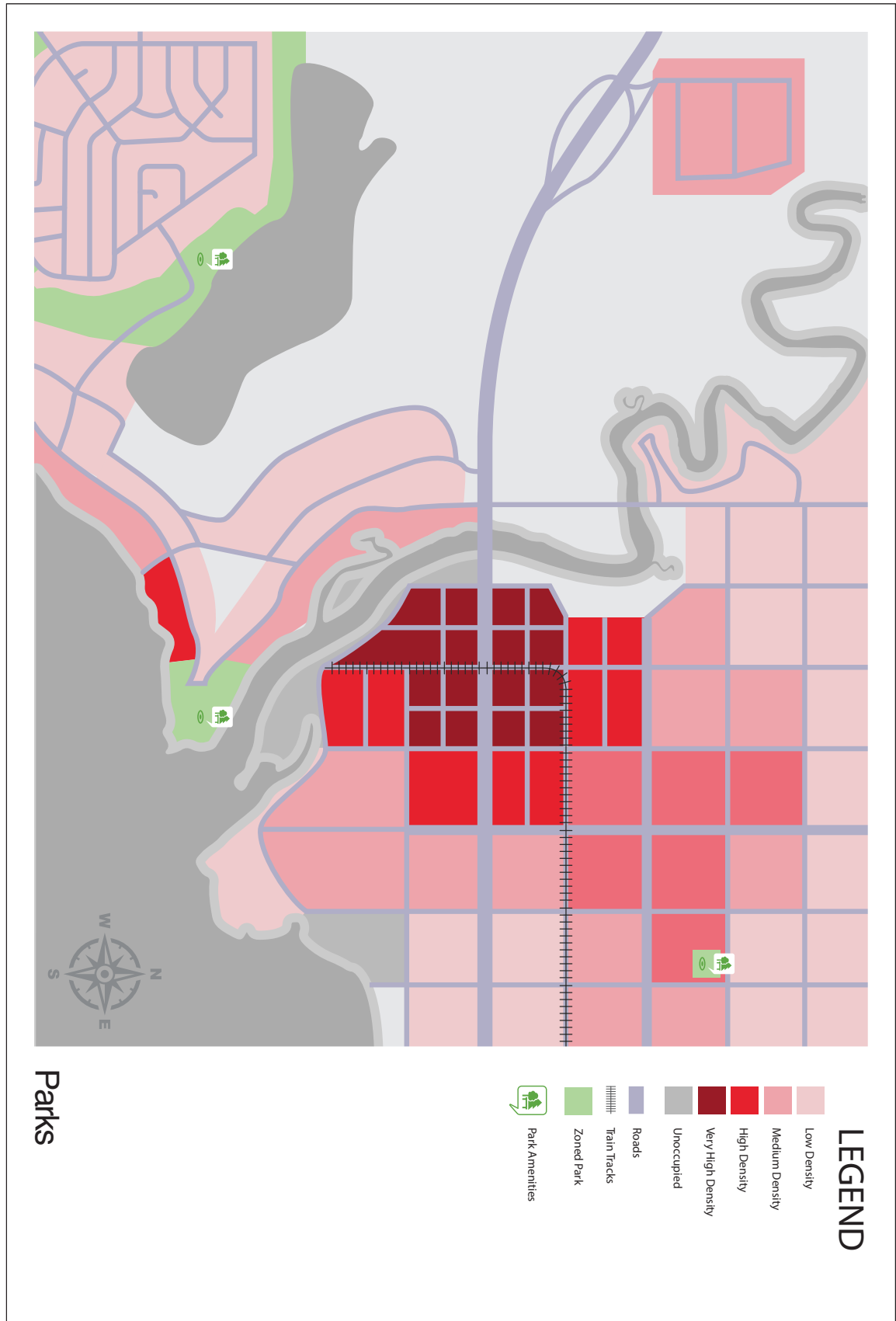
SCHOOL BOARD MEMBER: SUPPORTING ASSETS

- School Play Yard Amenities (List)
- Parks Map
- Vacant Parcels Map

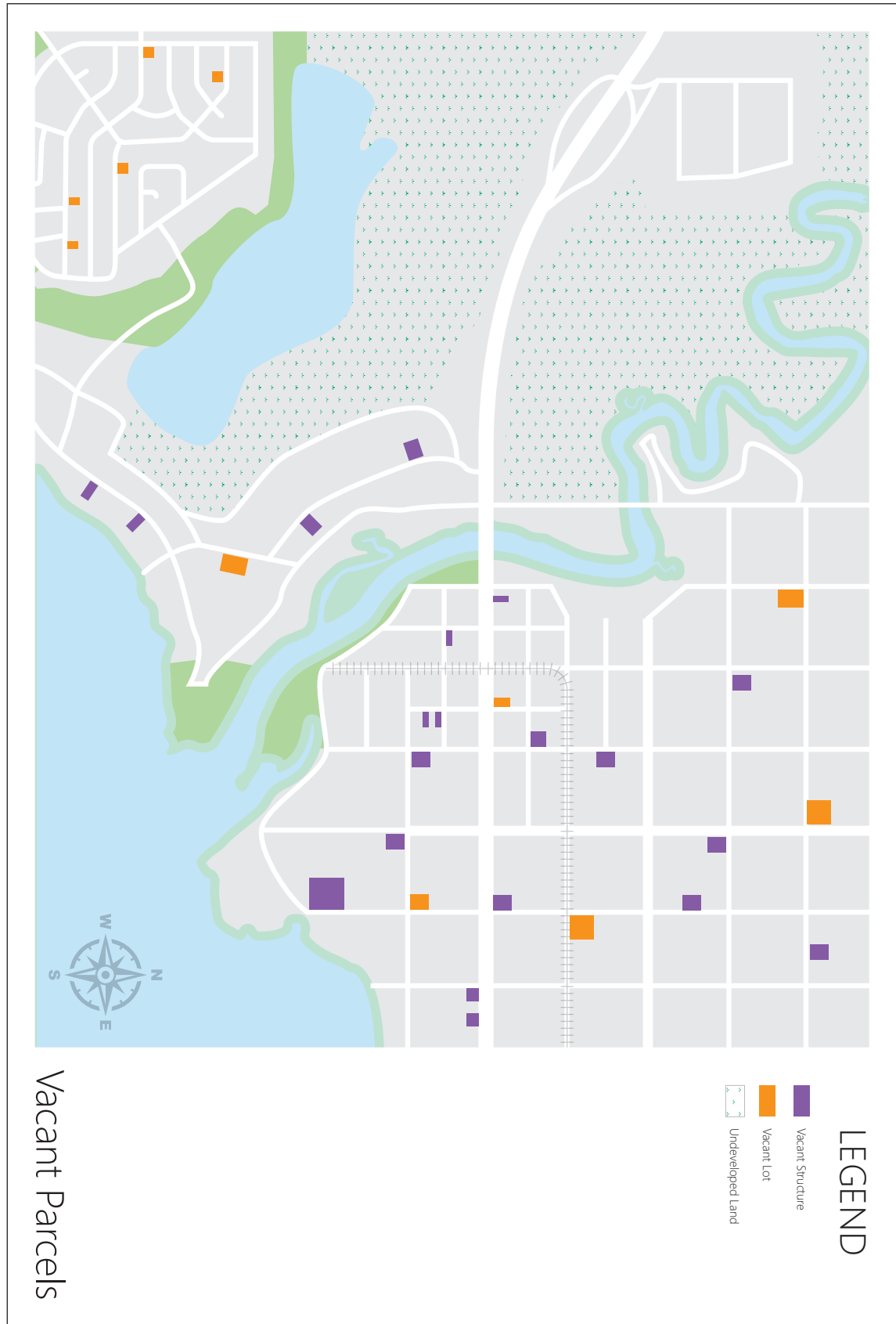
SCHOOL PLAY YARD AMENITIES

- | | |
|-----------------------------|--------------------|
| • Swings | • Playhouses |
| • Slides | • Monkey bars |
| • Climbing equipment | • Sandboxes |
| • Crawl tubes | • Basketball hoops |
| • Merry go rounds | • Soccer nets |
| • Music and sound equipment | • Signs |
| • Climbing nets | |

SCENARIO 2: THE GREAT OUTDOORS



SCENARIO 2: THE GREAT OUTDOORS





SCENARIO 3: ENVIRONMENTAL DEGRADATION

SCENARIO 3: ENVIRONMENTAL DEGRADATION

Planning Process Phase: Public Meeting & Decision

Roles:: Planner, Business Owners, Residents, Local Environmental Conservation Organization, City Council, Developer

Objectives:

- Evaluate the problem and determine if any action is necessary.
- Propose solutions to the problem.
- Make a decision about what the city will do moving forward.

DESCRIPTION:

It has come to the attention of the Community Council that as more of the community has developed, there has been an increase in the amount of impervious surfaces. Impervious surfaces do not channel storm water towards retention or detention areas has led to flooding. Further, roadways and yards and have begun picking up pollution in the form of nutrients (e.g. from fertilizers), chemicals (e.g. vehicles on the road), or litter and dumped it unfiltered into local waterways. This pollution has had a variety of effects on the local environment; environment that, at the very least, the tourism industry relies on and community residents enjoy.

PLANNER

Planners are in the middle of all three spheres that participate in the planning process: Community Residents, Government, and Development Related Businesses. They help facilitate communication between the three groups. They help residents develop and refine the community vision, help government develop the policy and code to implement the vision, and work with developers to help them understand the policy and code to improve projects so they match the community vision.

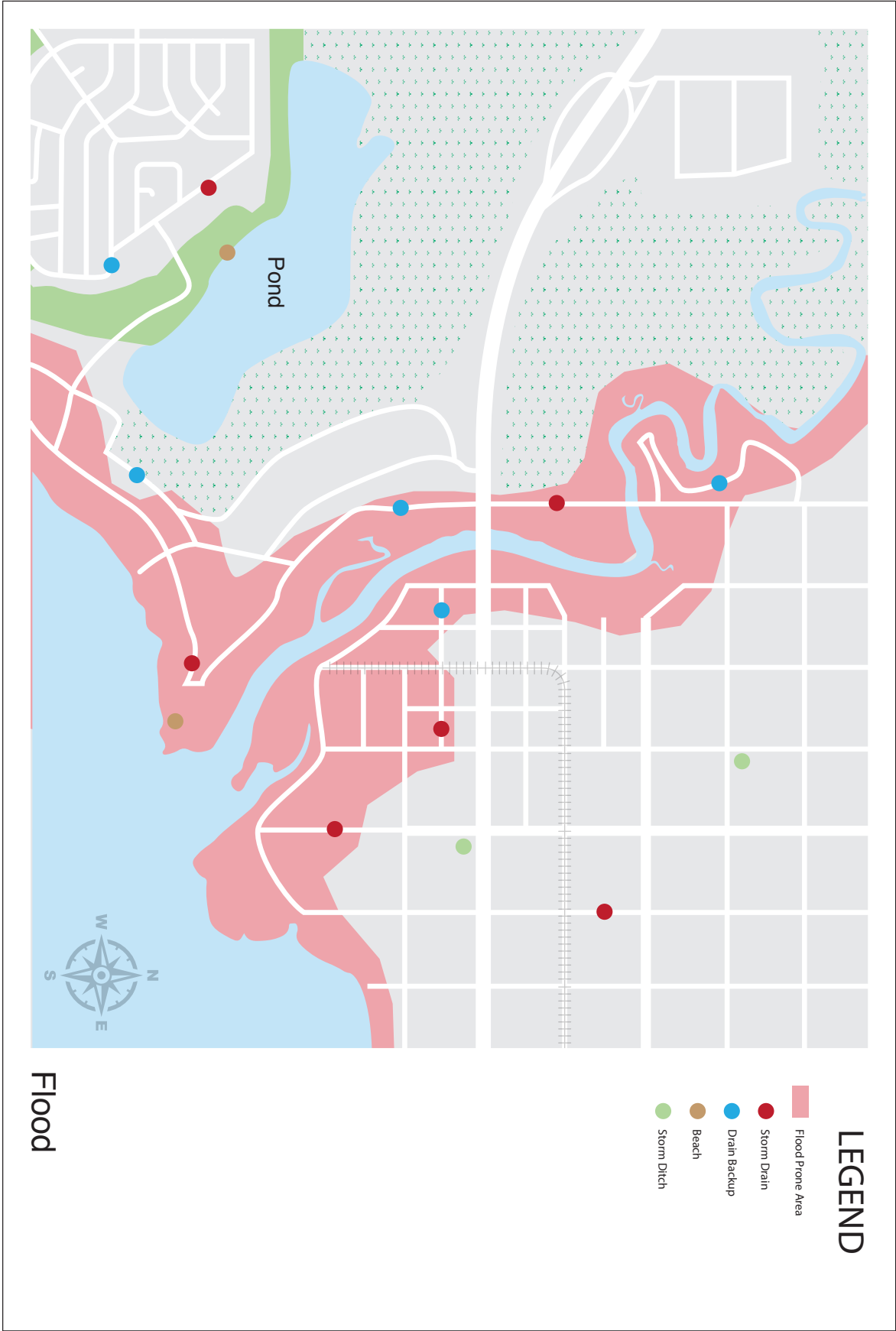
The Planner Code of Ethics states:

“Be conscious of the rights of others; concern for the long-range consequences of present actions; provide timely, adequate, clear, and accurate information on planning issues to all affected persons and to governmental decision makers; give people the opportunity to have a meaningful impact on the development of plans and programs that may affect them. Participation should be broad enough to include those who lack formal organization or influence; plan for the needs of the disadvantaged and to promote racial and economic integration; promote excellence of design and endeavor to conserve and preserve the integrity and heritage of the natural and built environment; deal fairly with all participants in the planning process.”

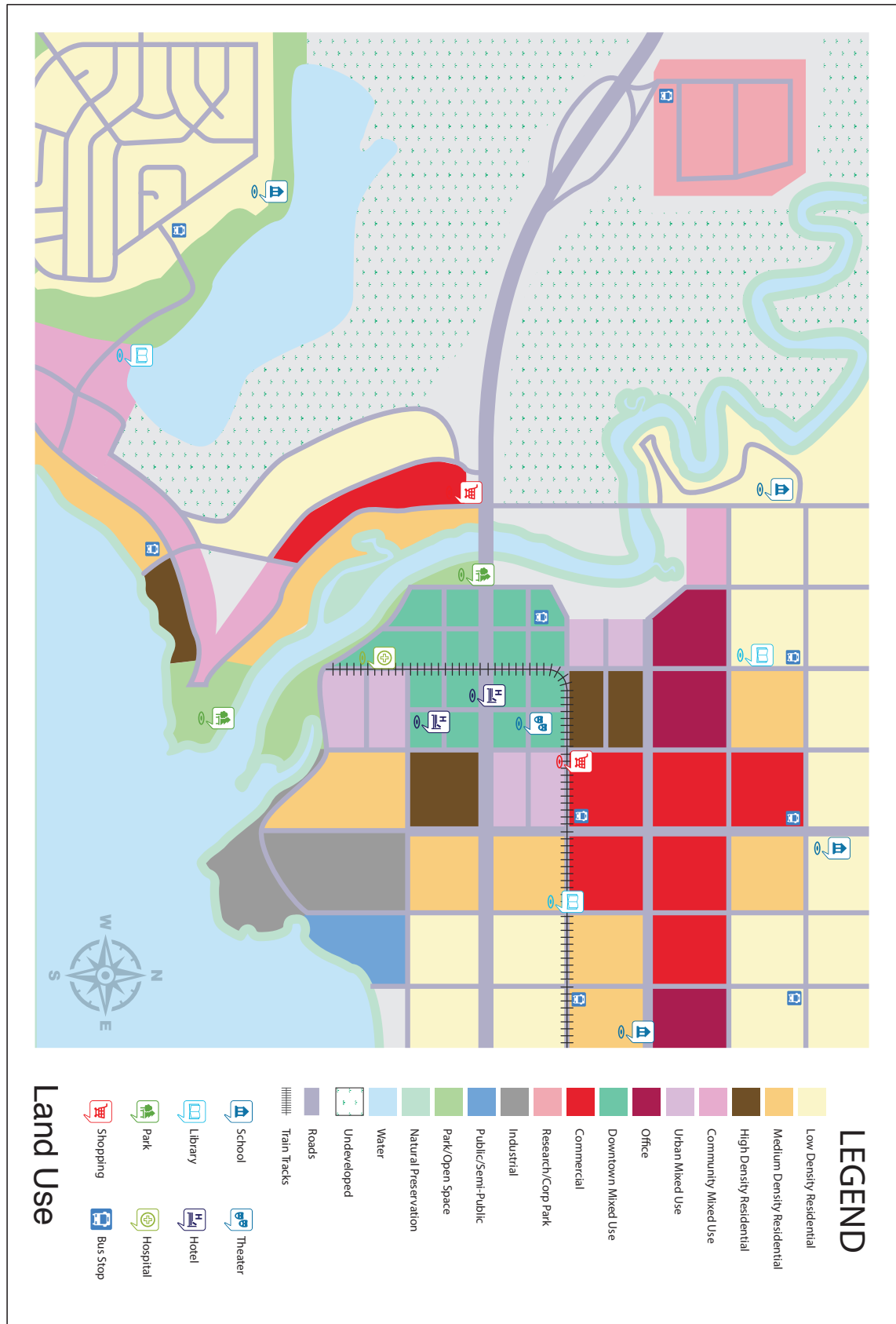
In this scenario, your job is to help the three groups come to an informed decision about how to move forward. You can accomplish this by providing information found in your supporting documentation and advising on solutions.

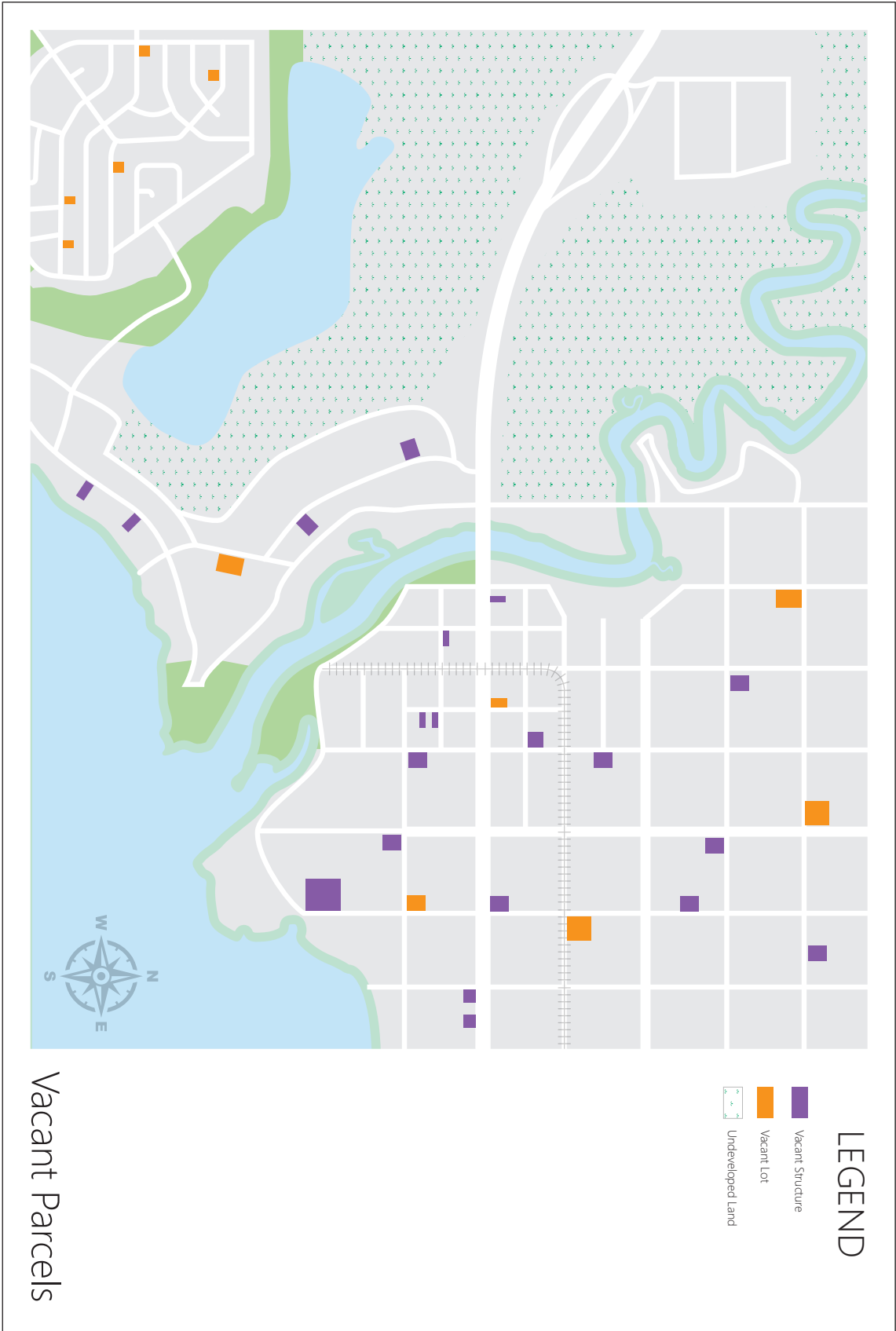
PLANNER: SUPPORTING ASSETS

- Flood Map
- Land Use Map
- Vacant Parcels Map



SCENARIO 3: ENVIRONMENTAL DEGRADATION





COMMUNITY RESIDENTS (BUSINESS OWNERS, INDIVIDUALS, LOCAL ENVIRONMENTAL CONSERVATION ORGANIZATION)

Set the vision for the community through public workshops, surveys, meetings, etc. They let the planners know what they desire for their community. Planners create policy and code based on those ideas. The vision of the community is constantly changing so planners must be nimble and continuously update and refine plans.

BUSINESS OWNERS

In this scenario, you are one of the business owners who is worried about greater regulation that could impact your bottom-line with additional precautions.

Suggested Businesses:

- **Grocery store** – Shoppers can't get into parking lots due to flooding at the entrances during heavy downpours.
- **Coffee shop/café** – Water is flooding the parking lot and at times will be so high it enters the café causing the business to shut down for a day or two to clean up and dry out. This is lost revenue.
- **Restaurant on a local lake** – The lake has seen a massive algae bloom and the smell has become overwhelming to diners. The restaurant is losing business during the summer months because the runoff has created environmental conditions that are toxic to the lake. The restaurant owner doesn't know if he can survive another summer and might have to close for good.
- **Canoe/Kayak Outfitter** – A local kayak/canoe outfitter has seen a major decline in business which he attributes to pollution washing into the river he relies upon for his business. Poor water quality has affected the number of fish and wildlife along the river. Beyond that, there are massive amounts of garbage along the riverbanks that has washed into the river during rainstorms.

RESIDENTS

- **Outdoors person** – You and your family moved to Florida specifically because of the access to clean, beautiful, and inviting natural areas. Several of your favorite species like the manatee and loggerhead sea turtle are already endangered and losing their habitat. You enjoy kayaking with the manatees and would hate to see their numbers dwindle further or for pollution to ruin your favorite landscapes.
- **Beach goer** – Pollution that washes out of the developed areas has started ending up on the beach, ruining the landscape. Some days the local government will issue pollution warnings to swimmers as the water has become unsafe to swim in. The turtle nests that you are used to seeing are almost non-existent these days and many of the birds that used to be found in the area are gone. Your concern is for protecting your favorite beach spot and the activities that you enjoy there.

LOCAL ENVIRONMENTAL CONSERVATION ORGANIZATION

Your main goal is to protect and clean up the water bodies your community relies upon for drinking water and recreation. You are dedicated to making sure citizens, local government, and developers adhere to the local, state, and Federal rules and regulations established to protect the environment. Lately there has not been sufficient enforcement of these rules as all levels of government have seen budget reductions and a lack of staff to monitor water quality and enforce established rules. You feel the local government hasn't been doing a good job educating citizens on how to protect the environment and you fear developers have been given free rein to build whatever they want, wherever they want, however they want.

GOVERNMENT (CITY COUNCIL)

Government is responsible for implementing the vision of the residents. Local government controls the adopted policy and code as well as provides the budget to make the community vision happen. Lack of funds can slow down implementation. Creative governments can succeed at implementing a vision with a limited budget.

CITY COUNCIL:

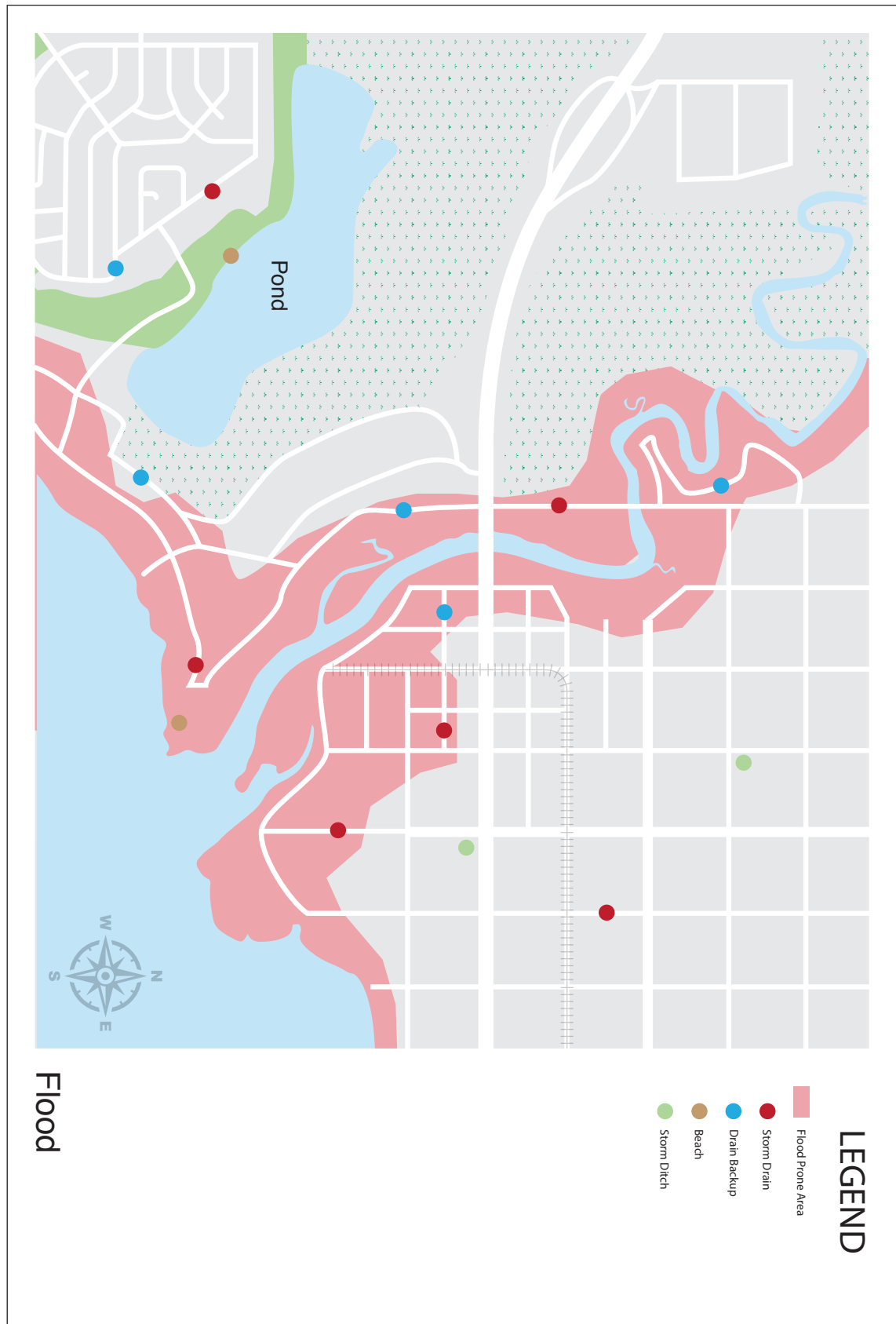
In this scenario, your job is to use the information you have available to guide the discussion, listen, and evaluate the perspectives of those that you are elected to serve. You are also tasked with proposing solutions, should the problem merit action, that are in the community's best interest.

Important Insight:

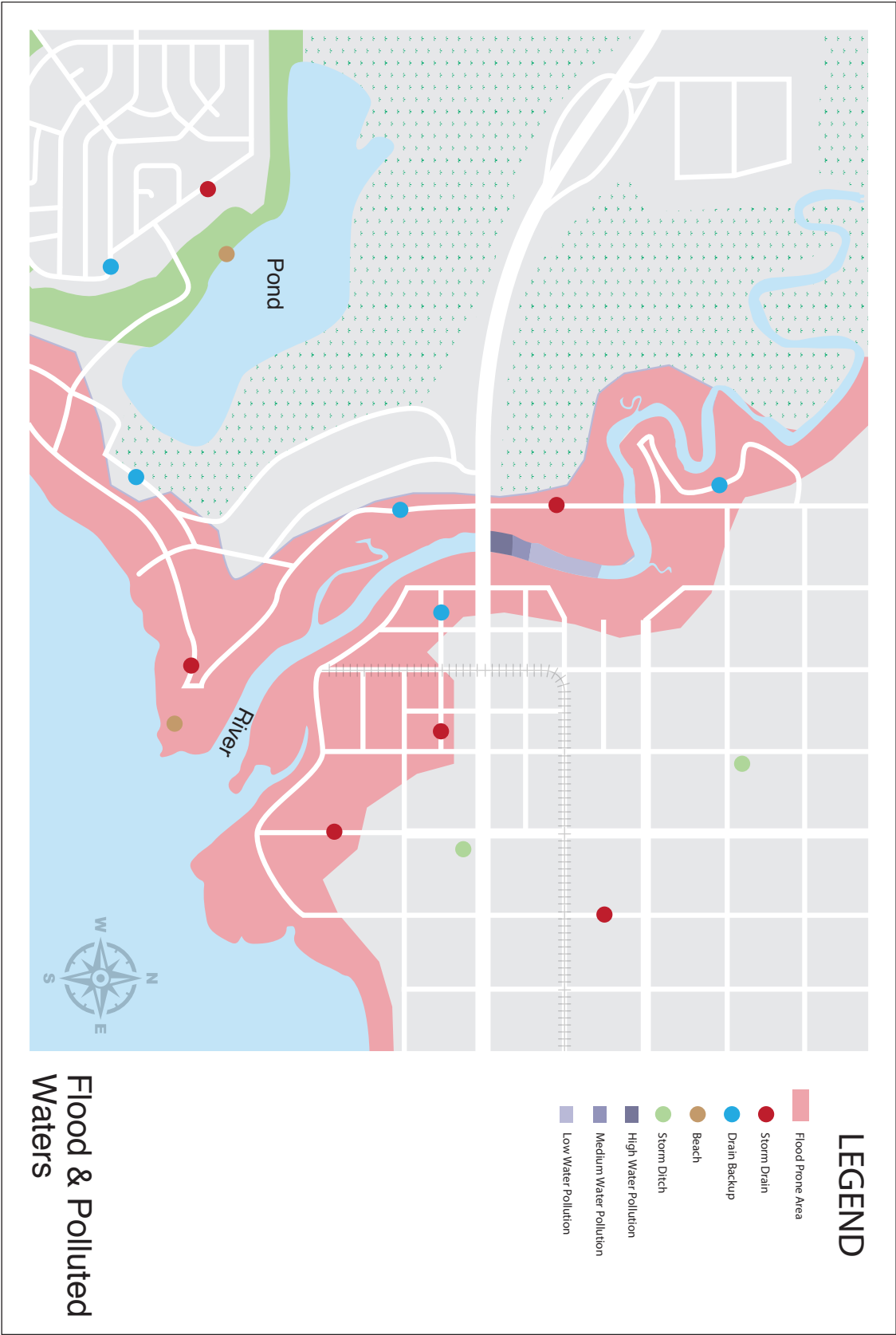
- Make use of your advisors and resource documentation.
- Consider some alternatives for controlling storm water like additional ponds, culverts, larger storm water pipes, treatment areas, etc.

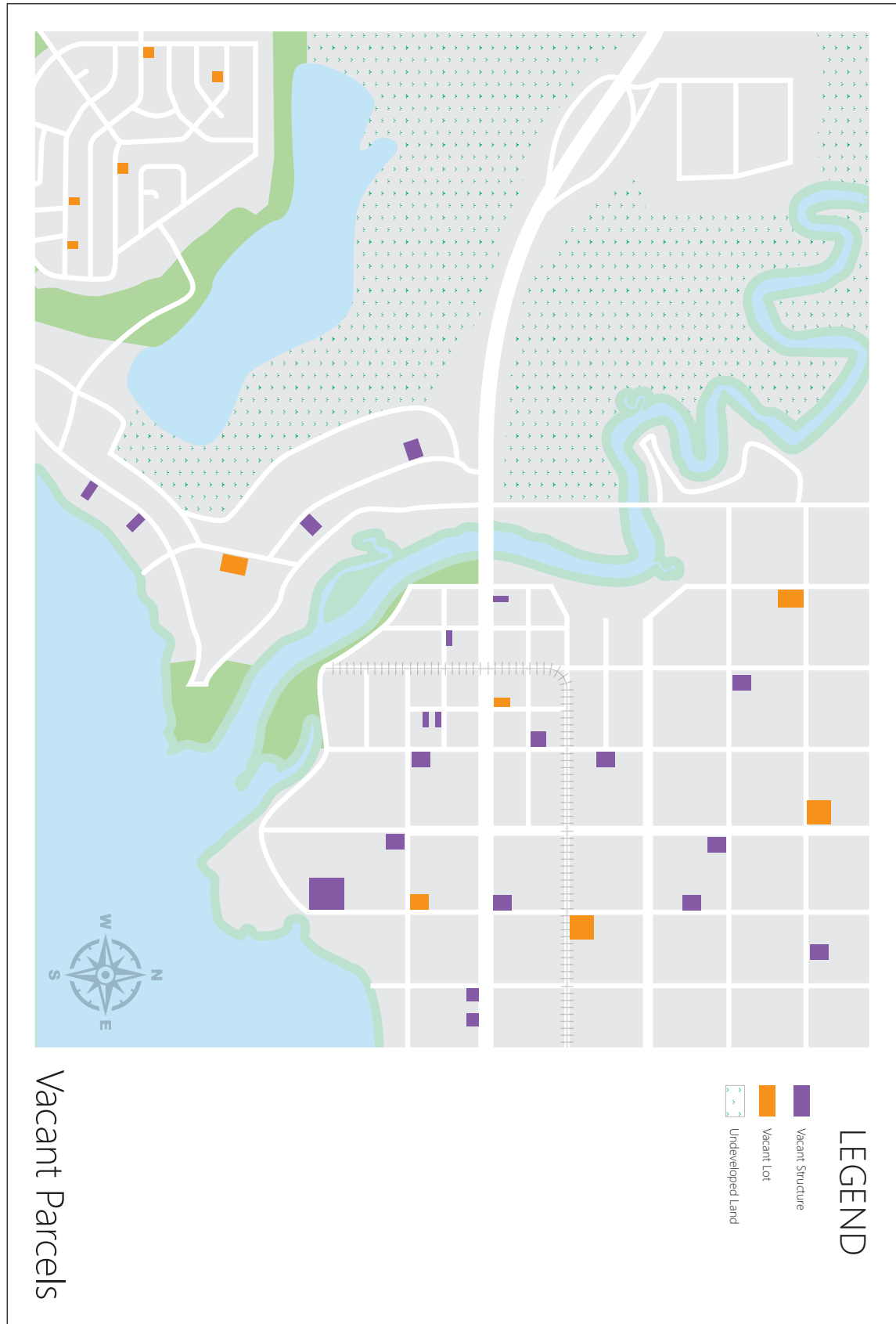
GOVERNMENT: SUPPORTING ASSETS

- Flood Map
- Polluted Waters Map
- Vacant Parcels Map



SCENARIO 3: ENVIRONMENTAL DEGRADATION





DEVELOPMENT RELATED BUSINESSES

These are the players who are on the ground building and putting the vision in place through development and redevelopment projects. Often developers and residents don't see eye to eye on how a community should look and feel. It's up to government to make sure developers are playing by the rules that were put in place to implement the community vision.

In this scenario, your is job to represent your interests as a developer looking to secure work and shape the community to what you see as the best version of itself, which will keep you employed and keep the community happy with what you provide them.

Important Insights:

- Be careful not to oversell projects that will seem outlandish to the government or residents.
- Developers are required by state law to maintain every drop of storm water on the parcel. This is an added cost which for many makes projects unfeasible. Many projects have to integrate unsightly storm water ponds or install storm water vaults to hold the water under their parking lots.
- Many older and urban parts of the city will have exemptions for developers to provide storm water facilities. As cities become denser and we see redevelopment in the urban core, many open fields are now home to multi-story apartment buildings, office buildings, and parking lots. These new developments have led to less pervious surfaces and more storm water runoff.

BREAKDOWN OF PROJECT COSTS

Source U.S. Environmental protection Agency, 2016

Type of stormwater system	Typical Cost (\$/system)	Application
Retention Basin	\$100,000	50-Acre Residential Site (Impervious Cover = 35%)
Wetland	\$125,000	50-Acre Residential Site (Impervious Cover = 35%)
Infiltration Trench	\$45,000	5-Acre Commercial Site (Impervious Cover = 65%)
Infiltration Basin	\$15,000	5-Acre Commercial Site (Impervious Cover = 65%)
Bioretention	\$60,000	5-Acre Commercial Site (Impervious Cover = 65%)
Grass Swale	\$3,500	5-Acre Residential Site (Impervious Cover = 35%)
Filter Strip	\$0-\$9,000	5-Acre Residential Site (Impervious Cover = 35%)



APPENDIX D: COMMON CORE STANDARDS MAPPED TO ACTIVITY

COMMON CORE STANDARDS MAPPED TO ACTIVITY: HIGH SCHOOL

MODULE 01: KEY TO THE COMMUNITY

Time: 8-10 min. + Extension 3-5 min.

Learners use a simplified zoned map to develop a key for the land use.

COMMON CORE STANDARDS

ANCHOR

- CCSS.ELA-LITERACY.CCRA.SL.1
Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-LITERACY.CCRA.SL.2
Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

HIGH SCHOOL

Speaking & Listening

- CCSS.ELA-LITERACY.L.9-10.4
Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9-10 reading and content, choosing flexibly from a range of strategies.
- CCSS.ELA-LITERACY.L.9-10.6
Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CCSS.ELA-LITERACY.SL.11-12.1
Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.



APPENDIX D: COMMON CORE STANDARDS MAPPED TO ACTIVITY

MODULE 02: AS THE PLANNER SEES IT

Time: 15 min. + 5 min Extension

Learners engage in a brief case study and role play type activity to get them thinking about their community from the perspective of a planning professional.

COMMON CORE STANDARDS

ANCHOR

- CCSS.ELA-LITERACY.CCRA.SL.1

Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

- CCSS.ELA-LITERACY.CCRA.SL.2

Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

HIGH SCHOOL

Speaking & Listening

- CCSS.ELA-LITERACY.SL.9-10.4

Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

- CCSS.ELA-LITERACY.SL.9-10.5

Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

- CCSS.ELA-LITERACY.SL.11-12.4

Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

- CCSS.ELA-LITERACY.SL.11-12.5

Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

- CCSS.ELA-LITERACY.SL.11-12.6

Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grades 11-12 Language standards 1 and 3 here for specific expectations.)

Language

- CCSS.ELA-LITERACY.L.9-10.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on GRADES 9-10 READING AND CONTENT, choosing flexibly from a range of strategies.

- CCSS.ELA-LITERACY.L.9-10.6

Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11-12 reading and content, choosing flexibly from a range of strategies.

- CCSS.ELA-LITERACY.L.11-12.6

Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Science & Technical Subjects

- CCSS.ELA-LITERACY.RST.9-10.1

Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.

- CCSS.ELA-LITERACY.RST.9-10.2

Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

- CCSS.ELA-LITERACY.RST.9-10.4

Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to GRADES 9-10 TEXTS AND TOPICS.

- CCSS.ELA-LITERACY.RST.9-10.5

Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., FORCE, FRICTION, REACTION FORCE, ENERGY).

- CCSS.ELA-LITERACY.RST.11-12.1

Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.



APPENDIX D: COMMON CORE STANDARDS MAPPED TO ACTIVITY

- CCSS.ELA-LITERACY.RST.11-12.2

Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

- CCSS.ELA-LITERACY.RST.11-12.4

Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to GRADES 11-12 TEXTS AND TOPICS.

- CCSS.ELA-LITERACY.RST.11-12.7

Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

- CCSS.ELA-LITERACY.RST.11-12.9

Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

MODULE 03: FUTURE IN THE PLANNING PROCESS

Time: 5-10 min.

This closing module will bring the whole class back together to start summarizing and making more explicit what the learners have been discovering during the course.

COMMON CORE STANDARDS

ANCHOR

- CCSS.ELA-LITERACY.CCRA.SL.1

Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

- CCSS.ELA-LITERACY.CCRA.SL.2

Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.