

Smart Crosswalk Dynamic Lighting System

Executive Summary

While in crosswalks, pedestrians are exposed to an increased risk of being involved in life threatening collisions with motor vehicles. Despite the numerous deaths associated with using crosswalks each year, they have remained relatively unchanged for decades. In order to help combat collisions between pedestrians and motor vehicles in crosswalks, the Smart Crosswalk Dynamic Lighting System (SCDLS) was developed. SCDLS consists of several lighting modules attached to a crosswalk. These modules illuminate the interior and exterior of the crosswalk when a pedestrian enters the crosswalk, thus dynamically alerting drivers to the presence of the pedestrian. They also collect vehicle traffic metrics for analysis by the system's owner.

Figure 1 shows sales projections for the first three years of operation.

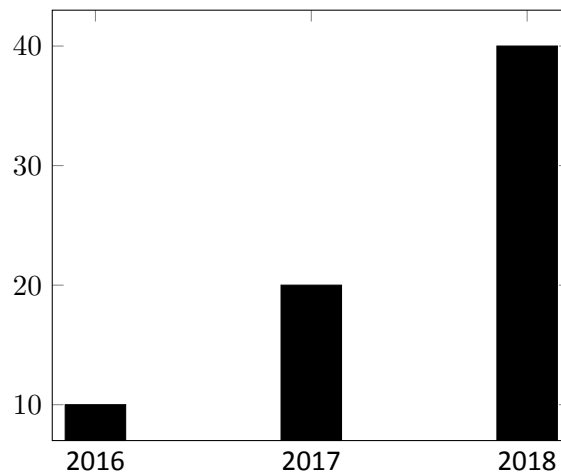


Figure 1: Projected sales in systems for first years of operation

Objectives

- Produce and sell 200 SCDLS units within the first three years of operation.
- Become cash flow positive by end of year five.
- Decrease initial tooling costs by 50%.

Keys to Success

- Use pre-established network connections to deploy early SCDLS units to the Mississippi State University campuses, expanding growth to other universities within first two years.
- Provide pedestrians and purchasers a way to submit feedback, allowing the team to consistently improve the product to make roadways even safer.

1. Plan Overview

1.1 Mission

Crosswalk accidents occur daily. Our mission is to provide effective and cost-sensitive pedestrian traffic safety solutions. We accomplish our mission by creating intuitive interaction between pedestrians and drivers on the roadway. Our initial product, the Smart Crosswalk Dynamic Lighting System (SCDLS) enables pedestrians and drivers alike to travel safely and confidently while providing federal, state, and municipal departments of transportation and public safety with cost effective solutions. SCDLS is the new standard in pedestrian to driver communication and we are a company focused on keeping roads safe for all.

1.2 Objectives

SCDLS provides proprietary smart crosswalk lighting module technology. Our primary objective is sell to at least ten crosswalk units to municipalities or educational campuses by directly marketing to departments of transportation and public safety within our first year. Additionally, we plan to develop and sell companion software packages for data collection and analysis. In order to allow our customers to maximize the utility of their investment, we will sell this software as a complementary product to enhance the lighting modules revenue stream. SCDLS will provide product and software support through a Software As A Service (“SAAS”) model. This two-pronged approach will allow SCDLS to provide a complete suite of services and will provide plenty of positive revenue opportunities.

SCDLS will not only market and maintain a technically superior product, but we will also develop a strong market presence. Our second objective is to establish our company as a manufacturer of premium, reliable road lighting systems. We hope to convert at least 50% of our initial customers to repeat customers as they add more crosswalk systems around their city or campus. The typical software, licensing, and support contracts will have minimum terms of forty-eight (48) months.

1.3 Keys to Success

- Development of a manufacturing process
- Deploy SCDLS at Mississippi State University (MSU)
- Creation of an effective supply chain

Having SCDLS deployed at MSU will allow us to demonstrate the full extent of SCDLS’ capabilities to potential customers while also gaining customer feedback during the formative years of the company. One of the most challenging problems facing SCDLS is soldering components to the printed circuit board due to the size of the packages used by some of the components, so the manufacturing process must be designed to overcome this issue. Securing the SCDLS supply chain will be a key to success especially in regards to obsolescence of certain key components.

1.4 Competitive Advantage

SCDLS provides a competitive advantage compared to the current industry leading solutions by providing more functionality with less road modification and cost than products offered by our competitors. Most existing systems such as that marketed by LightGuard Systems, Inc. require significant road alterations to provide electrical power to these lights, whereas SCDLS derives its energy from solar power. Our product provides a unique feature of sensing pedestrians as they arrive in the crosswalk to prevent vehicular traffic from being desensitized by the crosswalk illumination. Additionally, our product is able to gather traffic statistics which would otherwise require the purchase and installation of other road monitoring equipment. In summary, our product is preferable to the competition because it is more cost effective, provides more functionality, and does this with less road modification and shorter installation time.

1.5 Target Market

SCDLS' target market are departments of transportation and public safety for municipalities, including, but not limited to, public and private institutions where pedestrian and auto traffic is monitored and controlled. This market is very specific, yet quite large, since most crosswalks are under the jurisdiction of municipalities and campuses. There are municipalities and campuses seeking to update their roads and to make them safer. SCDLS is also the perfect solution for pedestrians who are concerned about their safety on the crosswalk, and motorists that are concerned about not having an accident while driving. As more people attend college, more colleges are expanding, which brings a need for more pedestrian friendly roads. This is also the case for expanding municipalities that are looking for more pedestrian friendly roads and sidewalks. SCDLS markets to cities and campuses that need to protect their citizens and students.

1.6 Basic Strategies

SCDLS will initially form as a limited liability company (LLC) with the primary goal to complete the design of a production-ready system while partnering with a municipality or beta facility to elicit final feedback. With this feedback and subsequent corrections, the company will seek funding through its extensive business network. Once an angel investor and initial funding is secured, the team will proceed with a small batch manufacturing run, allowing the team to begin marketing and selling the products to various municipalities and college campuses across the United States. After initial orders are sold, the team can then use this cash, investing it back into the company to allow further expansion and increase manufacturing capabilities. SCDLS will use this strategy to grow its customer base and market the product. Marketing will consist of direct to consumer sales using a product representative and distribution model. SCDLS will also pay competitive commissions. SCDLS will allocate roughly 30 percent of its overall operating budget to research and development activities, allowing the company to expand into other road safety areas yet to be explored.

2. Company Summary

2.1 Company Description

SCDLS, LLC will be established as a limited liability corporation, allowing company credibility, lower tax rates and little limitation on company ownership. Choosing an LLC will allow equal responsibility and financial distribution between all current partners. The current partners are George Hilliard, Lee Sargent, Emily Dance, Preston Stinson, and Hagan Walker; each representing a 20% share of the company. As time progresses and additional funding is needed, an equal distribution equity stake could be considered.

2.2 Company Location and Facilities

SCDLS plans to request space at the MSU Business Incubator facility. This would be the most cost effective solution as it is subsidized by the university. At this stage of development, all of the machining and PCB production and assembly will be outsourced, requiring only in house assembly and packaging. As a result, our space needs are drastically reduced.

2.3 Company Strategy

Once SCDLS becomes a limited liability company (LLC), SCDLS can begin to begin to reach our target market of municipalities and other pedestrian facilities. The target municipality is one in a city with high level pedestrian traffic and high level auto traffic, and large cities and college campuses both have these characteristics. Angel investors will be the main source of initial funding. An angel investor will be the first choice in investors, and a loan will be the backup plan. Once we have acquired the initial funds, we will manufacture systems and market and sell them to a municipalities and college campuses of varying sizes for a soft launch. The soft launch will be the initial launch with the municipalities and campuses so that our product can be used in real crosswalks. We will get feedback from the users and municipalities, and try to further tend to the needs of the crosswalk users before the actual full launch of SCDLS. Our goal is to sell 10 systems for the soft launch to municipalities and college campuses of varying sizes. The money made from the soft launch orders can be used to modify and market SCDLS better for the final launch, and it will be used to purchase more manufacturing equipment for the the facilities expansion in order to to make more systems.

Marketing SCDLS will begin before the soft launch and will continue through the final launch stage. There are a few marketing strategies. SCDLS will have product representatives paid on a competitive commission for the systems for sales and maintenance and partnerships with insurance companies. Our product representatives will go into cities and campuses and market and sell SCDLS to departments of transportation (DOT) and public safety departments. They will also be the DOT's SCDLS contact for any questions, concerns, and maintenance before, during, and after the installment and use of SCDLS. The product representative will have a marketing plan including the partnerships with insurance companies. SCDLS hopes to work with the insurance companies to lower premiums for cities who use SCDLS as part of their safety and accident prevention plans. SCDLS also will use 30 percent of the operating budget to have a research and development department dedicated to finding new ways to keep the roads safe with new products.

2.4 Startup Costs

2.4.1 Manufacturing

SCDLS aims to keep initial startup costs as low as possible. Our initial costs will primarily be related to preparing for and financing the initial manufacturing run of our product. The costs associated with manufacturing are as follows. To minimize these costs, SCDLS will keep the initial batch small; these numbers are for an initial batch size of 80 devices (enough for 10 crosswalks).

Printed circuit boards (PCBs) and electrical components will cost \$50 per unit, or \$4000 for the entire run. Raw aluminum for the cases will cost \$4000. The cost to machine this into finished cases will be around \$115 per hour for 9 hours, for a total cost of \$1035. Assembly of the completed parts is expected to cost around \$1000; this includes automated PCB assembly and final hand assembly of the device.

The total cost for our our startup inventory is therefore expected to be \$10035. These costs are summarized in Table 1.

Cost of Initial Inventory	
Electrical components	4,000
Case material	4,000
Case machining costs	1,035
Assembly	1,000
Total	\$10,035

Table 1: Cost breakdown of initial manufacturing run

After initial capital gain from the sale of the first production run, SCDLS can invest in processes that are cheaper per-unit than these small scale processes. For example, SCDLS plans to design and produce casting molds. These will enable us to produce device cases at a much smaller unit cost.

2.4.2 Facilities

SCDLS must rent the office and lab space we will need. The cost for the incubator space discussed in Section 2.2 is \$350 per month. In addition, we will need utilities such as Internet, for an additional cost of around \$100 per month. The total first-year cost for building space is \$5400. Renter's insurance is expected to cost \$500. This initial investment will provide sufficient space for the first year of operation.

2.4.3 Miscellaneous

In addition to the above costs, we are allocating \$500 for legal costs, such as fees incurred from incorporation. Marketing costs are expected to be small because we plan to self-market instead of hiring an outside marketing company; \$1000 is allocated.

2.4.4 Summary of Funding

The expenses seen in Table 2 will be covered with funding from angel investors. SCDLS plans to secure funding from at least two investors; SCDLS will seek \$20,000 from each investor. To cover any further costs, SCDLS founders are prepared to supply any remaining needed funds. Based on our estimates, these should be quite small.

Our funding sources are summarized in Table 2.

Startup Expenses	
Legal	500
Advertising	1,000
Insurance	500
Rent	5,400
Equipment	4,000
Total Startup Expenses	\$11,400
Startup Assets	
Cash Balance on Starting date	15,000
Startup Inventory	10,035
Capital Assets	6,000
Total Current Assets	\$31,035
Total Startup Requirements	\$42,435
Funding	
Investor 1	250,000
Investor 2	250,000
Founding Members	11,400
Loans	—
Total Investment	\$511,400
Left To Finance	—
Loss at Start-up	11,400
Total Capital	500,000
Total Capital and Liabilities	500,000

Table 2: Initial Expenditures

3. Product Summary

3.1 Product Description

The Smart Crosswalk Dynamic Lighting System (SCLDS) is a crosswalk system made up of eight modules that line a crosswalk. These modules illuminate the interior and exterior of the crosswalk when a pedestrian enters the crosswalk, thus dynamically alerting drivers to the presence of the pedestrian. They also collect vehicle traffic metrics for analysis by the system's owner using a magnetometer to detect vehicles and their speed. Each module consists of a microcontroller, sensors, a battery, a solar panel, wireless modules, and light emitting diodes (LEDs) encased in an aluminum housing. The microcontroller will be programmed to control everything. The sensors are infrared sensors that will detect pedestrians and vehicles. The solar panel will use solar energy to charge the battery that is planned to last a minimum of five years. The Wi-Fi capability will allow the modules to communicate with each other and communicate with the internet server to record traffic metrics. The LEDs will be placed in positions for maximum lighting of the crosswalk and vehicle alerting, and the LEDs will also be bright enough to get the drivers' attention and light the crosswalk. All the components will be housed in an aluminum shell to protect everything inside. The dimensions of the modules are comparable to most crosswalk lighting systems and are small enough for minimal vehicle interference. The system will have a simple surface installation on the pavement and requires little maintenance. This system will reduce the number of collisions between motor vehicles and pedestrians in crosswalks, while also giving municipalities improved information about road usage.

3.2 Customer Needs and Benefits

Around the world, traffic incidents occur daily. Our first product, SCDLS, makes the roadways safer for pedestrians and motorists alike. By implementing our system, not only are the needs of our customers met; but anyone that interacts with our system is blanketed by safety – the largest need of all. SCDLS also implements multiple benefits in addition to assuring safety for anyone that uses the system as intended. SCDLS is the only crosswalk system that automatically lights up, alerting approaching motorists of an active pedestrian in the crosswalk. It is also the only system that uses an eye-catching flash pattern to alert approaching motorists. These features address specific customer needs while providing benefits that far surpass any competing product on the market.

3.3 Future Products

SCLDS will enter the road safety market with an initial line of solar powered intelligent crosswalk products for multiple size crosswalks and associated monitoring software, and then survey the market for other opportunities. Currently the team is evaluating increasing the options for intelligent road products including street lights that communicate with the sidewalk such that the street lights make more efficient decisions about managing road traffic. Additional products include overhead lights that interact with sensors to provide lighting when it is desired, but not waste energy when it would be unnecessary. These multiple products can be combined and networked together to create a smart grid of safety products to improve the quality of life and safety for pedestrians.

3.4 Competitive Comparison

In order to analyze the crosswalk illumination market we will compare the features provided by SCDLS to systems from LightGuard Systems, Traffic & Parking Control Co. (TAPCO), and the Secure Logic Solar Road Light (SLSRL). The first place SCDLS excels is in its simple installation procedure. Installation of SCDLS occurs as follows. First, pilot holes are drilled in the installation sites. Second, an industrial grade adhesive is applied to the installation sites. Finally, the SCDLS modules are installed by bolting them to the road. The SCDLS installation procedure can be performed quickly and does not require major modifications to the road or sidewalk. All of SCDLS' competitors have more complex or restrictive installation procedures. LightGuard Systems' lighting modules have to be embedded into the road during installation. TAPCO's modules and the SLSRL can be installed on the road, similarly to SCDLS. However, LightGuard Systems' and TAPCO's systems also include system controllers and activation systems that must also be installed. These systems also require power lines to be run to the modules, except for TAPCO's solar modules. SCDLS' installation procedure is superior due to the simplicity of the procedure and minimization of equipment to install.

The second feature to compare is the activation method. SCDLS engages the lighting when it detects a pedestrian entering the crosswalk. The SLSRL simply activates at night. LightGuard Systems' and TAPCO's systems are activated either by the pedestrian pushing a button installed on the sidewalk, via a sensor installed in bollards on the sidewalk, or via a microwave sensor installed above the sidewalk. All of the competitors' systems either require the installation of expensive equipment or do not even activate based on the presence of a pedestrian.

The third feature to compare is the lighting itself. SCDLS uses diffused red green blue LEDs to illuminate the crosswalk. The color of the LEDs can be adjusted in software and a blinking pattern can also be assigned. The SLSRL only uses white LEDs that do not blink. LightGuard Systems and TAPCO use high brightness lights that can be seen during the day and can be assigned a blinking pattern. SCDLS' advantage, when it comes to lighting, is the ability to dynamically change the color and blink pattern of the lights depending on the user's desires and needs.

The final feature to compare is SCDLS' ability to collect and wireless transmit vehicle and pedestrian traffic data. None of the other products on the market have the capability to collect vehicle or pedestrian traffic data. As well, none of the competitors' systems can wireless communicate with a server to transmit traffic data, and with modern cellular technology, wireless communication is possible almost anywhere. Therefore, SCDLS' traffic data collection feature truly differentiates it from its competitors and renders existing combinations of traffic monitoring systems and crosswalks obsolete.

4. Market Summary

4.1 Market Analysis

SCDLS is designed to protect pedestrians from vehicle collisions in crosswalks with moderate to high pedestrian traffic. Municipalities, colleges, and universities are the target market for SCDLS, since both are responsible for construction and maintenance of crosswalks. Demand for SCDLS is set to increase in the future since more people are adopting walking as their primary mode of transportation for reasons such as health, environmental concerns, and automobile related expenses. SCDLS is the perfect solution to protect the pedestrians in cities and university and college campuses.

4.2 Marketing Strategy

SCDLS will start with marketing to local municipalities and university campuses. Mississippi State University will be the first client we pursue. We will then expand our marketing to local municipalities, such as Starkville. The first contracts will be used for a soft launch. The soft launch will be where the clients will use SCDLS for a period of time and then give us feedback about their experience with SCDLS. SCDLS can then make any needed adjustments or modifications before the main launch of the product. This will also give us an opportunity to get pictures, videos, testimonials, and live traffic metrics from the SCDLS product in real life use for marketing purposes. For the main launch, SCDLS will be marketed to university and college campuses and municipalities through a sales representative with strategic marketing material created after the soft launch.

4.3 Sales Projection

For the initial system production, SCDLS will produce 80 modules which will be enough modules for 10 systems, which we plan to sell for the soft launch in the first year. Once the soft launch is complete, we will resume system production. The second year goal is to sell 20 systems, and the third year goal is to sell 40 systems. The systems will be purchased by new customers for their first crosswalks and old customers that are looking to expand SCDLS in their city or on their campus. The systems can be produced for \$1003.50 per system and will be sold for \$5000 per system, resulting in an almost \$4000 profit margin per system. Bulk pricing will also be available.

4.4 Manufacturing and Distribution Strategy

Manufacture and distribution of SCDLS systems will be handled the by the SCDLS Manufacturing and Distribution Department, housed in the small business incubator office space. The printed circuit board and the aluminum housing manufacturing will be outsourced, but all assembly will be completed in house. Each system will be thoroughly tested by our team before it is packaged and distributed to the customer.

5. Organization Overview

5.1 Company Structure

SCDLS, LLC is a company that strives for excellence in all areas, and we believe excellence in our product begins with excellence in the workplace. SCDLS is built on the foundation of integrity, initiative, and integration, and these principles are key to our management style as well. There are five founding board members: Emily Dance, George Hilliard, Lee Sargent, Preston Stinson, and Hagan Walker. Based on strengths and potential, each board member is in charge of a section of the company as seen in Figure 2. Emily Dance is the Sales and Marketing lead over a sales representative that will be hired during the second year to cope with increased sales. George Hilliard and Hagan Walker are the Research and Development leads. Lee Sargent and Preston Stinson are the Manufacturing/Distribution leads with an additional packaging technician being hired during the second year. Although each member has their own section of the company to take care of, there is a system of checks and balances for each department. The board has weekly meetings to discuss weekly happenings and plans so that each department can work efficiently together and so that the board members can approve of each departments projects. To ensure that the finances and legal documents are handled correctly, SCLDS will outsource professional service contracts for human resources, legal, accounting, and payroll processing services. With these services outsourced, the board members can focus on the engineering and the sales of our SCLDS products.

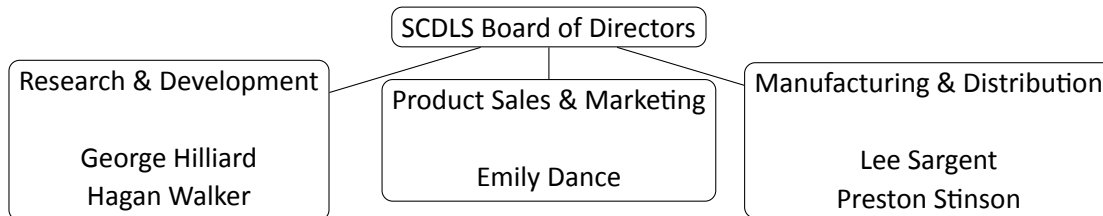


Figure 2: SCDLS Board of Directors Structure

5.2 Personnel Plan

In Table 3, the annual salaries of the SCDLS staff are shown. In the second year, more employees will be hired in the Sales and Marketing and the Manufacturing and Distribution departments.

Table 3: Annual salary payroll details for first years of operation

	2016	2017	2018
Research and Development			
George Hilliard	50,000	50,000	50,000
Hagan Walker	50,000	50,000	50,000
Sales and Marketing			
Emily Dance	50,000	50,000	50,000
Marketing Assistant	—	30,000	30,000
Manufacturing and Distribution			
Lee Sargent	50,000	50,000	50,000
Preston Stinson	50,000	50,000	50,000
Packaging Technician	—	36,000	36,000
Human Resources	1,000	1,000	1,000
Legal	2,000	2,000	2,000
Accounting and Payroll	6,000	6,000	6,000
Total Payroll	259,000	325,000	325,000
Payroll Burden	38,850	48,750	48,750
Total Payroll Expenditures	\$297,850	\$373,750	\$373,750

6. Financial Plan

6.1 Profit and Loss

Our current projections for the next three years rely on the sales of seventy SCDLS systems during that time frame, resulting in \$350,000 in sales. During the first three years we expect sales of SCDLS units to grow from ten per year to forty per year. Each SCDLS system is sold for \$5,000 and requires \$800 in materials and \$203.50 in wages. During year two the manufacturing process for the SCDLS module housings will change from CNC machining to injection molding in order to reduce the production costs for each SCDLS system. The change to injection molding will reduce the materials cost from \$800 to \$500 and the wages cost from \$203.50 to \$152.63 for each SCDLS system produced. Every sale results in annual gross profit of \$3,997.50 for the first two years and \$4,347.38 for the third year. In the first three years sales of SCDLS systems is projected to generate approximately \$290,000 in gross profit.

The primary expense affecting SCDLS during the first three years is employee salaries. During the first year SCDLS will consist solely of the five founders. A marketing assistant and technician will be hired in the second year in order to handle increased sales and to market for the next year. Employee annual salaries will result in \$1,045,350 in expenses from years one to three. The other major expense is the \$10,000 manufacturing change from CNC machining to injection molding during year two. However, the increase in gross profit from sales during year three will more than compensate for this expenditure. Office space will be rented through the MSU Entrepreneurship Center incubator and will annually cost \$4,200. Utilities for the office space will be \$1,200 annually. Business insurance will cost \$500 each year. During our first year the annual advertising budget will be \$1,000 and during the second year it will grow to \$5,000 as we work towards increasing SCDLS adoption. Starting in year two and onwards \$47,690 will be paid towards the loan taken out to ensure solubility. Miscellaneous and depreciation will result in \$1,000 and \$1,200 of annual expenses. The projected annual income, operating expenses, and net profit can be seen in Table 4.

Table 4: Projected profit & loss for first 3 years of operation, to nearest dollar

	2016	2017	2018
Income			
Sales	50,000	100,000	200,000
Cost of Sales			
Materials	8,000	16,000	20,000
Wages	2,035	4,070	6,105
Subtotal (Cost of sales)	10,035	20,070	26,105
Gross Profit	39,965	79,930	173,895
Gross Profit (%)	80%	80%	87%
Operating Expenses			
Recurring Salaries	297,850	373,750	373,750
Rent	4,200	4,200	4,200
Utilities(Elec/Gas/Phone)	1,200	1,200	1,200
Insurance	500	500	500
Bldg Maintenance	—	—	—
Travel	—	—	—
Advertising	1,000	5,000	5,000
Bank Finance Charges	—	—	—
Capital Expenditure	—	10,000	—
Loan Payments	—	47,690	47,690
Misc	1,000	1,000	1,000
Depreciation	1,200	1,200	1,200
Total Operating Expenses	306,950	444,540	434,540
Operating Profit	-266,985	-364,610	-260,645
Misc Income	—	500,000	—
Net Profit (before tax)	-266,985	135,390	-260,645
Taxes	11,990	23,979	52,169
Net Profit (after tax)	-\$278,975	\$111,411	-\$312,814
Net Profit/Sales (%)	-558%	111%	-156%

6.2 Projected Cash Flow

The projected annual cash flow can be seen in Table 5. Note that in 2017, we take a \$500,000 loan to cover the large amount of expenses we incur, especially salary. Our growing revenue from increased sales is expected to be able to help cover the cost of repayment of this loan.

Table 5: Cash flow statement for initial years of operation, to nearest dollar

	Startup	2016	2017	2018
Income				
Sales		50,000	100,000	200,000
Capital Received/Loans	483,965	—	500,000	—
Other Income		—	—	—
Total Inflow	483,965	50,000	600,000	200,000
Expenditure				
Materials		8,000	16,000	20,000
Wages		2,035	4,070	6,105
Recurring Salaries		297,850	373,750	373,750
Rent		4,200	4,200	4,200
Utilities		1,200	1,200	1,200
Insurance		500	500	500
Bldg Maintenance		—	—	—
Travel		—	—	—
Advertising		1,000	5,000	5,000
Bank Finance Charges		—	—	—
Capital Expenditure		—	10,000	—
Loan Payments		47,690	47,690	47,690
Misc		1,000	1,000	1,000
Taxes		—	40,617	—
Total Outgo		363,475	504,027	459,445
Income Less Expenditure		-313,475	95,973	-259,445
Cash Balance	\$483,965	\$170,490	\$266,463	\$7,018

6.3 Projected Balance Sheet

The projected annual balance sheet can be seen in Table 6.

Table 6: Balance sheet for initial years of operation, to nearest dollar

	Startup	2016	2017	2018
Current Assets				
Cash Balance	483,965	170,490	266,463	7,018
Merchandise Inventory	10,035	10,035	20,070	20,000
Subtotal	494,000	180,525	286,533	27,018
Capital Assets				
Capital Assets	6,000	6,000	6,000	6,000
Depreciation	—	1,200	1,200	1,200
Subtotal	6,000	4,800	13,600	12,400
Total Assets	500,000	185,325	300,133	45,523
Liabilities				
Current Liabilities	311,400	—	—	—
Long Term Liabilities	—	—	500,000	—
Total Liabilities	311,400	—	500,000	—
Capital	500,000	185,325	-208,667	37,923
Total Liabilities and Capital	\$500,000	\$185,325	\$291,333	\$37,923