

IPRO 350: Project Plan

1. Team Information

Instructors: _____

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Team Members: _____

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Our Team is made up of architecture students, engineering students, and business students. Together, we will use our courses of study to analyze the problem from all points of view.



2. Team Purpose and Objectives

The Urban Wood Reclamation project is an enormous movement that has a great number of current supporters and the promising future of many more. Our objectives will work in conjunction with the grand scheme of the project. Overall, our combined purpose is to promote the use of reclaimed timber. In this IPRO, we would like to study the finer details of the project. We will discuss the grand picture as well as the minute details with experts in the field. In the end, we hope to be one step closer to our goal of awareness.

3. Background

Our IPRO has been tasked with working to study Urban Timber, and its many possible uses. We will research Urban Timber from all aspects in order to be one step closer to solving the issue of “Urban Timber”, and its potential to be harvested or reclaimed into a myriad of beneficial uses. Urban Timber is defined as *any timber located in an urban or sub-urban area that must be removed*. Obviously, with the amount of building and development taking place in these areas, this quantity of timber is sizable. Currently, these trees are either cut down and disposed of (into landfills), or turned into low quality products (primarily mulch for landscaping). Our IPRO aims to pinpoint what companies, nonprofit organizations, schools, or government entities are interested and able to use the harvested/reclaimed timber, so as to put this timber to better use. Maximizing the use of this timber is a top priority of our IPRO. Examples include but are not limited to: Wood pallets for use in shipping, wood veneer and solid lumber for use in furniture, as well as heavy timber for use in construction.

At the moment, Ash Trees infected with the Emerald Ash Borer are forced to be removed all over Illinois and the Midwest. This action is taken to reduce the spread of the Ash Borer and it creates a surplus of usable Ash Timber.

By analyzing current markets for timber/wood products, our IPRO will key in on the most economical methods the communities of **Oak Park, Wilmette,** and **Evanston** can utilize to put these potential wood products to best use. While previous efforts by past IPRO's have been primarily concerned with infected Ash trees, our IPRO team will expand on all types of urban timber.

Our main concern, specifically with regards to the Emerald Ash Borer, is the utilization of the timber in a manner which minimizes/eliminates any potential for the insect to spread to other trees. This is of primary concern, since according to the WUT; the Emerald Ash Borer has been steadily gaining ground in previously unaffected areas via transfer in ash products such as firewood.

Equally as important in our study are the actual methods of harvesting the timber. Potential customers have historically shown an unwillingness to deal with urban timber due to the presence of metal objects (nails, fencing, etc.). These metal objects have the potential to damage equipment throughout the timber processing.

Our IPRO will create a business plan to address all of the aforementioned issues/concerns. Our IPRO will therefore strive to create a viable business structure which will encompass not only how to deal with the previously mentioned issues, but by finding the best uses for these timber products based on market oriented methods, thereby ensuring that these wood products are put to the best possible use.

By working in conjunction with **WUN, WUT, the WUT Guidance Committee,** as well as with the respective Chicago municipalities, our IPRO will conduct a feasibility study, as well as a cost benefit analysis of all urban timber to ascertain the best possible use of these wood products.

IPRO 497-350 is working in tandem with our customer/sponsor, which includes the following parties:

The Illinois Emerald Ash Borer Wood Utilization Network (WUN), which is a loose network of over 100 individuals who are interested in finding a solution to the problem of infestation by the Ash Borer beetle, which is an invasive species of beetle currently affecting ash trees in Ohio, Illinois, Indiana, Pennsylvania, West Virginia, Missouri, Wisconsin, Virginia, Ontario, and Quebec.

The Illinois EAB Wood Utilization Team (WUT), which is our IPRO's main sponsor, consists of 14 individuals who comprise the EAB's decision making body. The Illinois EAB is a subdivision of the Illinois Department of Agriculture concerned with the prevention of further infestations by the Emerald Ash Borer.

WUT Guidance Committee is a committee of wood marketing experts who were brought together specifically to aid the IPRO team in the project.

Our customers/clients are the Chicago communities of **Oak Park, Wilmette, and Evanston**, which are the locations where our IPRO will be conducting feasibility studies to determine future course of action(s) with respect to our IPRO project.

4. Team Values Statement

Our IPRO team is composed of many disciplines working towards achieving our goals. The following is the overall structure our IPRO will employ in order to best organize ourselves, as well as to resolve any issues that may arise during the course of our project:

- All members are expected to be present at all scheduled meetings, unless otherwise noted. Schedules of availability among the different members of the team will ensure that all scheduled meetings are made to accommodate all members of the team. (If a member is not available due to time conflicts with other conflicts, respective team leaders need to be notified in advance, no less than 24 hours prior to a scheduled meeting).
- All members will work with their respective team leaders to accomplish scheduled tasks on time, any inability to accomplish a given task should be brought up with the respective team leaders in order to reassign or accommodate the team member.
- Any issues, whether they are class related or personal, shall be discussed among team leaders. If team leaders are not able to accommodate, the overall team leader shall oversee responsibility for addressing these issues. In the event the overall team leader is unable to resolve the issue, the IPRO instructors will be on hand to deliver assistance.
- All members shall respect other members in order to provide a conducive environment to achieving the IPRO's goals.

5. Methodology/Brainstorm/Work Breakdown Structure

This section of the report explains in task orientated sequential terms how we will conduct the project.

A. There is an enormous amount of wasted wood resulting from urban construction and development, as well as from trees that need to be cut down due to the Emerald Ash Borer.

B. Our team will explore the possible target markets that exist for reclaimed wood, as well as investigating how much wood on average is wasted, the logistics involved in transporting that wood and the possible different uses for that wood based on quality.

- *Our team has organized into three sub-teams with one overall team leader and three respective sub-team leaders. Each of the three sub-teams will work in collaboration with one another and independently of each other within three communities throughout the Chicago-land area. Our sub-teams will engage community leaders within our respective cities and work with the Wood Utilization Team to assist us in determining who handles wood reclamation, the process of cutting down wood in urban areas, potential quality and quantities of urban wood and related uses for that wood. Based on our research, we will then determine the feasibility of such an entrepreneurial business venture and whether a large enough market exists to be profitable.*
- *Aside from working closely with community leaders in Oak Park, Wilmette, Evanston, and the Wood Utilization Team, our IPRO team will engage possible target markets to determine the interest in using reclaimed wood for different types of building projects, which include both structural and non-structural applications for reclaimed wood.*
- *Given that we are all full-time students, some of whom work as well as study, it would not be unreasonable to assume that this EnPro may need to continue on for another semester to determine what steps to take moving forward from the Market Feasibility of a Reclaimed Urban Wood Entrepreneurial Business Venture. The Market Feasibility Study this EnPro creates should be construed as nothing more than the foundation with which to create a strategic business and marketing plan in the future.*

C. Solutions for using what is now wasted urban wood will most certainly involve determining who the end users/purchasers will be.

- *Our groups' main focus should be on the market, and whether products of value can be made from reclaimed urban wood. If there is no viable market for reclaimed urban wood, determining amounts and qualities are not necessary. An equal amount of time, if not more, should be devoted to determining the markets that exist within the wood industry, and the size of those markets in numbers.*

C. We will use *Google Documents* and *iGroups* to maintain records of our interviews and the research we conduct, as well as compiling a detailed bibliography to appropriately site the sources we utilize.

- *Each group member is responsible for obtaining a google gmail account to access google documents, as well as for tracking their individual time spent working on task specific assignments in igroups.*

D. IPRO deliverable reports will be generated using a combination of both igroups, and google documents, by specific agreed upon times, which will allow designated sub-team leaders, or, our overall team leader to submit them to the IPRO office.

- *Our team will determine appropriate times to have sub-team meetings at least once per week, as well as conducting meetings among the entire group to ensure timely delivery of the necessary IPRO deliverables. These meetings will be outside of, and in addition to classroom time with our respective IPRO advisors.*

E. Our Market Feasibility Study (Opportunity Assessment) must contain the following information for our sponsor:

1. *Cover page*
 - a. *Name of product*
 - b. *Name of team members*
2. *Table of contents*
3. *List of tables/figures*
4. *Executive Summary*
5. *Introduction*
 - a. *Product overview*
 - b. *Opportunity statement*
6. *External analysis*
 - a. *Industry overview*
 - b. *Market analysis (local, state, national, international)*
 - c. *Target Market*
 - d. *Customer Profile*
7. *Analysis of internal resources, needs and capabilities*
 - a. *Resources and capabilities*
 - b. *Strength, weaknesses, opportunities and threat analysis*
8. *Business planning and objectives*
 - a. *Product positioning*
 - b. *Purchasing scenarios*
 - c. *Profit and financial analysis*
9. *Conclusion*
10. *Bibliography*
11. *Appendix*

6. Expected Results

IPRO 350's primary task is to gather pertinent information relating to the use of Urban Timber. We will collect information to produce a market-feasibility study. Our main target locations include: Wilmette, Evanston, and Oak Park. We will meet municipal leaders, local businesses and other experienced parties to gather reliable information. These sources include (but are not limited to) the Wood Utilization Team. In the future, our market-feasibility study will help to determine the possible formation of a real business venture.

One possible business idea is the creation of an online marketplace to match owners of urban timber with businesses that can process that timber. These businesses could include artists, manufacturers, and furniture makers.

Our potential outputs through the execution of assigned tasks are to gain knowledge of the potential market for urban wood products, including an industry overview, market analysis (three municipalities: Wilmette, Oak Park, and Evanston), target market analysis, customer profile, an analysis of resources and capabilities, product positioning, a SWOT analysis, and a financial analysis.

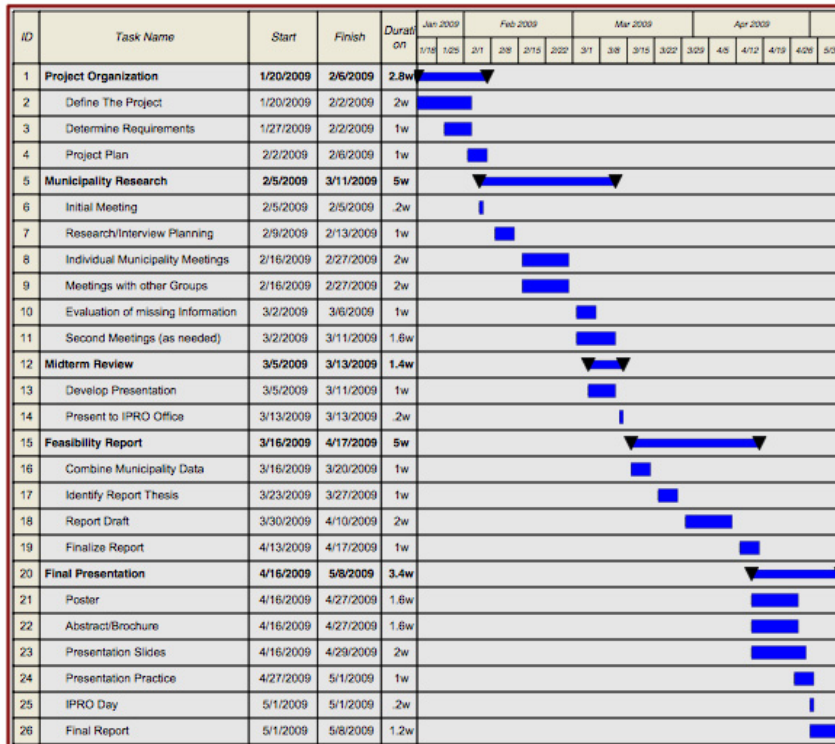
Our deliverables will include a finished opportunity assessment detailing the feasibility of proposed uses for urban wood. In addition to the general uses, we will detail the potential quantity, quality, and uses of the urban wood. Also included is a comprehensive cost benefit analysis, and a proposed preliminary course of action with respect to the use of urban wood.

We anticipate several difficulties throughout this process including the very limited existing infrastructure and the nuances of each municipality. This customization for each municipality will most likely be our biggest challenge. It is expected that each municipality will have their own policy in regard to timber. Hopefully, our input might be able to provide some consistency across these municipalities.

7. Project Budget

Item	Unit Price	Quantity	Tot. Cost	Total Price Description
Transportation to Municipalities	\$2.50pre 20miles	420miles	\$52.50	Driving to municipal clients
Transportation to Municipalities	\$3.35 to \$5.65	9 one-way	\$45.00	Metra to municipal clients Joliet and Evanston
Reading Materials	\$70.00	1	\$70.00	Needed reading materials suggested by clients
Meeting expenses	\$25.00	3	\$75.00	Meeting and presentation materials for client meetings
Modeling materials	\$100.00	n/a	\$150.00	Model construction
Testing and Analysis	\$200.00	n/a	\$200.00	Testing, Product research, etc.
Total Cost: \$592.50				

8. Schedule of Tasks and Milestone Events



9. Individual Team Member Assignments

A. Team Leaders

Team leader is Phillip Haywood. In addition, there are three sub-group team leaders, one for each sub-group.

Team advisors are:

Nik Rokop:

Big picture viewer, entrepreneurial side of the project.

John Stoner:

Administrative details, law consultation.

B. Sub-teams

The purpose of sub-groups is to distribute team effort over the municipalities that are interested in our team's activity. Every sub-group was formed in order to keep diversity to maximize interprofessional experience – one business major, one architecture major and one computer science\computer engineering major is present in each group. Every sub-group has its own leader and the groups are the following:

Evanston Team

- Jesse Stepniewski
- Philip Haywood
- Maksym Ostapenko

Wilmette Team

- Joshua Cabrera
- Keegan Springfield
- William Perkins

Oak Park Team

- David Connelly
- Nic Sahm

C. Sub-team Leaders

- David Connelly
- Joshua Cabrera
- Jesse Stepniewski

D. Sub-groups Responsibilities

Every sub-group has to produce a market research document from information provided by municipalities in order to contribute to the development of market feasibility study. In general, the following information must be taken from each municipality:

- What sources does the municipality have for urban wood?
- How does the municipality use collected urban wood as of today?
- What amount of wood can municipality supply?
- And other applicable information that will help in creating feasibility report...

E. Individual Team Member Assignments

Name	Major	Year/Level	Skills	Assignments
David Connelly	Finance, construction management	4 th	Knowledge of wood working, business planning, MFS and OPASS research.	Project plan, municipality interview/research, sub-team leading, market research, final presentation.
Philip Haywood	Architecture	4 th	Cabinetmaker and furniture building, desktop publishing.	Project plan, municipality interview/research, overall leading, final report, brochure, final presentation.
Maksym Ostapenko	Computer Information Systems	3 rd	Web-development, programming.	Project plan, municipality interview/research, midterm presentation, final report, final presentation.
William Perkins	Computer Science	3 rd	Programming.	Project plan, municipality interview/research, midterm presentation, final report, final presentation.
Nicholas Sahn	Architecture	5 th	Team building skills, entrepreneurship, architecture, cad, design.	Project plan, municipality interview/research, midterm presentation, market research, poster, final presentation.
Keegan Springfield	Business	3 rd	Knowledge of urban wood, online sales.	Project plan, municipality interview/research, midterm presentation, market research, final presentation.
Jesse Stepniewski	Business	3 rd	Market research, business planning.	Project plan, municipality interview/research, sub-team leading, market research, final presentation.
Joshua Cabrera	Architecture	4 th	AutoCAD, 3D MAX, Sketchup, Photoshop, Illustrator, Flash, Dreamweaver, Ms Office...etc	Project plan, municipality interview/research, sub-team leading, final report, poster, final presentation.

10. Designation of Roles

Meeting Roles:

Minute Taker: Nic Sahm

Agenda Maker: Keegan Springfield

Time Keeper: Jesse Stepniewski

Status Roles:

Timesheet Summarizer: William Perkins

Master Schedule Maker: Jesse Stepniewski

IGroups Organizer: Maksym Ostapenko