

The Economics of Land Use



Report

Austin [re]Manufacturing Hub Feasibility Analysis

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City of Austin

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1. EXECUTIVE SUMMARY

Introduction

Economic & Planning Systems, Inc. (EPS) was retained by the City of Austin (City) to evaluate the feasibility of developing the [re]Manufacturing Hub (“the Hub”) at 10108 FM 812 in Austin, Texas, as well as propose additional options to develop this concept. In this Report, EPS explores the financial feasibility of developing the Hub given currently anticipated sources and uses of funds, outlines the hypothetical options for closing or reducing financing gaps, and identifies alternative methods of achieving the goals of the current Hub concept.

Overview

Austin has been exploring ways to grow the recycling and remanufacturing industry for several years. Austin Resource Recovery’s Master Plan approved by City Council in 2011 included the concept of creating a specialized industrial park, and City staff has been pursuing this idea ever since through various research and planning efforts. In 2014, the City retained TXP, Inc. to study existing recycling facilities and the industry’s potential growth and economic impacts in the Austin area. City staff and EPS also visited the Edmonton Waste Management Centre in 2015 to observe and explore the most established Hub-like facility in North America. These and other due diligence efforts by City staff and consultants led to the City’s formulation of an initial Business Plan for the Austin [re]Manufacturing Hub in Fall 2015.

The original concept for the Austin [re]Manufacturing Hub was to turn 105 undeveloped City-owned acres at 10108 FM 812 into an eco-industrial park for recycling and reuse-related manufacturers with the City of Austin acting as the master developer. The City of Austin planned to invest directly in basic infrastructure and site preparation, and offer ground leases to recycling and reuse tenants at discounted rates based on community benefit performance measures. These tenants would then build their own facilities on their ground-leased tracts. The project was intended to create living wage jobs, especially for the hard to employ, and to advance Austin’s Zero Waste goal by providing an affordable real estate option for manufacturers that could help close the loop on recoverable materials locally. The City planned to require contractors and subcontractors to pay prevailing wage, to comply with worker safety training and the M/WBE program, and to require tenants to pay a living wage to their employees and all would submit annual waste diversion reports.

Based on City Council discussions and direction in late 2015-early 2016, this original plan has been amended. While the overall vision for the Hub remains the same, the current concept (“Current Concept”) for developing the Hub is a public-private partnership (P3) that would utilize the expertise and capital of a private developer, rather than the City serving in the master developer role. The City of Austin has used P3 models to great success in the 2nd Street District, Seaholm District and Mueller Redevelopment, among others. In addition, City Council specified new requirements that would be incumbent upon the private partner for the Hub (see details in Section 3).

Summary of Findings

- 1. Comparable projects in Canada and the USA all require substantial public subsidies and face ongoing financial challenges.** Comparable Hub-like industrial parks and programs identified by City staff were found at three operations: the ReVenture Park in North Carolina; the Edmonton Waste Management Centre in Edmonton, Alberta, Canada; and the Cabazon Resource Recovery Park in California. While there is no exact match for Austin's Hub concept plan, each of the operations shares the goal of supporting green industries through the development of an industrial park. The main takeaway relevant to this analysis is that each of the comparable projects requires public financial support in some form because such projects are infeasible with only private investment.
- 2. The Current Concept plan for the Hub is not financially feasible for two reasons: the cost of providing infrastructure to the site and the impact of City regulations and restrictions.** The identified Hub site at 10108 FM 812 is largely unimproved on the edge of city limits and requires an estimated \$7.5 million in horizontal infrastructure, of which \$2.37 million will be provided by the City for an exterior waste water line. The remaining \$5.13 million in onsite infrastructure costs would be a large, upfront investment for a private developer to cover if the tenants were expected to pay market rate ground lease rents. Even assuming favorable repayment terms, the annual debt service on these infrastructure costs is estimated to be \$530,000 for 20 years, nearly the amount that could be expected from ground lease revenues at market rates for industrial land. In addition, the City's requirements regarding eligible tenants, wages, purchasing and sustainability increase costs and risks of developing and operating the Hub, and thus reduce the expected ground lease revenue to well below the market rates for industrial land.

Figure 1 Annual Hub Operating Budget - Sources and Uses for Current Concept

Item	Total
<u>Sources</u>	
Estimated Ground Lease Revenue at Buildout	\$138,887
<u>Uses</u>	
Operating Costs	\$87,680
Debt Service for Infrastructure (for 20 years)	<u>\$530,000</u>
Uses Subtotal	\$617,680
Estimated Annual Operating Gap	(\$478,793)

EPS estimates the discounted ground lease revenue to sum to \$138,000 per year at full occupancy (2017 dollars), of which roughly \$88,000 is required for ongoing operations and maintenance. As noted above, the annual debt service for \$7.5 million in necessary infrastructure is \$530,000. In conclusion, ground lease payments from the Hub tenants are projected to cover the project's ongoing operating costs, but cannot cover the total costs of the infrastructure. If a private developer were to take on a 40-year lease to develop and

manage the Hub without additional subsidy. EPS estimates that the net present value of the Hub cash flow over 40 years is negative \$5.4 million. In EPS's opinion, no profit-oriented private developer would be attracted to this opportunity without major subsidy.

- 3. The financial gap posed by the Current Concept would require significant additional public investment and the restructuring of the project's numerous goals.** In order to attract a private partner, public investment is needed to help finance the Hub as currently conceived. Interest-free funding could come in the form of a federal or state grant, but typically requires matching funds from the City which have been difficult to secure. Alternatively, the City could explore low-interest financing mechanisms to improve the project's financial feasibility. However, the fundamental challenge is that the project's estimated ground lease payments, even at full occupancy do not generate sufficient funds to cover operating costs and debt service while also generating an attractive return on investment for a private partner. Given the proposed structure of the Hub, it is appropriate to think of public funding as a grant or ongoing obligation of Austin taxpayers or ratepayers, rather than as bridge financing for a temporary shortfall in Hub project revenues.

As currently envisioned, all Hub tenants must engage in business or research related to the recycling of waste materials. Allowing a broader array of green or general industrial businesses at the Hub expands the tenant pool and may make leasing easier, reducing the risk of development for the Master Developer and lender. In addition, the City has established a number of requirements for a master developer and tenants at the Hub, such as wage, hiring, and green building standards (see Section 3). These requirements are not industry standards and thus introduce additional costs, further reducing achievable ground lease revenue. As an alternative approach, the City may wish to structure a competitive bid process that does not set minimum requirements during the solicitation, but rather awards points to developers according to their willingness to comply with desired City requirements. Any elements included in a developer's proposal would then be incorporated into a master development agreement and enforced contractually. By structuring the proposal as voluntary, the City can award points – similar to a density bonus program -- and achieve priority goals while testing what the market will bear.

- 4. Other lands may be more suitable for a pilot Hub if they could be developed without incurring all the costs or risks of the Current Concept plan.** The City and of course the private sector control other sites suitable for industrial development that are already served by basic infrastructure, and thus would not require the same level of upfront investment required for the planned Hub site.
- 5. The City could create or expand incentive programs to financially support Hub-type tenants on private land.** The City could create a cost reimbursement incentive that reduces the added development costs associated with meeting the environmental and economic development goals for Hub-type tenants. Should the City secure funding for such a program, the construction of new, Hub-type businesses could be supported on a competitive basis. Alternatively or in addition, private industrial land or building owners could be incentivized to lease to desired remanufacturing tenants by funding the difference between market-rate rents and those supported by Hub-type tenant operations. In either case, the subsidies would be contingent on the recipients meeting reporting and performance requirements reflecting the environmental and economic development goals of the Hub.

Because these funds would be deployed directly to subsidize Hub-type tenants rather than for a speculative real estate development like the Hub, the City's risk would be significantly reduced compared to the Current Concept.

Figure 2 below summarizes the results of this feasibility analysis by assessing the degree to which each of the proposed alternatives addresses the City Council's six stated goals for the Hub project.

Figure 2 Alternatives and Principles Matrix

	Zero Waste	Environmental Stewardship	Inclusive Economic Development	Financial Feasibility	Compatibility	Adaptive Reuse	Notes
Current Concept: Lease land at 10108 FM 812	●	●	●	○	●	●	- Prioritizes businesses in the desired industries to reduce/reuse - Requires new construction to meet green building standards - Requires prevailing wage for construction, living wage for employees, and other hiring goals - Ground lease revenues not expected to cover O&M and capital costs over a 20-year period, thus requiring subsidy - Desired activities do not conflict with local land use patterns or regulations - Reuse of a former landfill, improving upon an undesirable land use
Modification A1: Reduce restrictions by eliminating prevailing wage requirement.	●	●	◐	◑	●	●	- Prioritizes businesses in the desired industries to reduce/reuse - Can still require green building standards - Requires living wage, local hire, and hard-to-employ jobs, but not prevailing wage for construction labor - May reduce development costs by roughly 7 percent - Desired activities do not conflict with local land use patterns or regulations - Reuse of a former landfill, improving upon an undesirable land use
Modification A2: Reduce restrictions on tenant type by allowing more types of industrial tenants.	◐	●	●	◑	●	●	- Allows a mix of businesses, not all of which are in the desired industries to reduce/reuse materials - Can still require green building standards of other tenant types - Can still require all hiring and wage criteria of other tenant types - Can reduce risk profile and increase ground lease revenues, reducing subsidy needs - Desired activities do not conflict with local land use patterns or regulations - Reuse of a former landfill, improving upon an undesirable land use
Alternative B1: Use other publicly owned land that does not require major infrastructure improvements.	●	●	●	◑	●	?	- Prioritizes businesses in the desired industries to reduce/reuse - Can still require green building standards - Can still require all hiring and wage criteria of other tenant types - Can reduce or eliminate infrastructure costs and related subsidy needs - Can still require compatibility - It is possible that underutilized or undesirable land will be reused, but unknown at this time
Alternative B2: Sell publicly owned land to generate funding for Hub.	●	●	●	◑	●	?	- Prioritizes businesses in the desired industries to reduce/reuse - Can still require green building standards - Can still require all hiring and wage criteria of other tenant types - Can still require compatibility - Can reduce or eliminate infrastructure costs and related subsidy needs and potentially gain revenue - It is possible that underutilized or undesirable land will be reused, but unknown at this time
Alternative C1: Support new business construction through direct subsidy.	●	●	●	◐	●	?	- Prioritizes businesses in the desired industries to reduce/reuse - Can still require green building standards - Can still require all hiring and wage criteria of other tenant types - Eliminates infrastructure costs, but requires subsidy - Can still require compatibility - It is possible that underutilized or undesirable land will be reused, but unknown at this time
Alternative C2: Support existing Hub-type business rent.	●	◑	●	◐	●	?	- Prioritizes businesses in the desired industries to reduce/reuse - Can only support businesses with green building standards, may be a limited supply - Can still require all hiring and wage criteria of other tenant types - Eliminates infrastructure costs, but requires subsidy - Can choose to only support businesses on compatible land - It is possible that underutilized or undesirable land will be reused, but unknown at this time

2. DESCRIPTION OF PROJECT

Background

In December 2011, the Austin City Council approved the Austin Resource Recovery Master Plan, which sets the Zero Waste goal that 90 percent of discarded materials will be diverted away from the landfill or incineration by 2040. The Council-approved plan calls for the City to create a specialized industrial park that will host businesses and non-profit organizations that can convert recyclable materials (or industry raw materials) into new products (see page 136, Austin Resource Recovery Master Plan) on the undeveloped acres at the site of the City's former landfill on FM 812. The [re]Manufacturing Hub ("the Hub") is envisaged to be a community of manufacturing and service businesses seeking enhanced environmental and economic performance through collaboration in the management of waste, energy, water, and raw materials.

The Hub aims to grow local recycling manufacturing markets for the vast amounts of recyclable materials that are expected to be collected under the new policies and programs of the Zero Waste Master Plan. The Universal Recycling Ordinance requires businesses to provide recycling access for tenants and employees, and the Construction and Demolition Recycling Ordinance requires that construction projects larger than 5,000 square feet divert at least 50% of their debris from landfill.

Many of the materials that are currently recycled are sorted, baled, and transported outside of Austin and Central Texas, traveling across the U.S. and to overseas. Austin has a difficult time attracting and retaining recycling-related businesses because of high land costs and competition for attractive space in the City limits and its extra-territorial jurisdiction. It is the City's hope that the Hub will provide Austin a competitive advantage for attracting these firms and act as a catalyst for innovative businesses, whether starting-up, expanding, or relocating to Austin. Through the Hub, the City hopes to capitalize on opportunities to support businesses that can utilize would-be waste and convert it to value-added products. A key driver of the interest in the Hub is the opportunity to offer affordable space to a targeted green industry sector to create new green jobs and site new green businesses in Austin. Building these markets locally can also reduce transportation costs and impacts and grow investment in the recycling sector.

[re]Manufacturing Hub Current Concept

The Hub project has leadership in both the City's Economic Development Department and Austin Resource Recovery (ARR) and reflects the key principles from both departments' missions. The July 26, 2016 memorandum from City staff to City Council established six overarching goals for the Hub to guide this analysis and subsequent developer selection process. This report will compare and contrast the Current Concept plan with several alternative scenarios, ranking them against these six principles.

Project Principles

1. *Zero Waste* – Maximize local remanufacturing, i.e., the value-added processing and manufacturing of would-be waste into new products. Tenants must be willing to submit an annual report of volumes of diverted waste from landfills to prove their commitment to the City's Zero Waste goal.
2. *Environmental Stewardship* – The City desires to maximize the project's environmental stewardship and to further green industry innovation. Hub tenants will need to construct in a manner that meets LEED rating standards.
3. *Inclusive Economic Development* – The City wishes to maximize the number of jobs created by the project, with an emphasis on middle-income jobs and jobs available to hard-to-employ individuals. In addition, the City wishes to maximize the number of employees hired from Austin MSA census tracts that are largely low-income or have high unemployment, especially census tracts encompassing or adjacent to the current Hub. The City hopes to minimize the employment of temporary workers at the Hub. Finally, the City wishes to maximize construction worker safety and career advancement opportunities through Better Build certification or equivalent programs.
4. *Financial Feasibility* – The project needs to be financially feasible with reliable revenue sources that are expected to cover the short- and long-term costs of constructing and operating the Hub.
5. *Compatibility* – The Hub must be placed where the site's industrial activities are consistent with zoning and overlay regulations, and are compatible with nearby land uses.
6. *Adaptive reuse* - Ideally, the Hub will revitalize currently unproductive or underutilized land.

In addition to the six principles listed above, City Council desires the structure of the project to be a public-private partnership (P3). This structure is commonly used to share risks and achieve mutually beneficial rewards for both government and private developer. City Council has not provided detailed requirements for the structure of the P3. Staff engaged EPS to provide independent analysis of the Current Concept and offer options for a P3 structure and other alternatives involving the private sector. EPS has been involved in P3 developments in Austin and throughout the United States, and is familiar with both public sector and private industry standards for investment in such projects.

Central Texas Recyclable Materials Processing

The City of Austin currently contracts with two private recycling businesses for the processing of single stream recyclable materials from residents and smaller business accounts. These two businesses, Balcones Resources, Inc. and Texas Disposal Systems, Inc. (TDS), receive materials from the City at their Materials Recovery Facilities (MRFs). As a result of the *C&A Carbone, Inc. v. Town of Clarkstown, New York Supreme Court Decision* case in 1994, the City is unable to direct the use of such material thereafter if not specifically required in the service contract. As of Spring 2016, the City of Austin had just re-approved the contracts with Balcones and TDS for the next 15 years without such provisions, and hence, cannot require that the current contractors

offer these materials to be used at the Hub unless the contract terms are renegotiated. The next reset (re-negotiation) period for the contract is in 2020.

Even though all Austin single stream recyclable materials are privately controlled once they reach a MRF, the MRF may find it financially advantageous to sell a portion of these materials to local businesses that may locate at the Hub. Also, there is opportunity for Hub tenants to utilize recyclable waste that cannot be included in single stream pickup, such as construction debris and electronics, as well as waste material from source separated commercial and industrial entities. The City expects tenants of the Hub to process such materials from within the City and/or the larger Austin region, and possibly even from other regions such as Dallas, Houston, and San Antonio.

City of Austin Incentives

The Hub project website (<https://austintexas.gov/ecopark>) lists the following benefits that tenants at the Hub would have access to, though they are not necessarily exclusive to the Hub.

- Expedited permitting
- Free commercial recycling services
- Triple Freeport exemption: the City of Austin, Travis County, and Del Valle Independent School District
- Exemption from paying state corporate or personal income tax

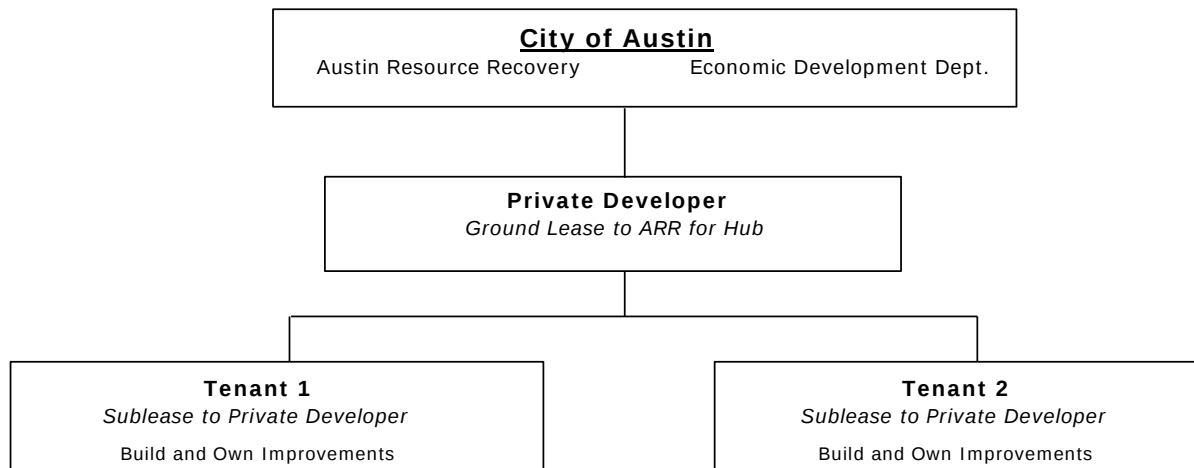
In addition, eligible firms can take advantage of the other City and State financing and incentive programs, including:

- *Family Business Loan*- provides up to \$1 million low-interest loans to qualified small businesses to pay up to forty percent of their costs to expand their business at the Hub. The main stipulation of the Family Business loan is that each business must create one job for every \$35,000 in loans.
- *Tax-Exempt Facilities Bonds* - offered by the Austin Industrial Development Corporation (AIDC) to eligible manufacturing and recycling projects. The program provides project financing that can be lower-cost and have longer maturity compared with traditional financing. Exempt Facilities Bonds are capped at \$20 million and can be used to finance facilities for the furnishing of water, sewage and solid waste disposal facilities, recycling facilities, etc.
- *Chapter 380 economic development grants* – the City is authorized to make grants to promote local economic development and to stimulate business and commercial activity in Austin.
- *Texas Enterprise Fund economic development grants* – cash grants awarded to incentivize job-creating projects to locate in Texas instead of alternative out-of-state sites.
- *Workforce training grants* – offered through the Texas Workforce Commission's Skills Development Fund, these grants provide funds skills development training that can benefit businesses by supplying highly trained workers.

Hub Organizational Structure

Per City Council direction, the Hub project would involve a competitive process to select a private developer with whom to partner. The ideal developer would have experience in and capital for constructing and managing industrial sites, while the City would offer its land holding and some financial assistance for infrastructure. Such an arrangement is intended to secure private funding for much of the infrastructure costs needed at the site and provide a reasonable return on that private investment. **Figure 3** illustrates the organizational structure of the Current Concept, assuming that the City and selected developer enter a master ground lease and the private developer then subleases land to qualified Hub business tenants.

Figure 3 Illustrative Organization Chart of Current Concept



Though monitoring and enforcing rules for how the Hub is to be operated and managed in the future is most easily accomplished through a ground lease, such rules could be established through a Master Development Agreement and associated deed restrictions should the City prefer to sell the site to a private entity.

Case Study Takeaways

City staff reviewed comparable Hub-like industrial parks and programs throughout the continent and conducted interviews stakeholders at four operations: the ReVenture Park in North Carolina; the Edmonton Waste Management Centre in Edmonton, Alberta, Canada; the Cabazon Resource Recovery Park in California; and the conceptual plans for the 130 Environmental Park in Lockhart, Texas. While there is no exact match for Austin's Hub concept plan, each of these operations shares the goal of supporting green industries through the development of an industrial park. Based on EPS's review of staff's documentation as well as our own review of industry literature, the main takeaways relevant to the Hub are summarized below:

- Public financial support has been required in all these examples because such projects have been infeasible with only private investment. The 130 Environmental Park developer states an intention to be privately financed, but has not yet begun construction on its most Hub-like aspects, though the industrial tenants will not be limited to remanufacturing-type tenants.

- Rents received are a very small percent of the overall financial picture, and most tenants in the targeted industries require some form of subsidy, whether that is reduced rent or other incentive packages.
- It is difficult for tenants to find lenders willing to grant construction loans on municipally-owned land for leases less than fifty years and without a right to renew.
- Development of Hub-type projects can take a long time due to the limited number of targeted tenants, financial feasibility constraints, and the lack of sustained revenues. Public partners, mostly land owners, are uniquely positioned to endure the years it may take until the project reaches a stabilized operating point because of government's ability to accept below-market financial returns in order to meet community objectives
- A quasi-governmental owner, such as Economic Development Authority, can help attract tenants by offering discounts on utilities, tax abatements, and/or enterprise zone designations that reduce tax rates
- The Edmonton Waste Management Centre is located with the City's MRF, which makes it easier for tenants to secure a steady stream of materials for their operations.
- Even with advantage including upfront subsidies and dedicated waste streams, none of the existing parks reviewed have achieved financial stability

3. *FEASIBILITY ASSESSMENT OF HUB CURRENT CONCEPT PLAN*

Hub Current Concept Plan Overview

The current strategy for creating a [re]Manufacturing Hub in Austin while achieving the project's six principles entails creating a public-private partnership with a master developer who would enter a master ground lease with the City, then develop and manage an innovative industrial park furthering the City's Zero Waste Plan on ARR-owned land at 10108 FM 812. By having the master developer sublease land parcels to individual businesses related to the recycling and reuse of waste materials, the City hopes to create a cohesive industrial community with unique opportunities for synergistic buyer and supplier relationships among tenants and between tenants and other area businesses. Beyond buyer-supplier relations, it is envisaged that tenants could benefit from shared amenities at the site.

The proposed strategy for the Current Concept envisions tenants signing long-term ground leases at market rates, then discounting those rates based on each company's willingness to meet community benefits performance measures related to the six principles laid out in Section Two of this Report. The City of Austin would extend a wastewater line to the site and the remaining "backbone" infrastructure would be provided within the overall site by the master developer. Private companies will sublease smaller parcels, and invest in the construction of their own buildings and their specific "in-tract" infrastructure needs.

Project Site

The ARR-owned site, located at 10108 FM 812, includes the department's closed FM 812 landfill surrounded by approximately 105 acres of virgin, undeveloped land. The entire property was originally intended for use as a landfill; however, the landfill began closure after the City airport relocated from Mueller to its current location at Austin Bergstrom, directly north of the site. The landfill, which will soon be under 30-year post-closure care within the EPA Subtitle D requirements, occupies approximately 286 acres of the property.

Access – The development site is an excellent location for recycling or reuses purposes, as it is located in a light industrial district in Southeast Austin with close proximity to several other recyclers, including metal, construction and demolition, automotive, and wood recyclers. Also, the site is located in close proximity to major state highways and the Austin Bergstrom International Airport. The southern portion of the site is just 1.35 miles from TX-183 and 4.3 miles to US-35. The land is bounded on the north by Burleson Road; on the east by FM 973; on the south by FM 812; and on the west by Progressive Waste Solutions, Inc.'s construction and demolition debris landfill and recycling operation. An interior road would be constructed inside the Hub with two entrances: one off of FM 812; and another off of FM 973.

Topography – The developable land is divided into two parcels – a 9.5 acre parcel and a 95 acre parcel. The 95 acre portion of the site is roughly flat with a slide grade change in the middle. The 9.5 acre parcel consists of more challenging topography. The parcel lies on the northeast corner of the site as seen below in **Figure 4**, and lies at a lower elevation than surrounding land on three sides, making it the bottom of a natural basin, prone to significant flooding. The City originally intended to sell the 9.5-acre parcel to generate funds to support the Hub but upon

recent notification of the risk of flooding, City staff is re-evaluating the amount of land available for development.

Figure 4 Site at 10108 FM 812



Utilities – Water is currently available to the site but interior water mains will need to be constructed for access to individual tracts. The nearest wastewater line is nearly 2 miles north of the site. The City is bringing a main line sewer down FM 973, approaching the development from the northeast corner. Extending wastewater line in this area will not only serve Hub tenants, but support new development, some already underway, along FM 973. Expansion of utilities is common way to support creation of jobs and services for underserved areas. Currently this area of Travis County is only served by localized septic systems.

Stormwater infrastructure on the 95-acre Hub site would likely mainly consist of detention ponds, pipes and/or open swales. The City of Austin has a Regional Stormwater Management Program available, through which a fee is paid in lieu of providing on-site detention.

The following entities will provide the remaining utilities at the site:

- Electric Utility: Bluebonnet Electric Cooperative (BEC)
- Communications: Time Warner and Others
- Natural Gas: Texas Gas or SiEnergy

The developer would likely partner with BEC to construct interior utility infrastructure that brings electricity access to the edge of tenants' leased tracts. Tenants would then be responsible for tying into existing infrastructure.

Zoning and regulation- The City of Austin annexed the parcel into Austin's full purpose jurisdiction and zoned it for Limited Industrial Services (LI) in December 2014. The Current

Concept is compatible with surrounding land uses, which include a construction demolition landfill and recycling operation, metal, automotive parts, and wood recycling.

Compatibility – The site's neighbor to the west is Progressive Waste Solutions, which hauls trash in nearby communities and operates a landfill for construction and demolition materials on FM 812. To the north is Austin-Bergstrom International Airport, thus specific restrictions apply to area land uses to ensure the safety of incoming and departing aircraft. Such prohibitions include: no wildlife or bird attractants, a limit of 600 feet mean sea level (MSL) on building heights, no standing water or reflective surfaces, and no visible emissions. According to City staff, numerous industrial properties in the vicinity have similar restrictions, which do not appear to significantly detract from the marketability of the sites.

Potential Hub Tenants

The City's vision for the Hub would limit tenant prospects to those making use of recovered waste materials or those manufacturers who are advancing the City's zero waste goals. The City's definition of remanufacturing does not include material recovery facilities or waste to energy facilities. The remanufacturing sector represents a very small subset of potential tenants for industrial land offerings. Under the Current Concept, the targeted industries for the Hub include, but are not limited to:

- Construction and demolition (C&D) debris recycling facility
- Plastics product manufacturer
- Paper converting operation
- Paper carton converting operation
- Wood salvage and re-milling operation
- Glass manufacturing facility
- Appliance repair facility
- Scrap tire recycling operation
- Electronics refurbishing and/or recycling facility
- Incubator, co-working, or flex light industrial space for recycling, reuse, or upcycling sector firms
- Zero waste-related research and development facility
- Manufacturing of products that replace a disposable good
- Manufacturing of products that enable the diversion of a waste material from the landfill or incineration

In fall 2015, the City put out a call for letters of interest (LOIs) to learn about the needs and benefits of tenants in targeted industries interested in locating at the Hub. The City received 21 LOIs from business representing interest in numerous materials, coming from Central Texas and beyond, and being both established businesses and start-ups. Potential tenants required a range of space from as little as 500 square feet to as large as 110,000 square feet.

Most tenants anticipated the need gap financing in their letters of interest. Responses also indicated that current plans for wastewater, electric and storm water service to the site, which is included in \$7.5 million infrastructure cost estimate, were sufficient to support interested tenants' operations.

Tenants will be responsible for securing their own supply of waste materials. Raw materials can originate from within the Hub, households in the City or Central Texas, be received from the city-contracted Materials Recovery Facilities (MRFs) if their operators choose to sell their waste to the Hub tenants, be sourced from commercial or industrial waste streams, or originate from nearby city and metro area waste streams. In 2015, CB&I Environmental and Infrastructure, Inc. (CB&I) estimated that 90 percent of waste stream sent to the landfill by Austin's residents could be diverted toward recycling and organic composting. While a large portion of that material could be accepted by the two MRFs in contract with the City (Balcones Recycling, TDS), Hub tenants can purchase sorted materials from these MRFs, and it is plausible that much of the appliances, bulk items, textiles, and hard to recycle items could be diverted directly to Hub tenants. The CB&I report estimated that in FY2014, 211 tons of bulk metal and 174 tons of bulk tires were disposed of by Austin residents.

Each potential tenant would create new jobs in the City that provide opportunities for residents with little education and/or are considered hard-to-employ workers (criminal record, previously homeless). Many LOIs also indicated they are would be willing to pay living wages for jobs that require little education and include hard-to-employ workers.

City Requirements for Public-Private Partnerships

Per Council direction beginning in 2011, City partnerships with private developers on City-owned lands must meet higher building and operating standards in order to support community values. The Council has adopted additional requirements for the Hub project.

The City's main requirements for public-private partnerships are:

- *Living and prevailing wage for construction.* Resolution No. 20080608-047 establishes a requirement for contractors and subcontractors hired for public-private projects on formerly public land to pay the prevailing wage as defined in Ordinance No. 20030508-031.
- *Minority and Women Business Enterprise (M/WBE) Goals.* Resolution No. 20120112-058 states that when the City of Austin enters into Third-party agreements for public improvements, the contractors must make efforts to provide minority-owned, women-owned, and local small businesses an equal opportunity to participate as suppliers of material and services for subject project. Consistent with the standards of the M/WBE Ordinance, eligible third-party agreements will include the establishment of ethnic specific M/WBE utilization goals, and a requirement that contractors and consultants on the subject project either meet the goals or demonstrate a good faith effort to do so.
- *Worker Safety Training.* Resolution 20110728-106 requires eligible third-party agreements to comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) Worker Safety Training Requirements, which include a mandatory 10-hour OSHA-approved worker safety class and a 30-hour OSHA-approved supervisor safety class.
- *LEED Resolution.* Resolution #20071129-045 requires LEED green building rating standards for structures built at the Hub.

Requirements Specific to the Hub Current Concept

The Austin City Council passed Resolution No. 20160414-003 that requires the contract for the Hub Master Developer and tenants to comply with the same living wage, safety, workers' compensation insurance, and small, minority, and women-owned business participation requirements applicable to construction projects for which the City is the developer. In addition, Council broadly extended living wage requirements to all parties involved in Hub construction and operations. Non-construction contractors and subcontractors for goods and services as well as the tenants of the Hub must pay all employees at the [re]Manufacturing Hub the same living wage rate applicable to City employees.

Resolution No. 20160414-003 also directs the City Manager to develop a solicitation process that gives preference to a Master Developer who demonstrates:

1. "A preference for employees hired from the Austin Metropolitan Statistical Area census tracts that are largely low-income or have high underemployment, especially census tracts encompassing and adjacent to the [re]Manufacturing Hub with these characteristics. This preference shall not be construed to conflict with the interstate commerce clause or in any way limit employees from moving to or from other census tracts once they are hired.
2. A preference for employees that graduated from local training and apprenticeship programs.
3. A Master Developer's commitment and plan to ensuring that employers at the [re]Manufacturing Hub will minimize the use of temporary staffing agencies and temporary workers in order to provide economic development and full-time jobs to underemployed and low-income portions of the community.
4. Whether the initial construction project will be Better Builder certified or by an equivalent program.
5. Whether there will be a requirement imposed on all employers located at the [re]Manufacturing Hub to enter into a labor peace agreement, with any labor organization that requests a labor peace agreement and which represents, or reasonably might represent, workers on the project, as essential consideration for the City or Master Developer entering into the contract. Generally, a labor peace agreement will include the following provisions: (1) if an employer meets its obligations under the labor peace agreement, then the labor organization and its members are prohibited from engaging in any picketing, work stoppage, boycott, or other economic interference with the employer's operations in the [re]Manufacturing Hub, (2) an employer that performs its obligations under a labor peace agreement will be relieved of further obligation to abide by the procedures in the agreement, if the labor organization engages in adverse economic action such as striking, picketing, or boycotting the employer, and (3) shall not include any provision that would require or compel an employee to be a member of any labor organization, pay dues or fees to the organization, and (4) shall not compel an employer to enter a collective bargaining agreement with the labor organization except as may be provided in accord with federal laws governing collective bargaining.
6. Demonstrate past and future commitments to environmental stewardship and green industry innovation."

In addition to goals related to workforce development, the City will require the Master Developer and tenants to construct in a manner that meets LEED rating standards at the Hub in accordance with the Hub's environmental stewardship principle.

Under a master developer agreement and/or master ground lease with the City, the developer will ensure each Hub tenant meets the requirements listed above.

Funding Needs

The Hub will require the improvement of the land, including infrastructure installation. At present, ARR estimates that such improvement will cost roughly \$7.5 million. This includes \$2.37 million for the extension of a wastewater main along FM 973 to the site. Austin Water Utility (AWU) is constructing this line and will be reimbursed for the cost by ARR over 20 years through a no-interest loan. The remaining \$5.13 million in infrastructure funds have not yet been identified. City staff originally planned to generate revenue for infrastructure costs from six sources. To avoid impacting ARR customer rates, the design and construction of the site's infrastructure was to be funded by a federal grant and a number of land sales and leases (see **Figure 5**).

Figure 5 Original List of Funding Sources

Funding Source	Revenue	Status
US EDA Public Works Grant	Up to \$1,000,000	Grant awarded 07/01/14 & authorized 08/07/14. Funds provided on reimbursement basis. The total value of the grant may be less than \$1,000,000 depending on the final costs of grant-eligible expenditures.
Austin Water Utility Loan	\$2,370,000	Design phase
Bolm Road Lease (District 3) to Skillpoint Alliance	\$1,340,000	Lease approved by Council 08/20/15. Payment due 1/31/2016.
Winnebago Lane (District 2) Sale	\$1,450,001	Bid Complete & Winning Bidder Identified.
Sale of 9.5 Acres of Remanufacturing Hub along FM 973 (District 2)	\$675,000	2013 Appraisal completed.
Sale of 25 Acres within FM 812 Landfill (District 2)	\$1,400,000*	2013 Appraisal completed.
Estimated Total	\$8,235,001	

* Some revenue from this sale will need to be directed toward rerouting drainage channels, which currently flow to the area proposed for sale, to within the property retained by the City.

Since the publication of the financing plan in **Figure 5**, several obstacles have surfaced, creating a need for major adjustments to the plan. The City Council rejected staff proposal to sell the Winnebago parcel and, and the City's real estate portfolio is currently being reviewed for parcels to use as affordable housing, emergency shelters, and mixed-used housing developments. Per Council Resolution #20161013-008, the City Manager was tasked with identifying three underutilized parcels for the potential development of affordable housing, mixed-use housing, or emergency shelters. In addition, City had to forego the \$1 million Economic Development Administration (EDA) Public Works Grant because the City was not able to identify a funding source for the local match requirement and was unable to meet the grant timelines.

Finally, the lease to Skillpoint Alliance for the Bolm Road site has yet to be signed and cannot yet be considered a reliable funding source. In the past, proposals to raise ARR user rates and to issue certificates of obligation to fund the project were also dismissed due to Council concerns and legal hurdles, respectively. Therefore, the only remaining source of funds for the \$7.5 million in infrastructure costs is the Austin Water Utility Loan for \$2.37 million, leaving \$5.13 million without identified funding sources.

In 2013, Integra Realty Resources (IRR) appraised the vacant land on FM812 for the proposed Hub. Based on the market at the time, IRR estimated lease rates for each lot ranged from \$0.15 to \$0.19 per square foot per year. Based on lot configurations by Carson Planners, the annual appraised lease for full occupancy at the site was estimated at \$645,934 in January 2015. It should be noted that the project will take several years to reach full occupancy, especially given the restricted type of tenants allowed at the Hub, and that these appraised lease rates represent market-rates that likely overestimate the rents achievable from Hub tenants by a significant margin, as explained in the following section.

Financial Burden of City Restrictions

The land appraisal did not incorporate costs for the City's various restrictions for the Hub. EPS has tried to demonstrate how these restrictions will have financial impacts by focusing on the wage requirements established for the Hub. Wage requirements are only one of the many Hub regulations previously outlined in this report, and therefore, only represent a portion of the additional financial impact the regulations might impose.

Wage Requirements

Aforementioned City Resolutions require that all employees at the Hub, their non-construction contractors, and their subcontractors for goods and services be paid at least the same living wage rate applicable to City employees. The current living wage rate for the City of Austin is \$13.03.¹ In order to understand if the living wage restriction might increase expenses for tenants at the Hub, EPS compared the living wage rate to the average hourly wage rate of occupations likely to be employed at the Hub. Data suggests that the Production; Construction and Extraction; Transportation and Material Moving; and Installation, Maintenance, and Repair occupation categories pay an hourly wage rate that is at or above the City's living wage.² In addition, all respondents to the City's request for Letters of Interest reported being able to commit to paying all workers the living wage or higher. This suggests that the living wage requirement for Hub employees will have little to no impact on tenants' ability to pay rent to the site's developer.

Any construction activity at the Hub is required to pay prevailing wages. Prevailing wage is defined as the hourly wage, usual benefits and overtime paid in the largest city in the county to majority of workers by trade and is set by the U.S. Department of Labor. EPS found in contrast

¹ According to the Official Website of the City of Austin Human Resources Department, March 2, 2017.

² According to the Bureau of Labor Statics for the Austin-Round Rock MSA, May 2015; The MIT Wage Report for Travis County, 2016; and the Austin Chamber's Median Occupational Hourly Wages Report, May 2015.

to living wage requirement, the use of prevailing wage instead of open market wages for construction increases development costs by approximately \$7 per square foot in the Austin area.³ In addition, the pool of eligible Hub tenants has been narrowed to those who make use of recovered waste materials. This, in combination with expectations and compliance efforts regarding OSHA training and hiring practices, will likely reduce the amount of rent the Hub's developer can charge by making it more expensive to develop and operate at the Hub than on a typical site as assumed in the appraisal.

To expand on this idea, consider the cost of developing a 13,000 square foot industrial warehouse on one acre at the Hub (at a common industrial floor-to-area ratio of 0.3). At a \$7 per square foot cost premium, the extra expense of paying prevailing wages would amount to roughly \$91,000 for the building, which is an expense incurred by the Hub's tenants. The original appraisal reported the site's market rate land value, which does not reflect the policies and regulations that will be enforced at the site. In **Figure 6's** example below, the additional cost of paying prevailing wage reduces the land value by \$91,000, which reduces the lease payments tenants are capable of paying from a range of \$0.15 - \$0.19 to a range of \$0.02 - \$0.06. As shown in **Figure 7**, when applied to the entire 95-acre development parcel, this added cost reduces the Hub's annual lease payments from approximately \$645,000 to \$139,000.

Figure 6 Example of the Additional Cost of Union Labor at the Hub

Item	Assumptions	Grid 1	Grid 2	Grid 3	Grid 4
Appraised land value (per acre)		\$119,790	\$135,036	\$102,366	\$128,502
2013 appraised land value (per SF)		\$2.75	\$3.10	\$2.35	\$2.95
Cap Rate	6.27%				
Appraised ground lease (per SF per year)		\$0.17	\$0.19	\$0.15	\$0.18
FAR	0.3				
Warehouse SF (per acre)	13,000				
Incremental cost of development using prevailing wage (per SF)	\$7				
Additional cost of using prevailing wage for warehouse	\$91,000				
Land value less additional cost of prevailing wage (per acre)		\$28,790	\$44,036	\$11,366	\$37,502
Remaining land value (per SF)		\$0.66	\$1.01	\$0.26	\$0.86
Cap Rate	6.27%				
Updated ground lease (per SF per year)		\$0.04	\$0.06	\$0.02	\$0.05

Source: Integra Realty Resources Land Appraisal (2013); Economic and Planning Systems, Inc.

³ EPS used RS Means to compare construction costs using unionized labor versus open market labor. The RS Means union labor costs are based on local prevailing wage rates.

Figure 7 Appraised and Adjusted Gross Lease Revenue

Lot ¹	Acres	Sq ft. /Lot	Appraised Annual Rate/SF ²	Appraised Annual Lease	Adjusted Annual Rate/SF ³	Adjusted Annual Lease
Lot 1	3.52	153,331	\$0.19	\$29,133	\$0.06	\$9,200
Lot 2	4.23	184,259	\$0.19	\$35,009	\$0.06	\$11,056
Lot 3	6.77	294,901	\$0.17	\$50,133	\$0.04	\$11,796
Lot 4	6.21	270,508	\$0.17	\$45,986	\$0.04	\$10,820
Lot 5	7.39	321,908	\$0.17	\$54,724	\$0.04	\$12,876
Lot 6	5.61	244,372	\$0.17	\$41,543	\$0.04	\$9,775
Lot 7	7.55	328,878	\$0.17	\$55,909	\$0.04	\$13,155
Lot 8	6.13	267,023	\$0.17	\$45,394	\$0.04	\$10,681
Lot 9	14.38	626,393	\$0.15	\$93,959	\$0.02	\$12,528
Lot 10	13.03	567,587	\$0.15	\$85,138	\$0.02	\$11,352
Lot 11	6.83	297,515	\$0.17	\$50,578	\$0.04	\$11,901
Lot 12	7.89	343,688	\$0.17	<u>\$58,427</u>	\$0.04	<u>\$13,748</u>
Lot 13	-	-	-	-	-	-
Lot 14	-	-	-	-	-	-
Total	89.54	3,900,362		\$645,934		\$138,887

[1] Concept and Lot configuration based on Carson Planners "Austin (re)Manufacturing Hub Planning Development Potential" report issued June 17, 2013; Land boundaries revised 07/2014.

[2] Acres of Leasable Land and Appraised Annual lease rate /SF provided by Integra Realty Resources Appraisal provided on July 22, 2013. Land boundaries revised 07/2014.

[3] Based on higher costs of development imposed by prevailing wage restriction.

Note that this calculation assumes the only added cost is associated with prevailing construction wages. In addition, factors such as green building, local hiring preference, M/WBE participation, and other policy objectives for the Hub require additional time and expense for the developer and tenants and causes uncertainty for lenders. This has direct and/or indirect cost implications that further diminish the supportable land values, yet are more difficult to estimate.

The City has placed community benefit-based restrictions on previous development projects at city-owned tracts in the past, like the Seaholm District and Mueller Redevelopment. In those cases, however, City tax increment and other financial resources were made available to subsidize the projects. In other cases, higher-value uses such as office and high-density residential development have been able to absorb those added costs and achieve favorable returns, despite the restrictions and community benefits required of them. Industrial development typically is a low-cost, low-value building type, and added development and/or operating costs can have a disproportionately high impact on its feasibility.

Current Concept Cash Flow and Developer Returns

Below, **Figure 8** summarizes the currently estimated funding sources and uses for the Current Concept. The analysis assumes that infrastructure is installed over a five-year period, and that the Hub reaches buildout and stabilized occupancy in a total of 10 years. This would imply absorption of roughly 10 acres per year, or roughly 125,000 square feet of industrial buildings if constructed at a 0.30 floor-to-area ratio (FAR).

The “sources” of funds includes the ground lease revenues (discounted as discussed above to reflect Hub requirements), the value of the remaining leasehold at the end of Year 10,⁴ and the loan from the Austin Water Utility. These represent the funds from which project expenses and developer returns can be paid.

The “uses” of funds reflect the expenses to be paid by the project. The Wastewater Line Extension is assumed to be funded by the AWU loan, and thus shows an offsetting number in Year 1. The project still must repay that loan, however, so the table shows a cost item for that loan repayment at zero percent interest over 20 years. The table also shows annual operations and maintenance (O&M) costs as estimated in the City’s business plan for the Hub in 2015. The largest item, however, is the \$5.13 million in other infrastructure, shown to be funded by the developer over the initial five years of the project.

The “Net Operating Income” line estimates the positive or negative returns in a given year and, where negative, indicates that additional investment is required to cover that year’s cost because ground lease revenues are insufficient. Given the upfront costs of providing infrastructure to the site and the below-market ground lease revenue that can be expected from the Hub’s tenants, the net operating income is expected to be negative until year 21 or FY2037, after the AWU loan is fully repaid. Only in Year 21 and beyond does the ground lease revenue exceed the annual O&M costs and yield modestly positive cash flow.

The feasibility of a project for private investment depends on the “rate of return” that the developer can expect to receive for their investment, relative to other investment opportunities and adjusted for the risk of the project at hand. For example, a real estate project requiring modest upfront investments and geared toward building types or tenants that are well established and known to be in demand would be attractive to investors at a lower rate of return than would a project involving extensive upfront investment and building or tenant types that are unproven in the market context. Past City of Austin public-private partnerships, such as the Seaholm and Mueller projects, have been premised on the master developer receiving a

⁴ Note that for the sake of this report’s analysis and presentation, EPS assumes the developer sells leasehold interest in year ten to a third party, who would assume the Master Developer’s remaining obligations in exchange for the projected Hub cash flow. This is not required for the Hub’s success; for illustrative purposes it allows EPS to present alternative financing and ownership models that may be compared more easily to the concept plan. Such an assumption does not alter the fundamental calculations and conclusions of the analysis (i.e., the results would be the same by showing the full cash flow over 40 years). As shown, that leasehold value is actually negative in the Current Concept, meaning that in Year 10, the net present value of the remaining revenues from Years 11-40 fall short of the remaining cost obligations.

“priority” return on investment of 13 to 15 percent. In those cases, these return rates represent the amount that accrues to the developer from a combination of City- and project-based resources (tax increment, ground leases or land sales, etc.), before the City begins to recoup any of its own contributions, but the developers are actually seeking return rates well in excess of those baseline figures.

For this Hub analysis, EPS is assuming that the return threshold will be slightly lower than for these other City examples, because the Hub involves less upfront investment in absolute dollars (though still substantial for the size and value of the project) and a single product type (industrial buildings) rather than being a mixed-use development contingent on the alignment of numerous market cycles. We believe a 12 percent rate of return is a reasonable assumption, and even aggressive given the unproven market for the types of businesses to whom the project is limited, as well as the various requirements expected of the project. The 12 percent rate of return is then applied as a “discount rate” to the cash flow of the project to determine whether the value of the future revenues exceeds the upfront investment by a sufficient margin. A positive “net present value” (NPV) indicates a project that exceeds the return threshold and thus is considered feasible. A negative NPV indicates that the project cash flow falls short of risk-adjusted investment requirements, and is thus infeasible and unattractive to private financing partners unless additional subsidy can be provided.

Under the Current Concept, a private developer would need to make infrastructure investments, AWU debt service payments, and cover basic operating deficits for 20 years before reaching their first profitable year. **Figure 8** indicates that if a private master developer leased the Hub from the City for a 40-year term, invested \$7.5 million for infrastructure (including being responsible for repaying the AWU loan) and paid *no ground lease rent* to the City, the Hub’s net present value to the private developer would be negative \$5.4 million. Thus, this analysis shows the Current Concept is not financially feasible, and that a private developer would agree to develop and operate the Hub only with additional public investment, lower infrastructure costs, and/or higher potential revenues.

In subsequent sections of this Report, EPS compares the feasibility of alternative financing and programmatic scenarios to this Current Concept cash flow from **Figure 8**. For illustrative purposes, **Figure 9** shows that, even if the City were to forgive the \$2.37 million outstanding debt obligation for the Austin Water Utility rather than requiring Hub project proceeds to repay that loan, it still would take nine years for the Hub to have a profitable year of operation and the NPV of the overall project would remain negative. As such, forgiveness of the AWU loan alone will not render the Current Concept feasible or attractive for a private developer partner.

Figure 8 Current Concept Sources and Uses Analysis

Year	1	2	3	4	5	6	7	8	9	10
Tenant Occupancy	0%	0%	0%	10%	20%	35%	50%	60%	75%	90%
Infrastructure Phasing	20%	20%	20%	20%	20%					
SOURCES										
Lease Revenue ¹	\$0	\$0	\$0	\$13,889	\$27,777	\$53,471	\$76,388	\$91,665	\$114,582	\$137,498
Remaining Leasehold Value ²	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-\$100,925
Austin Water Utility Loan ³	<u>\$2,370,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Sources	\$2,370,000	\$0	\$0	\$13,889	\$27,777	\$53,471	\$76,388	\$91,665	\$114,582	\$36,573
USES										
Infrastructure Cost ⁴	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	\$0	\$0	\$0	\$0	\$0
Wastewater Line Extension	(\$2,370,000)									
Repayment of Water Loan	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)
O&M Expense ⁵	<u>(\$169,293)</u>	<u>(\$93,069)</u>	<u>(\$94,931)</u>	<u>(\$96,829)</u>	<u>(\$98,766)</u>	<u>(\$100,741)</u>	<u>(\$102,756)</u>	<u>(\$104,811)</u>	<u>(\$106,907)</u>	<u>(\$109,045)</u>
Total Uses	(\$3,683,793)	(\$1,237,569)	(\$1,239,431)	(\$1,241,329)	(\$1,243,266)	(\$219,241)	(\$221,256)	(\$223,311)	(\$225,407)	(\$227,545)
Net Operating Income	(\$1,313,793)	(\$1,237,569)	(\$1,239,431)	(\$1,227,440)	(\$1,215,488)	(\$165,770)	(\$144,868)	(\$131,646)	(\$110,826)	(\$190,972)
NPV (Discount Rate)	12%	(\$5,393,598)								

[1] EPS assumes the Hub will not be fully occupied until year 11. Lease revenue reflects adjustments made to 2013 land appraisal to reflect higher development cost of prevailing wage.

[2] Assumes developer sells right to receive lease revenue from Hub's tenants while paying outstanding cost of the water loan and ongoing O&M expenses for next 40 years.

[3] Loan received from Austin Water (AW) for the extension of wastewater services to site. Loan has 20 year term and interest rate of 0%.

[4] Estimated cost of providing infrastructure to site less the water loan is \$5,130,000, which is assumed to be paid over the course of 5 years.

[5] Total operating and maintenance expenses estimated by ARR in 2015.

Source: Economic and Planning Systems, Inc.

Figure 9 Current Concept Sources and Uses Analysis without Wastewater Loan Repayment

Year	1	2	3	4	5	6	7	8	9	10
Tenant Occupancy	0%	0%	0%	10%	20%	35%	50%	60%	75%	90%
Infrastructure Phasing	20%	20%	20%	20%	20%					
SOURCES										
Lease Revenue ¹	\$0	\$0	\$0	\$13,889	\$27,777	\$53,471	\$76,388	\$91,665	\$114,582	\$137,498
Remaining Leasehold Value ²	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$568,627
Austin Water Utility Loan ³	<u>\$2,370,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Sources	\$2,370,000	\$0	\$0	\$13,889	\$27,777	\$53,471	\$76,388	\$91,665	\$114,582	\$706,125
USES										
Infrastructure Cost ⁴	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	\$0	\$0	\$0	\$0	\$0
Wastewater Line Extension	(\$2,370,000)									
O&M Expense ⁵	<u>(\$169,293)</u>	<u>(\$93,069)</u>	<u>(\$94,931)</u>	<u>(\$96,829)</u>	<u>(\$98,766)</u>	<u>(\$100,741)</u>	<u>(\$102,756)</u>	<u>(\$104,811)</u>	<u>(\$106,907)</u>	<u>(\$109,045)</u>
Total Uses	(\$3,565,293)	(\$1,119,069)	(\$1,120,931)	(\$1,122,829)	(\$1,124,766)	(\$100,741)	(\$102,756)	(\$104,811)	(\$106,907)	(\$109,045)
Net Operating Income	(\$1,195,293)	(\$1,119,069)	(\$1,120,931)	(\$1,108,940)	(\$1,096,988)	(\$47,270)	(\$26,368)	(\$13,146)	\$7,674	\$597,079
NPV (Discount Rate)	12%	(\$4,402,254)								

[1] EPS assumes the Hub will not be fully occupied until year 11. Lease revenue reflects adjustments made to 2013 land appraisal to reflect higher development cost of prevailing wage.

[2] Assumes developer sells right to receive lease revenue from Hub's tenants while paying outstanding cost of the water loan and ongoing O&M expenses for next 40 years.

[3] Loan received from Austin Water (AW) for the extension of wastewater services to site. Loan has 20 year term and interest rate of 0%. This scenario assumes 100% forgiveness of this loan.

[4] Estimated cost of providing infrastructure to site less the water loan is \$5,130,000, which is assumed to be paid over the course of 5 years.

[5] Total operating and maintenance expenses estimated by ARR in 2015.

Source: Economic and Planning Systems, Inc.

Options to Restructure Hub Current Concept Plan

Issue 1 - Closing the Financing Gap

As it stands, the Hub Current Concept has both a capital and operating deficit for many years. The infrastructure financing gap is approximately \$5.4 million and annual revenues are less than annual expenses until year 21. EPS has identified several potential sources of revenue eligible to support the development of the Hub at 10108 FM 812. While City Council has directed staff to not pursue land sales or rate increases, they are included to provide a comprehensive list of eligible resources and avenues through which to either 1) increase revenue or 2) decrease expenses.

Option 1A Gap Funding - Use Public Capital or Grant Funding

The City could consider using public money with low interest rates to help offset the upfront infrastructure costs to a private developer. One source of public funding available to ARR is a Certificate of Obligation (CO). It is staff's understanding based on guidance received in early 2015 that the City would need to gain voter-approval to issue a CO because the Hub includes economic development goals, and thus this approach may take one or more election cycles to commence. Alternatives to using voter-approved CO's might be Private Activity Bonds, which would also provide low-interest rate funding for the Hub. Private Activity Bonds are federal tax-exempt bonds issued by local or state government to finance projects of private uses that have some public benefit.

In addition to low-interest funds, the City could pursue federal or state grant opportunities to help close the financing gap. Previously, the City secured a \$1 million Public Works Grant from U.S. Economic Development Administration (EDA), but it was able to come up with match dollars for the fund. The City may be able to obtain a new public grant when the Hub development is underway; however, the City would still face the challenge of finding local dollars to match federal or state funds for many grants.

For every dollar that the project can secure in public capital or grant money, the feasibility improves by reducing the investment and debt obligations of the project and thus the developer. The ground lease revenues, therefore, cover a greater proportion of the remaining expenses. However, the prospect remains that public or grant money might be spent on a Hub project that does not achieve market success or financial self-sufficiency, as evidenced by other case studies from across North America.

Option 1B Gap Funding - Raise ARR Rates

Austin Resource Recovery desires to avoid raising its customers' rates to cover the costs of the Hub, and the Austin City Council has specifically directed staff to not raise rates. However, to provide a comprehensive list of hypothetical options, EPS has estimated by how much rates would need to be raised to result in a positive financial return for the project. In this scenario, the City would use the additional revenue generated by raised rates to invest in the project, while paying a fee for the private development and management of the Hub.

Austin Resource Recovery (ARR) charges rates and fees to its users for the services it provides. One of the revenue sources available to ARR is revenue generated by the Clean Community Fee (CCF). This is a fee paid by residents and commercial businesses that have their waste managed by ARR. According to the City's 2016-2017 proposed budget, the CCF rate was raised \$4.80 per

year for residential customers and \$21.00 per year for commercial users. In addition, ARR's base annual rate payment was increased \$12.00 for all users. This rate increase, combined with an expected increase in the number of customers is projected to generate \$2.1 million in 2016-2017.

For illustrative purposes, EPS estimated the amount by which the CCF rate would need to be raised for ten years to close the Current Concept's financial gap until 2026. In order to cover the annual cash flow deficits for years 1-10 in the Current Concept Plan scenario (**Figure 8**), the total annual CCF rate for both residents and commercial units would need to be roughly \$6.40 higher than the existing rate for the first five years and less than \$1.00 higher the next five years (see **Figure 10**).⁵ This translates to an average monthly increase of only \$0.33 (for both residential and commercial customers) for the next ten years. The City could potentially take advantage of both a grant and raised rates, thus requiring a lower increase to the CCF rate.

This estimate assumes no growth in the number of customers paying the Clean Community Fee. By raising the CCF rate as shown in **Figure 10**, the City could cover the annual operating and capital deficits not covered by ground lease revenues and effectively replace the upfront \$5.13 million private investment. The net present value would be improved from negative \$5.4 million to \$0. **Figure 11** also shows how an annual investment from CCF could substantially change the roles and responsibilities of the City's private partner. Under such a scenario, the City could solicit a private property management partner, whose primary responsibilities would be to market and manage the Hub, rather than be an investor. The private partner would be paid a fee for services from the property's lease revenues from tenants, rather than a return on their risky upfront investment.

⁵ For this exercise, EPS did not distinguish between rate increases for residential vs. commercial customers, but such distinctions are clearly possible as evident from the current rate structure.

Figure 10 Clean Community Fee Rate Increase

Year		1	2	3	4	5	6	7	8	9	10
Estimated number of CCF rate payers in 2016-2017 ¹	195,199										
Annual rate increase per customer		\$6.73	\$6.34	\$6.35	\$6.29	\$6.23	\$0.85	\$0.74	\$0.67	\$0.57	\$0.78
Monthly rate increase per customer		\$0.56	\$0.53	\$0.53	\$0.52	\$0.52	\$0.07	\$0.06	\$0.06	\$0.05	\$0.07
Average monthly rate increase per customer over 10 years	\$0.33										
Annual revenue from fee increase		\$1,313,793	\$1,237,569	\$1,239,431	\$1,227,440	\$1,215,488	\$165,770	\$144,868	\$131,646	\$110,826	\$152,818
Total revenue for years 2017-2026 (2016\$)	\$6,939,649										

[1] According to the City of Austin Proposed 2016-2017 Budget.

Figure 11 Current Concept Sources and Uses with Increased CCF Rates

Year	1	2	3	4	5	6	7	8	9	10
Tenant Occupancy	0%	0%	0%	10%	20%	35%	50%	60%	75%	90%
Infrastructure Phasing	20%	20%	20%	20%	20%					
SOURCES										
Lease Revenue ¹	\$0	\$0	\$0	\$13,889	\$27,777	\$53,471	\$76,388	\$91,665	\$114,582	\$137,498
Remaining Leasehold Value ²	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-\$62,771
Austin Water Utility Loan ³	\$2,370,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Sources	\$2,370,000	\$0	\$0	\$13,889	\$27,777	\$53,471	\$76,388	\$91,665	\$114,582	\$74,727
USES										
Infrastructure Cost ⁴	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	\$0	\$0	\$0	\$0	\$0
Wastewater Line Extension	(\$2,370,000)									
Repayment of Water Loan	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)
O&M Expense ⁵	(\$169,293)	(\$93,069)	(\$94,931)	(\$96,829)	(\$98,766)	(\$100,741)	(\$102,756)	(\$104,811)	(\$106,907)	(\$109,045)
Total Uses	(\$3,683,793)	(\$1,237,569)	(\$1,239,431)	(\$1,241,329)	(\$1,243,266)	(\$219,241)	(\$221,256)	(\$223,311)	(\$225,407)	(\$227,545)
Gross Cash Flow	(\$1,313,793)	(\$1,237,569)	(\$1,239,431)	(\$1,227,440)	(\$1,215,488)	(\$165,770)	(\$144,868)	(\$131,646)	(\$110,826)	(\$152,818)
Required Rate Increase⁶	\$6.73	\$6.34	\$6.35	\$6.29	\$6.23	\$0.85	\$0.74	\$0.67	\$0.57	\$0.78
Net Cash Flow after Rate Increase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NPV (Discount Rate)	12%	\$0								

[1] EPS assumes the Hub will not be fully occupied until year 11. Lease revenue reflects adjustments made to 2013 land appraisal to reflect higher development cost of prevailing wage.

[2] Assumes developer sells right to receive lease revenue from Hub's tenants while paying outstanding cost of the water loan and ongoing O&M expenses for next 40 years.

[3] Loan received from Austin Water (AW) for the extension of wastewater services to site. Loan has 20 year term and interest rate of 0%.

[4] Estimated cost of providing infrastructure to site less the water loan is \$5,130,000, which is assumed to be paid over the course of 5 years.

[5] Total operating and maintenance expenses estimated by ARR in 2015.

[6] Required rate increase calculated by dividing the negative gross cash flow per year by 195,199 ARR rate payers per 2016-2017 budget.

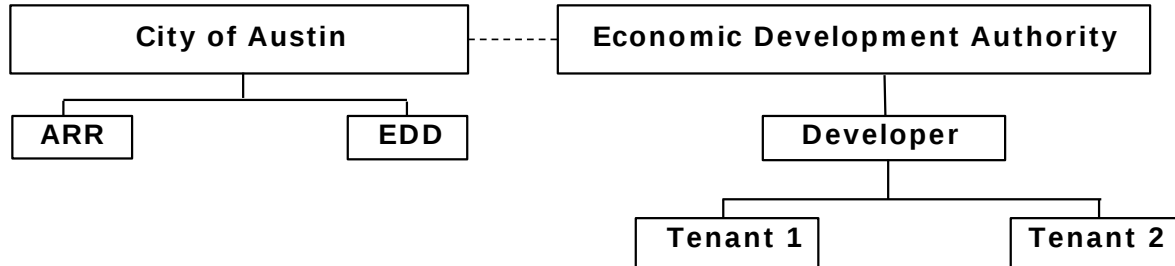
Source: Economic and Planning Systems, Inc.

Issue 2 – Governance and Organizational Structure

While the Hub has historically been under the purview of EDD and ARR, it is possible that an alternative governance structure could benefit it. The City of Austin Economic Development Department (EDD) is considering establishing an Economic Development Authority (EDA). The Hub could potentially be a project that the EDA could own, manage, finance, and/or enter into a public-private partnership to develop. According to City staff, neither ARR nor EDD has adequate financial or personnel devoted to the Hub to make the Hub viable at this time. While the exact fiscal operation of an EDA is currently unknown, it is possible that the EDA would be able to secure the funding needed to make the Hub work if this new quasi-governmental entity has autonomy to invest in real estate projects. For example, the EDA may be initially funded through the sale of some public property asset, and the funds could be directed toward the Hub, either through investments in infrastructure and/or through direct subsidies and incentive packages to Hub tenants that may allow them to pay greater ground lease amounts.

The City's Economic Development Department is moving forward with recommendations regarding a new EDA in 2017. No financial analysis has been done to reflect the EDA approach, as it is not clear that an EDA would either increase revenues or reduce or delay costs associated with the Hub development. Rather, this issue is included in this report to signify the possibility of considering the Hub as part of the purview of any EDA that might be created, and to further determine whether there are financial or procedural advantages that may accrue under the EDA approach.

Figure 12 Organization Chart of an Economic Development Authority



4. ANALYSIS OF MODIFICATIONS AND ALTERNATIVES

Due to the challenges the City faces in financing the Hub as currently envisioned, EPS has considered alternative ways in which the Hub could be structured while still addressing the City's economic development and/or waste diversion goals. As noted in **Figure 2** in the Executive Summary of this Report, each alternative ranks differently across the six main principles, requiring a give-and-take approach to make the Hub work.

Modification A: Reduce Policy Requirements

As currently envisioned, all Hub tenants must engage in business or research related to the recycling of waste materials. Allowing a broader array of green or general industrial businesses at the Hub expands the tenant pool and may make leasing easier, reducing the risk of development for a Master Developer and a lender. In addition, the City has established a number of requirements for a master developer and tenants at the Hub (see Section 3). These requirements are not industry standards and thus introduce additional costs, likely reducing ground lease revenue by a substantial margin. Interestingly, EPS analysis shows the requirement that workers be paid the City's living wage rate does not appear to have a significant impact on project feasibility, though the prevailing wage requirement does. Thus, the City may wish to structure a competitive bid process that does not set minimum requirements during the solicitation, but rather awards points to developers according to their willingness to comply with desired City requirements. Any elements included in a developer's proposal would then be incorporated into a master development agreement and/or master ground lease and enforced contractually. By structuring the community and economic development benefits as voluntary, the City can award points – similar to a density bonus program and achieve priority goals while testing what the market will bear.

One of the main principles of the Hub is inclusive workforce development. The previous section describes the several resolutions passed by the City to encourage favorable wages and the employment of diverse and hard-to-employ workers at the Hub. While these goals and requirements are certainly laudable, they do make it more expensive for tenants to develop and operate at the Hub and constrain the Hub's financial feasibility. As an example of how reducing one type of restriction could impact the Hub's feasibility, EPS has evaluated reducing wage requirements below.

M1. Reducing Wage Requirements

The first alternative to the Current Concept considers the financial implications of removing or reducing the requirements regarding wages, hiring, and training practices at the Hub. EPS found that the living wage requirement for employees is likely to have little to no effect on the costs of operating at the Hub, but the prevailing wage requirement for construction increases development costs by \$7 per building square foot, which in turn, reduces the lease payments tenants are able to pay.

If the prevailing wage requirement on construction were removed, the development costs could decrease by \$7 per square foot, or as much as \$8.6 million for the entire project assuming an FAR of 0.3 for the developable 95 acres, which could translate to over \$500,000 in additional

annual ground lease revenue. The extra lease revenue would thus offset more of the cost of infrastructure, making the overall project far more attractive to a private developer and/or reducing the amount of public subsidy required. **Figure 13** below demonstrates the potential financial impact of this approach, by assuming that the project could essentially achieve market-rate ground lease revenues if the prevailing wage requirement were eliminated.⁶ This scenario results in profitable operations much earlier and the ability to cover the AWU loan repayment and basic operating costs from ground lease revenues at buildout. However, due to the extensive infrastructure investment, this scenario still yields a net present value of negative \$2.7 million for the overall project. This approach essentially reduces by half the \$5.4 million subsidy needed under the Current Concept assumptions on **Figure 8** in Section 3 of this Report.

⁶ While it should be noted again that other Hub requirements - ranging from hiring and subcontracting to green building expectations – may also reduce achievable rents below market rates, this analysis takes an optimistic view that the prevailing wage requirement impacts serve as a proxy for all City requirements.

Figure 13 M1 Sources and Uses with Appraised Lease Revenue

Year	1	2	3	4	5	6	7	8	9	10
Tenant Occupancy	0%	0%	0%	10%	20%	35%	50%	60%	75%	90%
Infrastructure Phasing	20%	20%	20%	20%	20%					
SOURCES										
Lease Revenue ¹	\$0	\$0	\$0	\$64,593	\$129,187	\$248,685	\$355,264	\$426,316	\$532,896	\$639,475
Remaining Leasehold Value ²	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,919,915
Austin Water Utility Loan ³	<u>\$2,370,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Sources	\$2,370,000	\$0	\$0	\$64,593	\$129,187	\$248,685	\$355,264	\$426,316	\$532,896	\$5,559,390
USES										
Infrastructure Cost ⁴	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	\$0	\$0	\$0	\$0	\$0
Wastewater Line Extension	(\$2,370,000)									
Repayment of Water Loan	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)
O&M Expense ⁵	<u>(\$169,293)</u>	<u>(\$93,069)</u>	<u>(\$94,931)</u>	<u>(\$96,829)</u>	<u>(\$98,766)</u>	<u>(\$100,741)</u>	<u>(\$102,756)</u>	<u>(\$104,811)</u>	<u>(\$106,907)</u>	<u>(\$109,045)</u>
Total Uses	(\$3,683,793)	(\$1,237,569)	(\$1,239,431)	(\$1,241,329)	(\$1,243,266)	(\$219,241)	(\$221,256)	(\$223,311)	(\$225,407)	(\$227,545)
Net Operating Income	(\$1,313,793)	(\$1,237,569)	(\$1,239,431)	(\$1,176,736)	(\$1,114,079)	\$29,444	\$134,008	\$203,005	\$307,488	\$5,331,845
NPV (Discount Rate)	12%	(\$2,729,091)								

[1] EPS assumes the Hub will not be fully occupied until year 11. Lease revenue reflects 2013 land appraisal.

[2] Assumes developer sells right to receive lease revenue from Hub's tenants while paying outstanding cost of the water loan and ongoing O&M expenses for next 40 years.

[3] Loan received from Austin Water (AW) for the extension of wastewater services to site. Loan has 20 year term and interest rate of 0%.

[4] Estimated cost of providing infrastructure to site less the water loan is \$5,130,000, which is assumed to be paid over the course of 5 years.

[5] Total operating and maintenance expenses estimated by ARR in 2015.

Source: Economic and Planning Systems, Inc.

M2. Allowing More Diverse Tenant Types

In furtherance of the Hub's environmental stewardship principle and the City of Austin's Zero Waste Plan, the type of tenant allowed at the Hub under the Current Concept is restricted to tenants that make use of recyclable waste materials, are involved in manufacturing that impacts waste reduction, or those otherwise involved in research and development for similar enterprises. This restriction greatly decreases the size of the pool of potential tenants at the site, which has two effects: 1) reduced competition for the land lowers its market value, and 2) limited re-tenanting options for the Master Developer increases the project's risk and thus a developer's or lender's financial return requirements. If the Hub were to be opened to a wider array of tenant types, then it might be easier to reach full occupancy at the Hub, which maximizes lease revenue, and increases the projects' likelihood of attracting a private developer partner. Furthermore, it is possible that allowing a wider array of tenants could increase the diversity of funding and partnerships available to help make the Hub work.

As an alternative to only allowing remanufacturing tenants at the Hub, some portion of the 95-acre site could be made available to more types of green industries or to general industrial uses as allowed under the zoning. A logistics distribution center, for example, might work well at 10108 FM 812. The site's proximity to major state highways and the Austin Bergstrom International Airport make it appealing for a distribution center, and Hub tenants themselves could benefit from the transportation and storage services provided by logistics centers. A market study is needed in order to identify which specific industries to target at the Hub.

By offering at least portions of the large Hub site for more general industrial uses, the overall project's feasibility can be improved significantly. If such uses are exempt from some of the wage and hiring requirements preferred by the City for the Hub, they should be able to pay market-rate land values that are several multiples of the discounted rates assumed for Hub users. Even if the general industrial uses are subject to those same restrictions, however, the breadth and depth of potential tenants should increase competition to locate at the Hub, thus increasing the amount of rent tenants are willing to pay, and consequently, reducing the project's risk to a developer or lender. On **Figure 14**, EPS has demonstrated the potential impact of this risk reduction by increasing annual lease revenue by ten percent from those shown on **Figure 8** and by expediting lease up time from ten years to seven. As illustrated, a lower-risk project would achieve a Net Present Value of negative \$5,037,684 compared to negative \$5,393,598 for a higher-risk concept with lower lease revenue.

Figure 14 M2 Sources and Uses with Expedited Lease up and Increased Lease Revenue

Year	1	2	3	4	5	6	7	8	9	10
Tenant Occupancy	10%	20%	35%	50%	60%	75%	90%	95%	95%	95%
Infrastructure Phasing	20%	20%	20%	20%	20%					
SOURCES										
Lease Revenue ¹	\$15,278	\$30,555	\$53,471	\$76,388	\$91,665	\$126,040	\$151,248	\$159,650	\$159,650	\$159,650
Remaining Leasehold Value ²	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$36,603
Austin Water Utility Loan ³	<u>\$2,370,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Sources	\$2,385,278	\$30,555	\$53,471	\$76,388	\$91,665	\$126,040	\$151,248	\$159,650	\$159,650	\$196,253
USES										
Infrastructure Cost ⁴	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	(\$1,026,000)	\$0	\$0	\$0	\$0	\$0
Wastewater Line Extension	(\$2,370,000)									
Repayment of Water Loan	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)	(\$118,500)
O&M Expense ⁵	<u>(\$169,293)</u>	<u>(\$93,069)</u>	<u>(\$94,931)</u>	<u>(\$96,829)</u>	<u>(\$98,766)</u>	<u>(\$100,741)</u>	<u>(\$102,756)</u>	<u>(\$104,811)</u>	<u>(\$106,907)</u>	<u>(\$109,045)</u>
Total Uses	(\$3,683,793)	(\$1,237,569)	(\$1,239,431)	(\$1,241,329)	(\$1,243,266)	(\$219,241)	(\$221,256)	(\$223,311)	(\$225,407)	(\$227,545)
Net Operating Income	(\$1,298,515)	(\$1,207,014)	(\$1,185,959)	(\$1,164,941)	(\$1,151,600)	(\$93,201)	(\$70,008)	(\$63,661)	(\$65,757)	(\$31,293)
NPV (Discount Rate)	12%	(\$5,037,684)								

[1] EPS assumes expedited lease up by year 7, plus a 10 percent increase to lease revenue to reflect the lower risk of a more diverse tenant pool.

[2] Assumes developer sells right to receive lease revenue from Hub's tenants while paying outstanding cost of the water loan and ongoing O&M expenses for next 40 years.

[3] Loan received from Austin Water (AW) for the extension of wastewater services to site. Loan has 20 year term and interest rate of 0%.

[4] Estimated cost of providing infrastructure to site less the water loan is \$5,130,000, which is assumed to be paid over the course of 5 years.

[5] Total operating and maintenance expenses estimated by ARR in 2015.

Source: Economic and Planning Systems, Inc.

Alternative B: Use Other City Land

The feasibility analysis of the Current Concept demonstrates that the infrastructure needs associated with the 10108 FM 812 site represent a significant challenge to achieving project feasibility and attracting a private financial and operating partner. As an alternative to developing the Hub at 10108 FM 812 – a large, generally unimproved site at the City's edge – the City could consider developing a Hub or incentivizing Hub-type tenants at other sites with less costly infrastructure needs. While co-locating the Hub tenants has theoretical synergistic value, the case studies reviewed by EPS suggest that such opportunities are much more limited if the Hub is not be adjacent to a MRF where materials for reuse could be collected, sorted, and transported with minimal effort and expense. Synergies could still be achieved for Hub-type tenants who could make use of similar materials – say, different metals that could be recovered from recycled electronics, or different materials associated with construction debris – but there is not necessarily great value in having those two broad categories co-located. For this reason, it may be advantageous to consider a smaller site that may be used to host one or two tenants, and serve as a demonstration that the Hub concept can work in Austin.

Alternative B explores the possibility of using a different site for the Hub. It is important for the City's economic development objectives that the Hub be located within City limits. Within Austin's boundaries, the Hub could theoretically be located on another publicly owned site, or Hub goals could be achieved by supporting firms located on privately owned sites. The approaches and implications for each option are described below.

B1. Publicly owned Site

Like the site at 10108 FM 812, other publicly owned sites can offer several advantages for a [re]Manufacturing Hub operation. With Council approval, such sites can be offered at below-market-rate prices, zoning and other development regulations can be amended to facilitate development, and deals can be negotiated to trade financial incentives for various policy-related goals. Equally important, the public sector can exercise the financial patience often required to realize unique policy-related goals, by allowing a phased take-down of land, slower payments for ground leases, or other practices uncommon for private landowners. The City would be able to place various operational requirements on tenants through leasing agreements, thus advancing the environmental stewardship, compatibility with surrounding uses, inclusive economic development, and other stated goals of the Hub. Such requirements would be more difficult for the City to implement in transactions between private entities because the City would not have a landlord's right to monitor and enforce obligations of their lessees.

EPS has outlined potential for developing the Hub on the land owned by ARR at 4711 Winnebago Lane. While City Council rejected staff's recommendation to sell the 9.4 acre site in February 2016, and since then other community benefits are being considered for the tract, EPS outlines advantages of developing the Winnebago site as a Hub for illustrative purposes. The Winnebago tract is zoned industrial in an active industrial area. Basic infrastructure facilities and services are already in place.

The February 2016 purchase offer of \$1,450,000 represented a price of roughly \$154,000 per acre, and reflected the assumption that this would be an arm's-length transaction with no significant use restrictions or development requirements placed on the buyer. As discussed in

the previous chapter, EPS estimates that the construction requirements for prevailing wage add roughly \$91,000 in development costs per acre for industrial development, so the Winnebago site may be worth closer to \$60,000 per acre under those requirements. However, that \$60,000 figure would represent the “as-is” value of the parcel, not the value achievable only after significant infrastructure investment is made.

As such, the City could theoretically offer the land at \$60,000 per acre to a developer, or the annual equivalent for purposes of a ground lease – assumed to be 6.27 percent of the fee-simple value based on the appraisal findings – for \$0.09 per square foot. At this rate, the 9.4-acre site would generate an estimated \$35,000 per year in ground lease, which though not a significant revenue source to the City, would not be directed toward payment of even more costly infrastructure debt service or operating and maintenance costs (as in the case of 10108 FM 812). Thus, this structure represents a virtually revenue-neutral or even slightly positive proposition for the City or a developer partner rather than one requiring ongoing subsidy.

The Winnebago site used for this illustration is only 9.4 acres of land, which is significantly smaller than the 105 acres at 10108 FM 812. However, several of the LOI respondents indicated that they would require sites of only 1 acre or less, which suggests that a site like 4711 Winnebago Lane could accommodate multiple Hub tenants and thus achieve more than merely a symbolic start for the Hub concept. By demonstrating the success of such tenants on municipally-owned land, the City may be more successful in attracting other tenants and securing additional financing needed for a larger site or the original site at 10108 FM 812.

Another complementary example would be to locate the Hub on a publicly owned brownfield site, where it could potentially take advantage of the Austin brownfields revolving loan fund that has been granted by the U.S. Environmental Protection Agency (EPA). Granted in 2016, the program will allow the City to provide five loans and one subgrant to support cleanup activities for sites contaminated with hazardous substances and petroleum. The grant money will be loaned at favorable and flexible terms for sites that might have problems obtaining traditional bank financing. Developing on a brownfield would further the City’s Hub goal of reusing underutilized or unproductive land.

B2. Sell Public Land

Aside from developing the Hub at a different publicly owned site, it may be worth revisiting the idea of selling publicly owned land to help pay for the infrastructure costs. City Council has rejected past proposals by staff to sell City land to raise funds for the Hub development, but this report seeks to provide a comprehensive list of options available to City leaders. For example, instead of developing the entire 105 acres at 10108 FM 812 as the Hub, the City could sell a portion of that site to generate revenue for the Hub. The balance of land could serve as a smaller demonstration site for the Hub.

The land, as previously discussed, was valued by appraisers in 2013 at \$119,000 to \$136,000 per acre in its as-is condition. While precise calculations are not useful without a specific subdivision and marketing concept, EPS believes it is likely that selling as little as 30 to 40 unimproved acres of the 105-acre FM 812 site could balance the Hub project’s feasibility by generating land sale proceeds and reducing infrastructure costs. The remaining 55+ acres would still represent a large industrial park for an innovative concept like the [re]Manufacturing Hub.

Alternative C: Support Existing or New City Businesses that meet Hub Goals

C1. Subsidize Development Costs on Private land

An alternative to developing the Hub on publicly owned land is supporting the development of Hub-type businesses on land owned by one or more private landowners within City limits. A public-private partnership would need to be arranged so that the City's priority principles for the Hub, such as supporting Zero Waste or creating jobs, are not compromised.

For example, the City could create a grant program that provides direct subsidy to Hub-type tenants to support the added construction costs associated with the City's policy-related goals for construction and economic development. As discussed earlier in this Report, EPS estimates that those requirements add roughly \$7 per building square foot. As one concept, the City could offer to amortize this difference over a 20-year period as long as the tenant complied with reporting and operating standards. If the tenant used a combination of construction debt and equity investment to cover those added costs, and the City agreed to pay a blended interest rate of roughly 10 percent on those added costs, the annual cost to the City would be roughly \$0.82 per square foot or \$16.40 per square foot over 20 years. **Thus, for the same total cost as would be required to subsidize the Current Concept (\$5.4 million in negative Net Present Value), the City could directly subsidize the construction of roughly 330,000 square feet of Hub-type tenant facilities.** Based on the responses to the call for Letters of Interest, this amount of space could represent numerous Hub-type tenants. Moreover, because this money would be spent to support a known business that had already committed to developing and operating in Austin and would continue to be offered only based on the tenant's performance, the risk profile of this approach would also be more favorable than investing public dollars into a speculative industrial park available to a limited group of users.

C2. Subsidize Rent on Private Land

A complementary option is the City could consider offering subsidies to industrial landlords to discount the rent for Hub-type tenants. Similar in concept to the "Section 8" program for affordable housing, the City's program could pay the difference between a market-rate industrial rent and the amount that could be paid by Hub-type tenants based on their business plans and commitments to meeting various City policy objectives. Unlike the program above that would offset certain development costs, this program could be used by properties that already exist, making productive use of underutilized built infrastructure. For example, an industrial landlord could offer an existing building at a reduced rent as an inducement for Hub-type tenants, yet would receive the building's full market value in rent. **Such a program would be revenue-neutral to the landlord, but could be of great value to Hub-type tenants who are not in the financial position to make significant investments in newly constructed buildings.** With Austin-area industrial rents currently averaging roughly \$7.00 per square foot per year⁷, this type of program could allow the City to subsidize up to 50 percent of the rent (\$3.50 per square foot) for 150,000 square feet of Hub-type tenants for 10 years, for the same amount that

⁷ Source: austintenantadvisors.com report for 1Q16 industrial rents in Greater Austin.

is required to subsidize the infrastructure investment for the FM 812 site. Again, this program would require reporting and performance metrics to ensure that the goals of the Hub project were being met, and would reduce the City's risk profile by directly funding Hub-type businesses rather than investing in a speculative industrial park for a limited number of potential users.

It is assumed that if granted City Council approval, the options described in Alternative C would be funded by the City's General Fund, which would avoid potential legal issues associated with using bonds for such purposes.

Summary of Alternatives

This analysis has shown that the Current Concept is not financially feasible, due in large part to the infrastructure costs necessary to prepare the site at FM 812 and the ongoing operating deficit based on the rents tenants are likely to be able to pay. The Current Concept requires significant public subsidy to close the ongoing financing gap, which could come in the form of local, federal or state grants, or raised ARR rates. Restructuring the governance of the Hub could potentially introduce new funding sources to the project as well, though external funding resources would still be required that have not yet been identified.

Alternatively, the City could reduce the financial deficit by modifying different aspects of the Current Concept. EPS described how reducing regulations at the Hub and allowing more diverse tenants can potentially improve the project's feasibility. In addition, EPS has presented four alternative methods by which the City could advance their waste and economic development goals while taking on less risk than is associated with the Current Concept. As previously discussed, developing a Hub-like concept on other public land that requires less infrastructure spending or selling publicly owned land to generate funds for the Hub could potentially allow the City to develop a Hub and break even financially.

Alternatively, the City could support the construction of new Hub-like tenants or subsidize existing Hub-like tenants on privately owned land. These two options would require the dedication of public funds for the project, but the total amount needed could be significantly lower and/or less speculatively deployed than the funds required for the Current Concept.