A RISK ANALYSIS MODEL FOR THE MAINTENANCE AND REHABILITATION OF PIPES IN A WATER DISTRIBUTION SYSTEM: A STATISTICAL APPROACH

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ABSTRACT

A Risk Analysis Model for the Maintenance and Rehabilitation of Pipes in a Water Distribution System: A Statistical Approach

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The network of pipes in potable water distribution systems (WDS) are comprised of thousands of pipes made of various materials including PVC, concrete, cast iron, and steel, among several others. The pipes are subjected to internal and external conditions that lead to their failure. Stress conditions include, but are not limited to internal pressures, traffic loading, and corrosion. The deterioration of a pipe decreases its mechanical strength which results in an increase of its probability of failure. Failures lead to loss of service which translates to loss of money due to the cost of repairs and buildup of traffic caused by street closures.

The focus of this study is the pipe network underneath cities that make it possible for communities to have access to potable water. The objective of this analysis is to evaluate the physical conditions of each pipe in a water distribution system in order to assess its probability of failure and ultimately calculate the risk associated with each pipe in the case that it were to fail. This model focuses only on the pipes of the WDS and does not take into consideration fittings, pumps, and other network components. This model assesses pipe age, material, diameter, internal pressure, traffic loading (industrial or residential), and length to determine the probability of failure. It then utilizes several economic factors such as material cost, customer criticality, demand, traffic impact, and land use to calculate the risk associated with each pipe. The risk associated with each pipe can then be used as a ranking system to identify the most vulnerable pipes, those with the highest economic impact upon failure. Identifying the pipes with the highest risk allows municipalities to better allocate funds for maintenance or replacement of pipes. It highlights the most critical pipes within a network of thousands.

In order to check its functionality, this model applied to the WDS of the City of Arroyo Grande, California. Information on the City's distribution system was analyzed using Bentley's WaterCAD, ESRI's ArcGIS, MathWorks' MATLAB and Microsoft's Excel software to perform the analysis.

The risk analysis model provided 3 pipes within the distribution system made of cast iron as having a high probability of failure and a critical level of risk. A critical level of risk is defined as falling within the highest range of risk within this study. Considering that only 3 pipe segments were highlighted as having a Critical Risk, 4 as High Risk, and 6 as Medium Risk, in a system of 3572 pipes indicates that the model functions properly. This model was compared to a method developed by Jan C. Devera in his thesis "Risk Assessment Model for Pipe Rehabilitation and Replacement in a Water Distribution System" (2013), which was also applied to the City of Arroyo Grande's distribution system. Results provided by this analysis prove that both models are functional due to similar results. The current study utilizes the concepts of random variables and conditional assessment to run various Monte Carlo Simulations as the means of calculating the probability of failure of a pipe. Mr. Devera's model utilizes simplistic approach that does not involve intensive calculations, but results for both models turned out to be similar when looking at the Arroyo Grande distribution system.

This risk assessment model demonstrates that a risk assessment model can provide a framework to prioritize pipes based on risk. The approach can help create a schedule for a city's pipe distribution network for maintenance and repair. It is important to note that it is not a predictive model. This study may be employed to better allocate funds for the rehabilitation and replacement of a city's existing pipe network to promote optimal operating conditions and service to the public.

Key Words: Water Distribution System/Network, Risk of Failure, Monte Carlo Simulation, Random Variable, Conditional Assessment.

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Chapter 1

Introduction

1.1 Background

The deterioration of materials over time is an inevitable process that is expedited by constant use. This process of deterioration affects every component of a city's infrastructure including its transportation system, buildings and utilities. The stress felt by each component is substantially amplified with the increased demand and use resulting from population growth. With deteriorating systems and constant population increases it is important to assess the performance and existing condition of a city's infrastructure in order to continue providing these necessary services to the public. Rehabilitation or replacement of entire systems is economically infeasible, therefore there arises a need to develop models to facilitate the selection of the most crucial components of a system.

This study will focus primarily on the physical operating conditions of a potable water distribution system in order to facilitate the selection of its most crucial pipes. Several components of this model are based on a previously developed model, however, the computation of the probability of failure is more realistic. This study incorporates a statistical model that incorporates several factors that affect pipe deterioration. The previous model did not include statistical or mathematical model to determine the probability of failure. The previous model assigned probabilities of failure through intuition. A realistic model, such as this one, has the potential to become a predictive model instead of a mere framework to assess the risk of failure of a pipe and prioritize them.

1.2 Scope of Work

This model focuses on a statistical model that utilizes the theory of random variables and Monte Carlo simulations combined with a statistical model in order to assess the physical conditions of a water distribution system. The current model was applied to the potable water

distribution system of the City of Arroyo Grande and was compared to the results obtained by Mr. Jan Devera's model presented in his thesis "Risk Assessment Model for Pipe Rehabilitation and Replacement in a Water Distribution System" (2013). His user-friendly approach would simplify the risk analysis of water distribution systems and would provide a model that could be used by county officials, engineers, and a range of other personnel if proved to be valid. However, his model is highly intuitive and subjective; therefore its results may vary greatly from city to city. This model provides a framework that can be utilized in any WDS without the reliance on mere intuition to determine the probability of failure of each individual pipe.

This model involves the analysis of both the physical characteristics of the pipes within the potable water distribution system (i.e., material, diameter, length, and age) and their operating conditions (i.e., flow through the pipe, internal pressure, land use and demand) in order to calculate their individual probability of failure. The model also incorporated several consequences (as a result of a failure) such as traffic impact, estimated cost of repair, and customer criticality. The analysis was conducted with the use of MATLAB, Excel, WaterCAD, and ArcGIS. MATLAB was used as the primary calculation tool and Excel as a secondary calculation tool. WaterCAD was used to obtain flow rates through each pipe and pipe characteristics. ArcGIS was utilized as a presentation tool to provide visual results of the distribution system.

1.3 Research Objective

The availability of potable water is a necessity for any city to function properly. Proper maintenance of the city's potable water distribution system is necessary to ensure that water can be delivered to each user. Having a poorly maintained system can lead to a loss of capacity, delayed operations, or complete loss of serviceability. Persistent drought conditions throughout the nation call for the efficient use of water. However, the effective use of water cannot be

achieved if a city's pipe network is deteriorated to the point where water is lost due to the presence of breaks, leaks and ruptures.

Through the risk assessment of a city's potable water distribution system, city officials can improve the day to day operating conditions of the network and minimize the risk associated with a failure. A risk assessment model would allow officials to rehabilitate or replace pipes prior to the end of their service life, and as a result, avoid the high cost of repair associated with a failure. By allocating funds to the network's most critical segments, city officials can ultimately save money and ensure the serviceability of their system. Households, businesses, schools, hospitals, and other emergency services, all would benefit from a well maintained distribution system due to decreased interruptions in serviceability.

Chapter 2

Literature Review

2.1 General Theory

It is a well-established fact that potable water is one of the most important utilities made available to cities. Without a constant source and distribution of water, the western United States could not have developed to what it is today. Water, as readily available as it may seem, is a scarce resource that requires entire infrastructures to be built in order to extract, divert, extract, and transport it to households. There is however, a constant problem that faces small municipalities just as much as it affects large ones; the deterioration of distribution systems. It is not enough to divert water into areas that need it, the water must be made available to households via pipes. These pipes deteriorate over time and failure results in expensive repairs, loss of service, and even damage to property. Some pipes have been in service over 100 years! The cost of replacing all worn out pipes and their valves that are used in potable water distribution systems in the nation would be in the magnitude of $250 billion over a time frame of 30 years (AWWA, 2008). Pipe replacement is an expensive task, but a necessary one if communities are expected to stay. Figure 2.1 provides an example of a pipe failure resulting from a pressure surge.

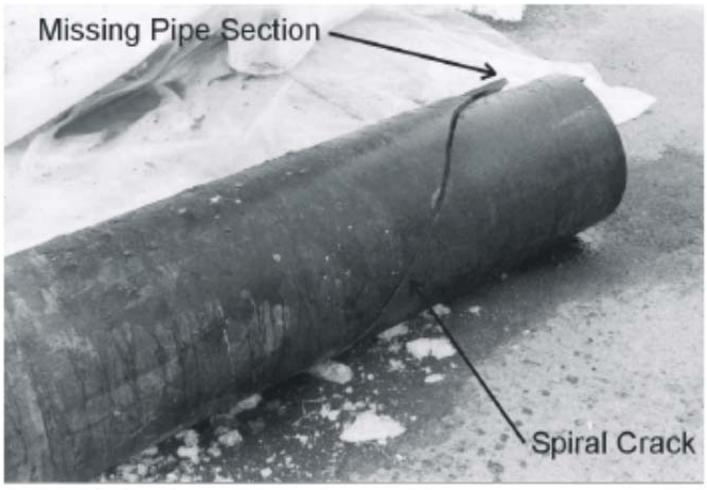

Figure 2.1 Medium diameter pipe failure (Makar, 2001)

In order to efficiently allocate money to the maintenance of potable water distribution systems, a risk assessment of the network would be an ideal approach for the municipality to employ. Having a conditional-based risk model to highlight the risk associated with each pipe would eliminate the need to arbitrarily select pipes to be rehabilitated. The assessment model would help prioritize maintenance and could serve as a tool to generate a schedule based on the results. In order to fully comprehend a conditional-based assessment, it is important to understand the physical characteristics and operating conditions that lead to pipe failure.

2.2 Causes of Pipe Failures

Pipe failure can be attributed to several factors that influence the pipe's integrity. It is often a combination of conditions that leads to the failure of a pipe. Table 2.1 presents the criteria that can be attributed to a pipe's failure and examples of those conditions.

Table 2.1 Failure Criteria for Pipes and Relative Examples

Failure Criteria	Examples
Pipe Material	Metallic vs. plastic
Pipe Dimensions	Diameter and length
Pipe Age	Time since installation
External Forces	Loading from buildings, traffic, or soil.
Internal Forces	Internal pressure and flow velocity
Soil Conditions	Moisture content and acidity
Location	Susceptibility to seismic loading and proximity to active faults
Manufacturing	Defects and irregularities of the pipe
Temperature	Variation in temperature that cause contraction/expansion

The failure of a pipe is not limited to the criteria shown above. Other conditions that may result in premature pipe failure include 1) poor storage and handling 2) improper installation 3) soil erosion and 4) pipe corrosion (Mavin, 1996). Poor storage and handling can result in deformation or physical damage prior to installation. Improper installation (i.e., improper soil cover or base) can lead to the pipe experiencing increased stresses than what it was designed to feel. Soil erosion from surface runoff or groundwater rise can leave the pipe exposed and can be

subject to increased external forces. Pipe corrosion can be attributed to flow conditions and water characteristics and can lead to decreased flows and increased internal pressures. These conditions along with the ones presented in Table 2.1 can be experienced by a pipe in any sort of combination, thus impacting its actual service life.

2.3 Impacts of a Failure

Any failure has consequences associated with it. These consequences are usually in the form of direct and indirect economic losses. Direct economic losses include the cost of repairing the pipe itself and any property that may have been damaged as a result of its failure. Direct losses also include loss of serviceability, which can range in magnitude based on the affected users. To elaborate, if a pipe that a hospital draws water from fails, the consequences may well be much more catastrophic than compared to the failure of a pipe that is used by a small community of homes. Although the failure of any pipe is a nuisance to all users, the consequences related to each failure vary based on a pipe's location and the users that draw water from it. Pipe failure can affect the integrity of critical services such as firefighting or medical services and can lead to the loss of human life in these cases. Other cases may not be as critical, but may cause economic losses due to street flooding and mandatory repairs. These scenarios are a bit drastic, but they are definite possibilities.

Indirect economic losses include time lost by the increased traffic around the area of repair and the effects on the overall system (i.e., increased flow through a different pipe). Unexpected pipe failures lead to flooding and street closures which can delay the schedules of services and individuals. It may sound cliché, but in the sense of economics, time is money.

2.4 Classification of Pipe Failures

As mentioned before in Section 2.1 there are several mechanisms that can cause a pipe failure. A failure mode can be best classified based on the magnitude of its consequences. Some failure modes require immediate attention (a pipe break) versus others (a pipe leak) that can almost be dismissed and dealt with at a later date. It is important to make the distinction between a pipe break and a pipe leak. A pipe break is a structural failure of the pipe. On the other hand, a pipe leak is a loss of water at ill-fitting joints. Breaks occur when a load (i.e., internal pressure or vehicular load) exceeds the pipe's material strength (Clark, 2010). Leaks occur when joints or connections are not sealed properly or are displaced enough for water to escape. Table 2.2 provides a description of the characteristics of both failure modes.

Table 2.2 Failure Mode Categorization (Clark, 2010)

Category	Break	Leak
Detection	Easily identified due to substantial loss of pressure and flow	Difficult to detect due to small disruptions changes in flow and pressure
Service Impact	High Likelihood of service interruption and required excavation and replacement	Low likelihood of service loss or pressure loss
Occurrence	Structural failure along length of pipe	Usually found at pipe fittings and at connections to laterals
Repair Urgency	Require immediate attention	Repairs are less urgent and may remain undetected and/or uncorrected

Failure modes vary depending with the operating conditions of the pipe as well as with the physical characteristics of a pipe. It is common to observe different failure modes for different diameter pipes. Figure 2.2 displays typical forms of failure modes for small diameter pipes (<380 mm). The left pipe displays bell splitting on top of the pipe and circumferential cracking at its center; both failure modes are most common in small diameter pipes. Bell splitting occurs due to a variation of the thermal coefficient of expansion at joints. Circumferential cracking is attributed

to bending forces caused by soil movement (seismic activity) or surface loading (vehicular or structural) (Makar, 2000).

The pipe on the right of Figure 2.2 provides a visual of corrosion-type failures. From the top of the pipe to the bottom: corrosion blowout hole (top), chain created corrosion pitting (middle), and elongated corrosion pitting with a blowout hole (bottom). Corrosion blowouts occur when corrosion pitting has caused the pipe wall to thin out until the point that the water pressure bursts through the remaining pipe wall. Corrosion blowouts vary in size depending on the severity of the corrosion.

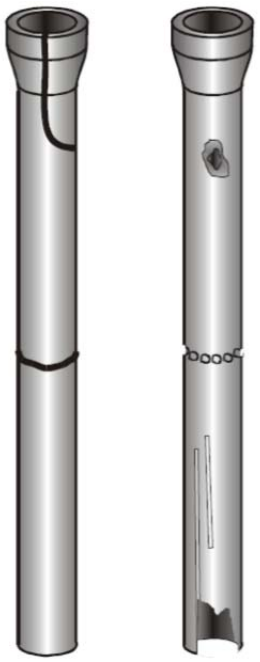

Figure 2.2 Failure modes for small (<380mm) diameter pipes (Makar, 2000)

Figure 2.4 provides visuals of typical failure methods for large diameter pipes (>500 mm). Large diameter pipes generally experience longitudinal cracking (left) or bell shearing (right). Longitudinal cracking is a form of failure that seems to affect large diameter pipes exclusively. This failure mode is due to high internal water pressures or compressive/crushing forces acting along the pipe (building loading or vehicular loading). Once the crack has initiated,

it may propagate along the entire length of the pipe. Bell shearing can be a result of bending forces along the bell or spigot of a pipe would cause the shearing at the bell.

Figure 2.3 Failure modes for medium (380 mm - 500 mm) diameter pipes (Makar, 2001)

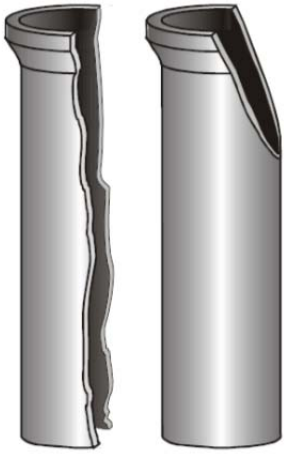

Figure 2.4 Failure modes for Large (>500 mm) diameter pipes (Makar, 2001)

Figure 2.3 displays the common failure modes of medium diameter pipes (380 mm – 500 mm pipes). Spiral failure, as shown in Figure 2.3, is unique to medium sized diameter pipes. It is a result of a crack that propagates along the entire length of the pipe. The combination of bending forces and pressure surges are the major stressors behind this form of failure.

Medium and large diameter pipes also experience corrosion pitting failures on top of the failure modes described above. Due to the many types of failure modes that exist, the goal for this study is to accurately predict the probability of these sorts of failures prior to it occurring. The following section provides an overview of several methods that were developed to predict pipe failures.

2.5 Methods for Modeling Pipe Failures

There are various methods to calculate the probability of failure and/or the remaining serviceable life of underground pipes. Some models are based on the physical mechanisms involved in pipe deterioration and take into account some of the following three aspects (1) pipe structural properties, (2) internal and external loads or (3) material deterioration due to the internal/external chemical, bio-chemical, and electro-chemical environment (Rajani, 2001). Other models are based on statistical methods and take into consideration historical data on failures to model the probability of failure. Figure 2.5 and 2.6 provide an overview of the types of models available and provides examples of the developers of those models. Figure 2.5 provides a summary for statistical models while Figure 2.6 for physical/mechanical models.

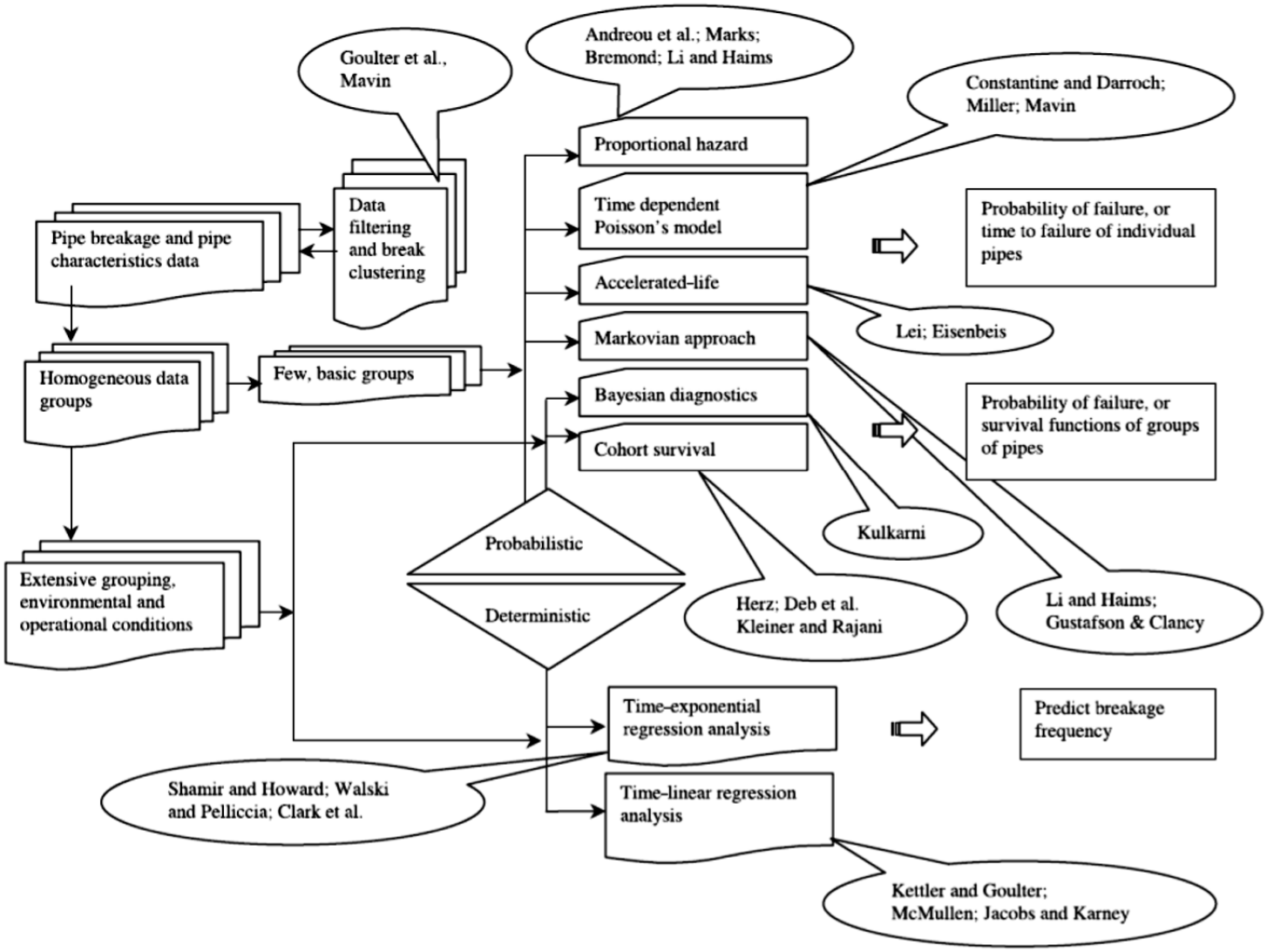

Figure 2.5 Summary of statistical models (Kleiner, 2001)

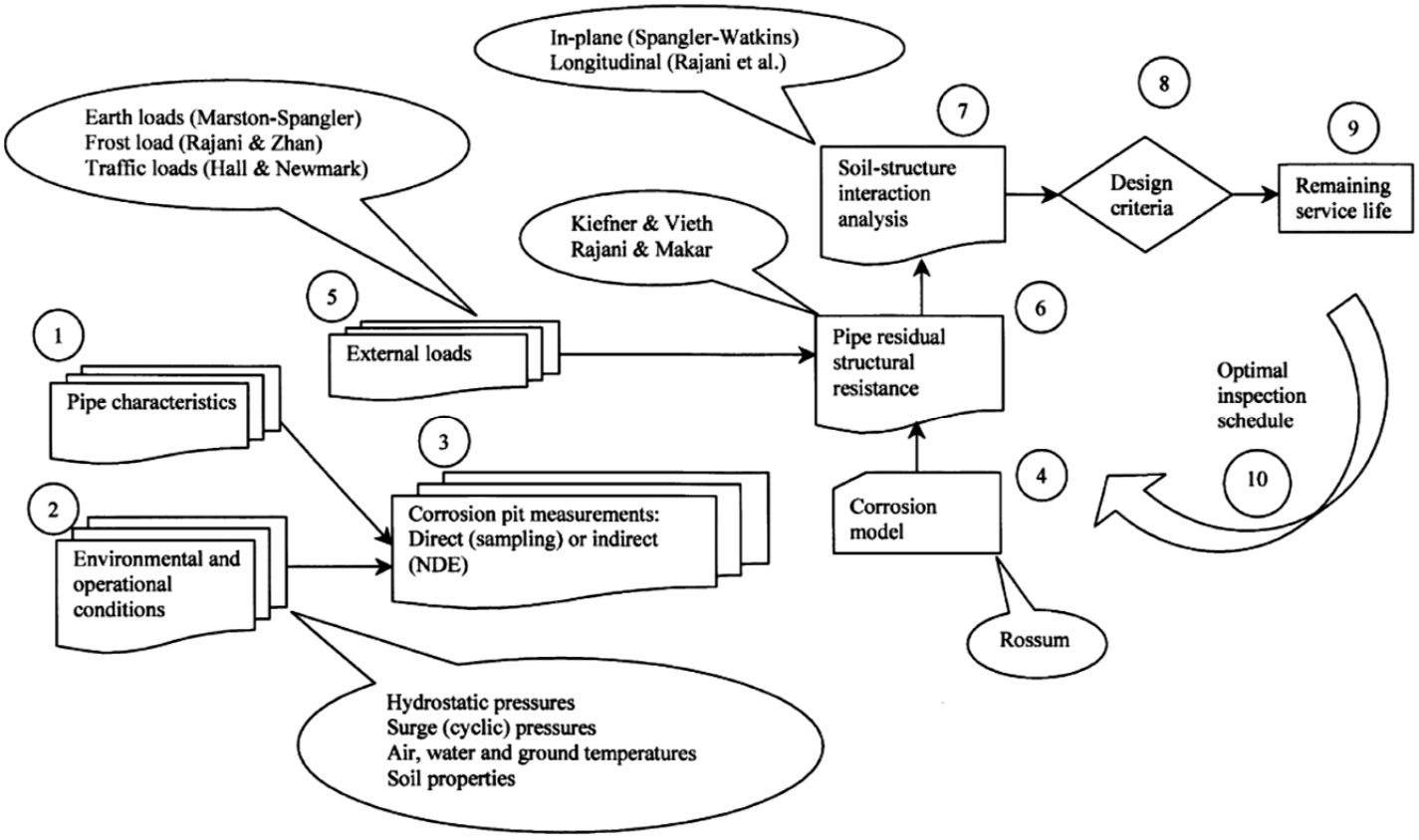

Figure 2.6 Summary of Physical/Mechanical Models (Rajani, 2001)

The models provided in Figures 2.5 and 2.6 vary in the factors taken into consideration and in complexity. The following sub sections provide a more in-depth description of some of the statistical and physical models shown above.

2.5.1 Statistical Models

Statistical models try to predict pipe breaks through the use of available historical data on past breakage patters. The patterns are expected to continue into the future, thus allowing the ability to calculate the probability of failure. Statistical models are separated into two major categories: a) deterministic statistical models and b) probabilistic models.

2.5.1.1 Statistical Deterministic Models

Deterministic statistical models are typically simplified after extensive data manipulation and experimentation; their complexity can be highly variable from model to model. Kettler and Goulter (1985) developed a linear relationship between the number of pipe breaks on a segment of a pipe and the age of the pipe. The relationship is as follows:

$$\mathbf{N = K_0 A} \qquad \text{(Eq.1)}$$

Where, N = the number of breaks on a given pipe segment per year

K_0 = the unknown regression parameter

A = the age of the pipe at the time of the first break

Kettler and Goulter's analysis was based on similar pipes that were installed within 10-years in a town named Winnipeg, Manitoba. Their analysis determined that there was a negative relationship between the diameter of a pipe and the breakage rate, indicating that small diameter pipes are more prone to breakage than large pipes (Yamijala, 2008). Although this method determined a relationship between diameter and breakage rate, it requires a regression parameter that would require extensive data, thus making it unfavorable to employ in a real network.

. A linear model developed by McMullen (1982) is an example of a simple method to determine a pipe's age at its first failure. It is a soil property-based model. The equation is as follows:

$$\mathbf{Age = 0.028(SR) - 6.44(pH) - 0.049(r_d)} \quad \text{(Eq.2)}$$

Where, Age = age of pipe at the first break (years)

SR = saturated Soil resistivity (Ω cm)

pH = soil pH, and

r_d = redox potential (mV)

McMullen concluded that the soil resistivity was a dominant factor in pipe breakage because he observed that 94% of pipe failures occurred in soils with saturated resistivity of less than 2000 Ω cm. (Yamijala, 2008). This model only reflects the effects of soil properties on pipe deterioration therefore it cannot adequately reflect a full network that is subject to several other stressing factors. It would also require for extensive soil testing in order to completely analyze an entire distribution network, which may be infeasible.

Clark, Stafford, and Goodrich (1982) developed a linear model to calculate the anticipated number of serviceable years of a pipe based on several characteristics. This model is a linear regression, but is referred to as a deterministic model within Kleiner's "Comprehensive review of structural deterioration of water mains: statistical models" (2001).

The Clark et al. (19882) model is as follows:

$$\mathbf{NY = X_1 + X_2(D) + X_3P + X_4I + X_5RES + X_6LH + X_7T} \quad \text{(Eq.3)}$$

Where, NY = number of years from installation to first repair

X_i = regression parameters

D = Diameter of pipe (in)

P = Absolute internal pressure of the pipe (psi)

I = Percentage of pipe covered by industrial development

RES = Percentage of pipe covered by residential development

LH = Length of pipe exposed to corrosive soil conditions

T = Pipe material (0 = reinforced concrete, 1 = metallic)

The Clark et al. (1982) model predicts the first incident of a failure while incorporating information that is typically available in municipal records. Although the model is inclusive of several of the components contributing to expedited pipe deterioration, an analysis of the model only produced an R^2 value of 0.23. This implies that the model did not perform too well in accurately predicting the time before the first failure as the ideal R^2 value is 1 (Clark, 1982). The model assumes that the factors affecting the deterioration of the pipes are independent rather acting jointly (Kleiner, 2001).

Clark et al. (1982) also developed a model for subsequent failures. The subsequent failure model is a non-linear model unlike all of the previous models. The exponential model estimates subsequent failures while still incorporating several of the operational conditions that expedite pipe deterioration.

The model is in the following form:

$$\mathbf{REP} = (\mathbf{0.1721})(\mathbf{e}^{0.7197})^{\mathbf{T}}(\mathbf{e}^{0.0044})^{\mathbf{PRD}}(\mathbf{e}^{0.0865})^{\mathbf{A}}(\mathbf{e}^{0.0121})^{\mathbf{DEV}}(\mathbf{SL}^{0.014})(\mathbf{SH}^{0.069}) \quad \text{(Eq.4)}$$

Where, REP = Number of repairs

T = Pipe Type (0 = reinforced concrete, 1 = metallic)

A = Pipe age from first break (years)

DEV = Percent of pipe in low and moderately corrosive soil

SL = Surface area of pipe in low corrosive soil

SH= surface area of pipe in highly corrosive soil

The non-linear model provided an R^2 value of 0.47 (Clark, 1982), which is higher than the non-linear model, but still relatively far from the ideal value of 1. The low R^2 values for both models indicates that other factors affecting the deterioration of pipes are present and that more research is required to determine the suitability of the model (Kleiner, 2001).

Shamir and Howard (1979) developed a non-linear regression analysis that relates pipe breakage rate to the exponent of its age. The relationship is based on the following two equations:

$$\mathbf{N(t)} = \mathbf{N(t_0)e^{A(t-t_0)}} \quad \text{(Eq.5)}$$

$$\mathbf{N(t)} = \mathbf{N(t_0)} + \mathbf{A(t-t_0)} \quad \text{(Eq.6)}$$

Where, N = the number of pipe breaks per year per unit length

t = time in years

t_0 = base reference year

A = growth rate coefficient (0.01-0.15)

Their model assumed that all pipe characteristics were similar. Although this model is simple and can be applied to various economic conditions, as per the growth rate, the model lacks the ability to factor in other important operational conditions in a pipe network. The model completely disregards environmental conditions, historical breaks, and water pressures along with other physical characteristics that play a huge role in the deterioration process of a pipe.

2.5.1.2 Statistical Probabilistic Models

Probabilistic statistical models can account for practically all factors affecting pipe deterioration and failure in an analysis. Due to their ability to consider most covariates they are potentially able to obtain better failure/breakage predictions. These models tend to be much more complex than deterministic models as they are mathematically intense. Data acquisition is also intense and calls for physical/mechanical data instead of generalized pipe characteristics as used in deterministic models more often. An example of a probabilistic multi-variate model is one developed by Marks et al. (1985). According to Kleiner et al. (2001), Marks was the first to propose the usage of the proportional hazard model to predict water main breaks by computing the probability of the time between consecutive breaks. The proportional hazards model is a general failure prediction model proposed by Cox (1972) which relates the instantaneous rate of failure to the environmental and operational stressors.

Marks' model is given in the following set of equations:

$$\mathbf{h(t, Z) = h_0(t)e^{b^T Z}} \quad \text{(Eq. 7)}$$

$$\mathbf{h_0(t) = 2x10^{-4} - 10^{-5}t + 2x10^{-7}t^2} \quad \text{(Eq. 8)}$$

Where, h(t,Z) = Hazard function

$h_0(t)$ = Baseline hazard function

b = Vector of coefficients to be estimated by maximum likelihood

T = Time to next break

Z = Vector of covariates

t = Survival time

In the Marks model, the hazard function, $h_0(t)$, can be interpreted as a time-dependent aging component and the covariates represent the environmental and operational stressors acting on a pipe. The model suggested that the probability of a break decreases as the pipe "burns-in" or "matures" after installation or after the previous break. Then, after approximately 28 years of being in service, the pipe's deterioration begins (or is resumed for the case of pipes with previous breaks) and the probability of failure increases (Kleiner, 2001). The trend of decreasing probability of failure and then increasing after a period of time is known as the "bathtub curve." Figure 2.7 displays this trend.

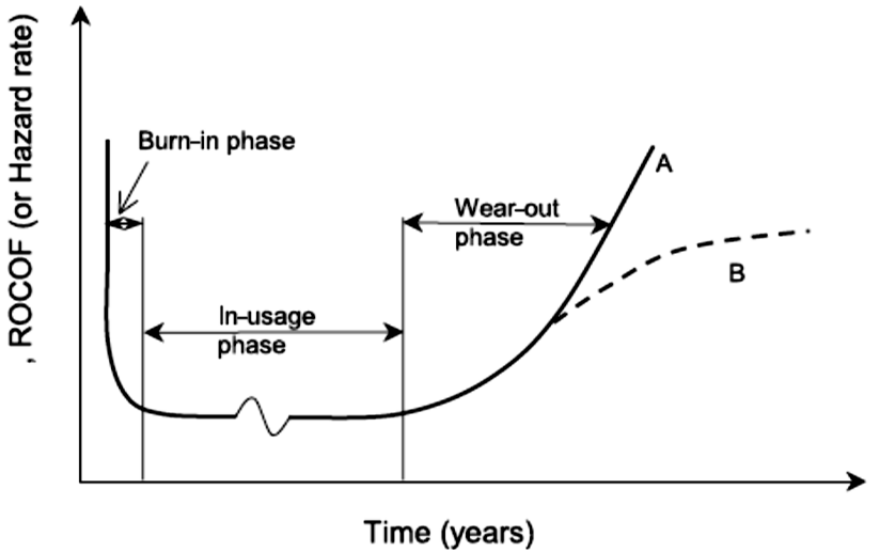

Figure 2.7 The Bathtub Curve of the Life Cycle of a Buried Pipe

2.5.2 Physical Models

Physical models are based on the physical behavior of pipes against loads (operational and environmental) and try to reflect the mechanical performance as best as possible. An example of a physical model is one developed by Doleac et al. (1980) that was based on Rossum's (1969) function that relates corrosion pit depth with the age of a pipe in order to estimate the remaining wall thickness. This relationship was then applied to Barlow's equation of pipe hoop stress to determine the pipe failure.

The Doleac et al. model is provided in the following equations:

$$\mathbf{p = K_n K_a (10 - pH)^n \rho^{-n} t^n A^a} \quad \text{(Eq. 9)}$$

Where, p = Average pit depth

K_n, K_a, a = Empirical constants derived from field or lab tests

A_a= Pipe surface area exposed to corrosion

pH = Soil pH

ρ = Soil resistivity

n = Soil aeration constant, and

t = time in years

$$\mathbf{S = \frac{pD}{st}} \quad \text{(Eq. 10)}$$

Where, S= Hoop stress on the pipe

p = internal pressure

D = Outside pipe diameter

t = Pipe wall thickness

For this model, pipe failure was defined as "a reduction in pipe wall thickness to a point where a pressure surge in the pipe, equal to 50% of the working pressure, would raise S to the material's elastic limit" (Rajani, 2001). Although the model attempts to reflect the physical deterioration of a pipe, it has not yet been validated. There are very few studies that utilize the Rossum's power function and the Doleac et al. testing only involved five samples, which provide mixed results. It appears that no matter the model, there appear to be limitations. Some of these limitations are addressed in the following section.

2.5.3 Model Limitations

To this date, there has not been a model developed that can accurately calculate the failure of a pipe. Even with physical models that try to incorporate multi-variants in their models, they fail to adequately predict pipe failures. Aside from accuracy, some models require extensive data that is not always available. Components such as the pH level and soil resistivity require physical testing that could make a model's application infeasible. There is always a limitation for a model, whether it is the accuracy, the amount of exhaustive data, or the computational intensity and complexity. Limitations are the reason why statistical models must be compared and adequately selected prior to employing them in a study.

2.6 Jan Devera's Risk Assessment Model

Jan Devera's risk assessment model presented in his thesis, "Risk Assessment Model for Pipe Rehabilitation and Replacement in a Water Distribution System" (2013), was based on a model developed by WSC Inc. His model consists of three major steps: 1.) Determine the Remaining Useful Life (RUL), 2.) Assess the Degree of Impact due to a pipe failure, and 3.) Determine the Risk of failure.

Step 1, determining the RUL for a pipe, involves a process that takes into consideration a pipe's year of installation, material, and historical breaks or leaks. In order to calculate the RUL, Mr. Devera assumed that the anticipated service life (ASL) was equal to the mean manufacturer given service life. His model then adjusts the RUL based on the number of breaks each pipe has experienced.

This computation is displayed in the following equation:

$$\mathbf{RUL} = \big((\mathbf{ASL}) - \mathbf{Age}\big)\ \mathbf{x}\ \mathbf{P_{adj.}} \qquad \text{(Eq. 11)}$$

Where, RUL = Remaining useful Life (years)

ASL = Anticipated service life (years)

Age = Pipe age from present year to year of installation (years)

$P_{adj.}$ = Break history percent adjustment

Table 2.3 Probability of Failure Scoring Criteria (Devera, 2013)

Remaining Useful Life (RUL) in Years	Probability of Failure (PF) Score	Risk Level
Less than 2	10	High ↑
2 to 4	9	
4 to 6	8	
6 to 8	7	
8 to 10	6	
10 to 12	5	
12 to 14	4	
14 to 17	3	
17 to 19	2	
Greater than or equal to 20	1	↓ Low

The break history adjustment factor is based on the number of breaks experienced by a pipe; for a pipe with only one previous break $P_{adj.}$ = 30%, for two breaks $P_{adj.}$ = 20%, and for three or more breaks $P_{adj.}$ = 10%. The probability of failure is then determined based on the resulting adjusted RUL and is in the form of a score. The scoring criteria used is presented in

The second step in his model involved assessing the degree of impact associated with a pipe failure. Mr. Devera's impact parameters include the customer criticality, pipe material phasing, land use, service demand, traffic impact, and estimated cost for pipe replacement. These impacts are assigned a subjective value based on their "relative importance" (Devera, 2013) and

are summed into a Degree of Impact (DI) score. The Impact Scores for each individual impact criterion is provided below in Table 2.4. These DI scores are utilized in the third step: calculating the risk of failure.

Table 2.4 Impact Score Criteria (Devera, 2013)

Impact Criterion	Impact Score				
	1	2	3	4	5
Service Demand	<160gpm	between 160-320gpm	between 320-480gpm	between 480-640gpm	≥ 640 gpm
Customer Criticality	No critical customers or pipe size < 8"	At least 1 Critical Customer	2 Critical Customers	3 Critical Customers	4 or more Critical Customers
Land Use	Agriculture, Open Space	Very low to low medium Density Residential	Low medium to high Density residential	High to very high Density residential, Village core, or mixed use	Office professional, Regional Commercial, or Community Facility
Traffic Impact	Local Streets	Collector Street	Priority 2 Transit	Priority 1 Transit	Arterial Street
Material Phasing	PVC and ACP	Ductile Iron	Steel & Techite	Galvanized Iron	Unlined Cast Iron or unknown material
Estimated Total Cost for Repair	≤ $26,440	between $26,440 - $52,882	between $52,882 - $79,322	between $79,322 - $105,762	≥ $105,762

Figure 2.8 displays the calculation of the Risk of failure (RFS) and the parameters that are incorporated within the calculation.

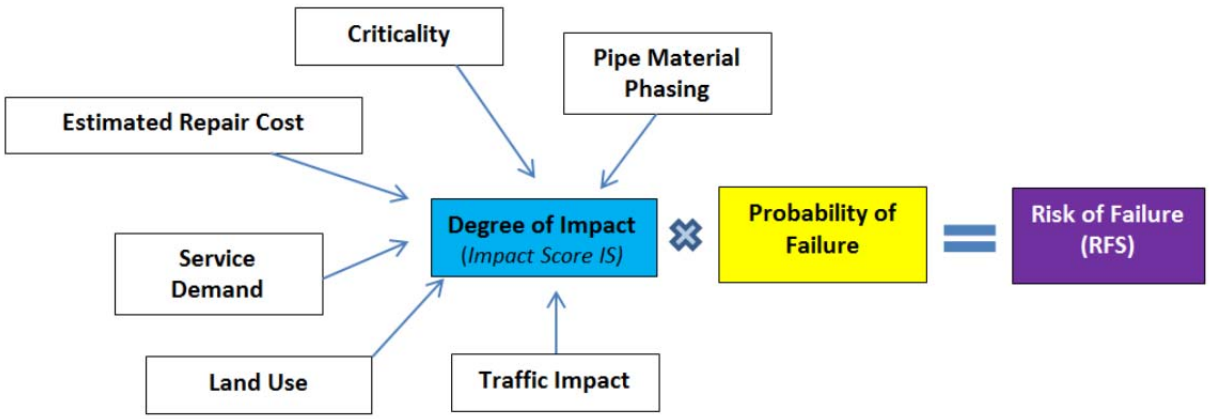

Figure 2.8 Risk of Failure Computation (Devera, 2013)

The RFS values are used to provide visual representations of the results within ArcGIS. The following chapter provides the methodology for this current risk assessment model and presents the criteria that helped me select the proper computational model for this analysis.

Chapter 3

Risk Assessment Methodology

3.1 Overview

The main goals of this risk assessment model were to accurately highlight a potable water distribution system's most critical pipes and also to provide a comparison for a previously made simplified model. This method, although statistically and computationally intensive, was built to be able to be applied on any potable distribution system. It was not designed to accurately predict the failure of a single pipe; rather, it was designed to adequately highlight the pipes with the most risk within a pipe network using a statistical approach in order to be compared to other models. The ultimate goal of this method is to prove or disprove the ability of a simplified method to accurately highlight the most critical pipes within a distribution system and to provide a method for employing maintenance and rehabilitation schedules for an entire distribution network.

This model is composed of a three-stage procedure to calculate a pipe's individual risk. The first stage of analysis involves calculating a pipe's Remaining Useful Life (RUL) to determine the Probability of Failure (PF). The RUL of a pipe takes into consideration a pipe's age, expected serviceable life, material, diameter, internal pressure, percent (%) covered by residential areas, percent (%) covered by industrial areas, length, and historical break data. This stage was built to reflect the uncertainty of a pipe's serviceable life and to capture the operating conditions of each individual pipe. The RUL of a pipe is used to assign a numerical score that represents the PF.

The second stage involves quantifying the consequences associated with the failure of each individual pipe. Consequences are comprised of the cost of materials for pipe replacement, traffic impacts, loss of serviceability (modeled as flow rate), and the effects on critical users (i.e., hospitals). Each consequence component is assigned a score based on their degree of impact and is totaled to reflect an individual pipe's degree of impact if it were to fail. The degree of impact is

meant to reflect the consequences of a failure as a whole. Individual consequences are scaled in order to provide a comparable method.

The final stage of the analysis involves combining the results from the first two stages in order to quantify each pipe's Risk of Failure. The risk of failure is then used as a mean to highlight the most critical pipes within the pipe network by categorizing them based on their risk value. Each category is assigned a color to help create an easy to understand visual of the results within ArcGIS.

3.2 Step 1: Computing Remaining Useful Life

The first step of the model is to calculate the RUL, which is the estimated time before a pipe failure occurs. For this model, a pipe failure was defined as a pipe break and not as a pipe leak. Therefore, a failure would cause significant loss of pressure in the system and result in loss of serviceability. Based on the data available and the methods covered in the literature review, the Clark et al. (1982) linear model was selected as a means of calculating the RUL.

3.2.1 Clark et al. Model

Clark's linear model, as presented in Eq. 3, estimates the number of years from installation to first repair (represented by the variable NY), or first failure. The Clark model incorporates the diameter of a pipe, the pressure within the pipe, the percentage of pipe covered by industrial development and residential development, and the material of the pipe. This required data for this model was ideal for a generalized risk assessment model since it is usually available through the municipality. Having a model that incorporated more exhaustive data such as the soil pH would not be ideal for a model that is designed to be applied to any distribution network as it may render the assessment infeasible.

The Clark et al. (1982) linear model, once again, is provided by the equation:

$$\mathbf{NY = X_1 + X_2(D) + X_3P + X_4I + X_5RES + X_6LH + X_7T} \quad \text{(Eq.3)}$$

Where, NY = Number of years from installation to first repair

X_i = Regression parameters

D = Diameter of pipe (in)

P = Absolute internal pressure of the pipe (psi)

I = Percentage of pipe covered by industrial development

RES = Percentage of pipe covered by residential development

LH = Length of pipe exposed to corrosive soil conditions

T = Pipe material (0 = reinforced concrete, 1 = metallic)

3.2.2 Regression Parameters and Pipe Materials

Due to the uncertainty of a pipe's life, the X_1 conditional parameter was modeled as a random variable. The rest of the X_i parameters were obtained from the Clark et al. model. The following table provides the definition of each individual regression parameter and the value assigned to it.

Table 3.1 Clark Model Regression Parameters

Regression Parameter	Definition	Assigned Value
X_1	Anticipated serviceable life. Modeled as a random variable	Varies based on Monte Carlo Simulation
X_2	Diameter parameter	0.338
X_3	Pressure parameter based on the magnitude of pressure within pipe	-0.022
X_4	Industrial cover parameter	-0.265
X_5	Residential cover parameter	-0.0983
X_6	Length parameter	-0.003
X_7	Pipe material parameter	13.28

In order to adequately reflect the uncertainty of the pipe's useful life, the anticipated service life (X_1) was modeled as a normal random variable. The manufacturer given service life range was used to calculate the average and standard deviation for a given pipe material. A Monte Carlo simulation was then utilized to determine the most probable value for the expected minimum life. According to Moss (2013), a "Monte Carlo simulation is a 'brute force' computational approach to solve a probabilistic problem" (Moss, 2013). A Monte Carlo simulation using 100,000 simulations was ran for each pipe material within MATLAB. Every iteration from the Monte Carlo simulation is inserted into the Eq. 3 for a given pipe (Eq.3 is calculated 100,000 times for every single pipe) and the mean is calculated to obtain the NY for a single pipe. Figure 3.1 provides an example of the histogram created from the Monte Carlo simulation for cast iron pipes. It is observed that the mean anticipated service life is approximately 75 years.

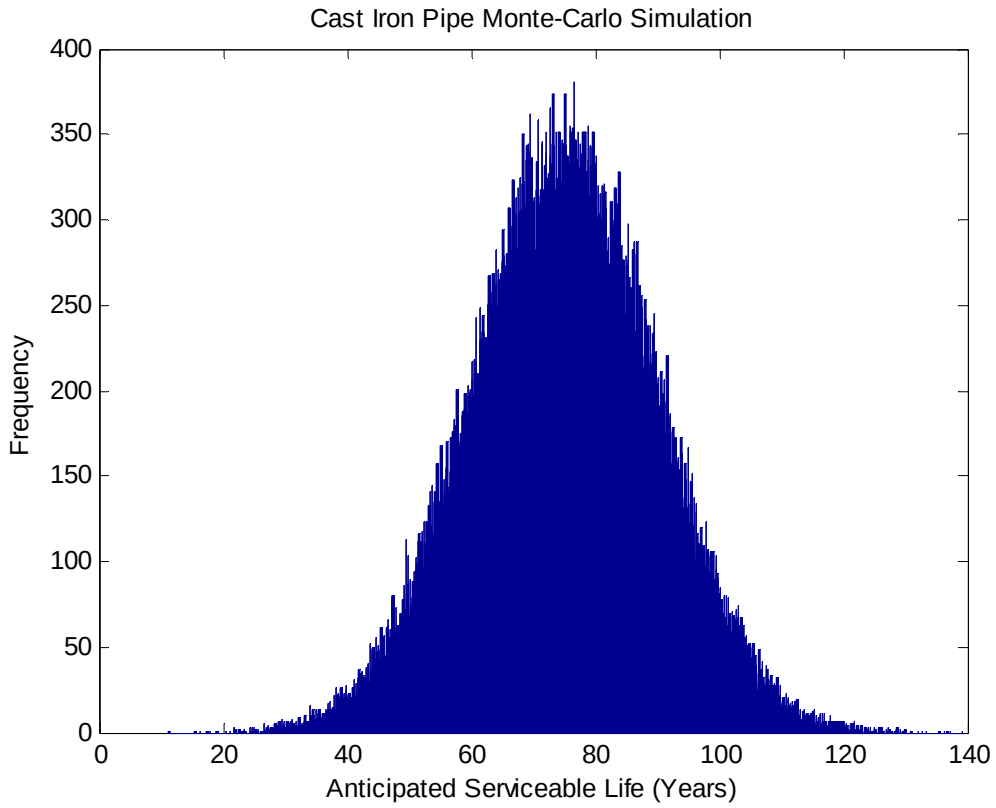

Figure 3.1 Monte Carlo Simulation Example: Cast Iron Pipes

As mentioned above, each pipe had an assigned serviceable life (X_1) based on its material composition. The manufacturer given (MFG) service lives were obtained from Mr. Devera's risk assessment model (originally obtained from WSC's risk assessment model). Table 3.2 provides the pipe materials used within this study, the abbreviation used, mean anticipated service life (ASL), and the standard deviation from the mean.

Table 3.2 Material Serviceable Life

Pipe Material	Abbreviation	MFG Service Life (Years)	Mean ASL (Years)	Standard Deviation of ASL
Cast Iron	CIP	50-100	75	15
Ductile Iron	DIP	75-125	100	15
Galvanized Iron	GALV	40-60	50	6
Steel	STL	30-75	52.5	13
Polyvinyl Chloride	PVC	50-150	100	29
Composite (Techite)	COMP	50-150	100	29
Asbestos Cement	ACP	75-125	100	15
Unknown	UKN	50-150	100	29

3.2.3 Pipe Age

The age of a pipe is determined by calculating the number of years from the pipe's installation year to the present year. It is assumed that the pipe was in operation throughout the entire length of time. The age does not take into account service loss, repairs, or replacements.

3.2.4 Calculating RUL

The RUL of a pipe is the estimated length of time from the present to the time of a pipe's failure. To calculate the RUL of a pipe, the NY of a pipe (obtained from Eq. 3) is subtracted by the Age of a pipe. The following equation presents this calculation:

$$\mathbf{RUL} = (\mathbf{NY} - \mathbf{Age}) \quad \text{(Eq. 12)}$$

Where, RUL = Remaining useful life (years)

NY = Number of years from fist installation to first failure

AGE = Age of pipe

3.2.5 Break History Adjustment

In order to adequately reflect previous breaks when calculating the RUL for a pipe, an adjustment factor was included within the model ($Hist_{adj}$). The adjustment factor is multiplied by the calculated RUL to obtain the adjusted RUL (RUL_{adj}). The following two equations provide the adjustment:

$$\mathbf{RUL_{adj}} = (\mathbf{RUL}) * \mathbf{Hist_{adj}} \quad \text{(Eq. 13)}$$

Where, RUL_{adj} = Adjusted remaining useful life (years)

RUL = Remaining useful life (years)

$Hist_{adj}$ = Adjustment factor based on historical break data

$$\mathbf{Hist_{adj}} = \mathbf{1} - (\mathbf{0.1} * \mathbf{N}) \quad \text{(Eq. 14)}$$

Where, $Hist_{adj}$ = Adjustment factor based on historical break data

N = Number of historical breaks

The adjustment factor decreases the RUL by 10% for each previous break.

3.3 Determining Probability of Failure

After the RUL of a pipe has been calculated, its PF can be designated. In this study, in the same manner as Mr. Devera's model, the PF is represented by a score since the PF cannot be directly calculated using Clark's linear model. The PF score is a subjective value that directly represents the PF. It was assigned on the basis that as the RUL of a pipe decreases, the probability of it failing increases due to inevitable deterioration. The highest PF score that can be assigned to a pipe is a value of 10 and the lowest score is a 1. Table 3.3 provides the scoring criteria for the PF scores.

Table 3.3 Probability of Failure Score Criteria

Remainig Useful Life (Years)	Probability off Failure (PF) Score	Risk Level
< 2	10	High
2 to 4	9	
4 to 6	8	
6 to 8	7	
8 to 10	6	
10 to 12	5	
12 to 14	4	
14 to 16	3	
16 to 19	2	
≥ 20	1	Low

The PF score serves as a direct representation of the PF and is directly related to the remaining useful life of a pipe. As an example, a pipe with an RUL of 3 years would be assigned a PF score of 9, which designates that pipe as having a relatively high probability of failure (PF). As a second example, a pipe with an RUL of 57 years would be assigned a PF score of 1, which is representative of a low probability of failure. The PF score is solely representative of the pipe's actual failure and does not account for the consequences of that failure. The consequences are addressed in step 2.

As mentioned above, this scoring criterion was obtained from Mr. Jan Devera's Model, which was based on WSC's risk assessment model. The original scoring system developed by WSC was more conservative. It included a shorter range of RUL values at increments of 5 years

and a range of PF scores at increments of 2. The absolute range for the original scoring system was the same as it is now, making the original model less specific.

3.4 Step 2: Determining Consequences

The second step in this risk assessment model is to determine the consequences associated with pipe failures. This section focuses on the potential economic impacts that a pipe failure can have. The impacts considered in this model are the cost of pipe replacement (material only), loss of service, traffic impacts, and affected critical customers. These individual impacts are further explained in the subsequent subsections.

3.4.1 Loss of Service

The loss of service in this study was made proportional the total flow rate through a pipe. It was assumed that the flow rate through a pipe was representative of the number of users drawing from that pipe. For example, take into consideration two pipes: 1) a pipe with a flow rate of 1000 CFS and 2) a pipe with a flow rate of 100 CFS. The failure of the pipe with the flow rate of 1000 CFS will result in a greater amount of affected users when compared to the pipe with the flow rate of 100 CFS. Since flow rates are substantially greater (in magnitude) than most of the other consequences, a scoring system was employed so that the flow rates would not cause a disproportion in the results. The scoring ranges from 1 to 5 and is based on the flow rate through a pipe. The scoring criterion is presented below in Table 3.4.

Table 3.4 Flow Rate Score Criteria

Flow Rate (CFS)	Flow Rate Score	Risk Level
0 to 200	1	Low
200 to 400	2	
400 to 600	3	
600 to 800	4	
≥ 800	5	High

The flow rate score serves as a scaling factor in order to proportionally compare the flow rate to other consequences. To expand on the pipe flow examples mentioned above (1000 CFS vs 100 CFS), the pipe with a flow rate of 1000 CFS would be assigned a Flow Rate Score of 5 while the pipe with the 100 CFS flow rate would be assigned a Flow Rate Score of 1.

3.4.2 Customer Criticality

Customer criticality refers to the affected customers and how crucial their services are to society. Critical customers are either lifeline services or institutions deemed important based on their operation. Critical customers for this study include hospitals, nursing homes, schools (public and private), fire stations, and police stations. The influence zone was set to a ¼ mile radius from the establishment. The influence zone is reflective of the area surrounding the critical institution that if a pipe were to fail within that area, the institution could possibly feel an effect in their service. It is obvious that losing serviceability for certain customers could result in devastating consequences when compared to others, therefore a scoring system was used to reflect the proportionality of the consequences. Each critical customer is assigned a Criticality Score to reflect its criticality. Table 3.5 presents the scoring criteria.

Table 3.5 Critical Customer Criticality Scores

Critical Customer	Consequence Score	Criticality Level
Hospital	5	High
Police Station	4	
Fire Station	4	
Nursing Home	3	
Public/Private School	2	
Others	1	Low

The criticality scores were assigned based on potential consequences associated with the loss of service to each customer. A hospital is ranked with the highest criticality due to its service. The lowest ranked customer is assigned to "other" users. The "other" category includes residential homes, agricultural areas, parks and recreational areas, office spaces, retail areas, and any other customer not shown in Table 3.5.

3.4.3 Traffic Impact

Traffic impacts were defined as the amount of cars that are displaced from their original route due to road closures resulting from repairs. The number of automobiles displaced from their original route was assumed to be proportional to the road classification. Road classifications include highways, arterials, collectors, and local roads. In this study, the road classifications were expanded to include other categories to better reflect traffic loading. Since calculating the total amount of cars displaced due to a closure would prove to be exhaustive, a scoring system was

used in the same manner as it was used for critical customers. Table 3.6 provides the traffic designation and the Traffic Impact Score.

Table 3.6 Traffic Impact Score Criteria

Traffic Designation	Traffic Impact Score	Impact Level
Highways	5	High
Arterials	4	
Collectors	3	
Office/Commercial	3	
Public Collector	2	
Local	1	
No Traffic	0	Low

The traffic impact scores were assigned based on how much traffic a road category experiences. Highways, being the most traveled type of road, are assigned the highest score of 5. Highways were also set to include on- and off-ramps. The lowest score was assigned to areas with no traffic, as an example, areas where pipes go under vegetated areas. The scoring system allows for a direct comparison between other consequences. The scoring system is used once more for the cost of repair. This is presented in the following section.

3.4.4 Estimated Costs for Pipe Repair

The estimated cost of repair was defined as the cost to replace the material of the pipe only. This study does not include excavation costs, cost of labor, or phasing because it was assumed that the price of the material would be reflective of including all other costs associated

with a pipe replacement. The cost of repair was also subjected to a scoring system, as mentioned above, in order to make the price comparable to the other consequences. The Cost Score criteria is presented below in Table 3.7

Table 3.7 Cost Score Criteria

Cost Range	Cost Score	Cost Level
$0 to $5,000	1	Low
$5,000 to $10,000	2	↑
$10,000 to $50,000	3	↕
$50,000 to $80,000	4	↓
> $80,000	5	High

Since cost of pipes varies depending on material and diameter, the price per linear foot was obtained based on material and diameter. The prices were obtained from Mr. Devera's model (prices were verified by Water Systems Consulting (WSC) Inc.) and were also verified during this study using manufacturer pricing. The Price per linear feet for each material in this study is provided below in Table 3.8.

Table 3.8 Pipe Cost Estimates

Pipe Material	Abbreviation	Diameter (in)	Price per Linear Foot
Cast Iron	CIP	2	$10
		4	$18
		6	$32
		8	$50
		12	$123
Ductile Iron	DIP	8	$22
		10	$24
		14	$40
		16	$50
Galvanized Iron	GALV	2	$11
		4	$26
		6	$40
		8	$55
Polyvinyl Chloride (SCH 40)	PVC	2	$2
		4	$5
		6	$8
		8	$12
		10	$19
		12	$28
		14	$33
		16	$43
Asbestos Cement	ACP	2	$30
		4	$42
		6	$55
		8	$64
		10	$69
		12	$77
		14	$87
		16	$98
Composite (Techite)	COMP	2	$30
Steel	STL	8	$138
Unknown	UKN	N/A	N/A

3.5 Step 3: Determining Risk of Failure

The final step in the model is to determine the risk of failure. The risk of failure combines the probability of failure (PF) and all of the consequences addressed above. Risk of Failure is defined by the following equation:

$$\text{Risk} = \text{PF} \times \text{Consequences} \qquad \text{(Eq. 15)}$$

Where, Risk = Risk of failure

PF= Probability of failure score

Consequences = Combined weight of total consequences

The score of each consequence is summed together for a particular pipe and is then multiplied by its respective PF score. Risk serves as a mechanism of comparison between failures. It can be in the form of cost, lives lost, or in this case, a unit-less number assessing failure modes and their consequences. Risk is a "level assessment for making rational decisions" (Moss, 2013). Specific to this model, the risk of each individual pipe can then be compared to all others and can serve as a ranking system to highlight the highest risk.

The risk of failure scores were broken down into four categories ranging from a low level of risk to a critical level of risk. Table 3.9 displays the range of Risk scores that were assigned to each category.

Table 3.9 Risk Categories

Risk Score	Risk Category and Color Designation
0 to 40	Low Risk
40 to 80	Medium Risk
80 to 100	High Risk
≥ 100	Critical Risk

The risk category and color designation are meant to be able to visually highlight the most critical pipes within a system. This approach is best if used within ArcGIS or another visual model.

This model was applied to the City of Arroyo Grande in order to validate the results and to compare the results to those obtained by Mr. Devera's model. The following chapter explains the approach taken to apply this model to the City of Arroyo Grande's potable water distribution system.

Chapter 4

Case Study: City of Arroyo Grande

4.1 Data Acquisition

In order to prove the validity of this risk assessment model, the model was applied to the potable water distribution system of the City of Arroyo Grande, California. The data included a WaterCAD V8i model of the distribution system and an ArcGIS layout of the network. The data was obtained from WSC Inc. and the City of Arroyo Grande (AG). The data that was extracted from these files included: a) Land use b) Road names and classification c) Hydraulic information – flow rates d) physical pipe properties – length, diameter, installation year, and location e) and history of pipe breaks.

4.2 Computer Modeling and Analysis

In order to adequately process the data for a network consisting of 3,572 pipes, it was necessary to utilize computer models throughout the entire process. Programs such as Bentley's WaterCAD, ESRI's ArcGIS, Math Works' MATLAB, and Microsoft's Excel were used to facilitate the data organization, computations and processing of results. This section provides an overview and summary of what was done with each program.

4.2.1 Bentley WaterCAD V8i

WaterCAD V8i is a water distribution modeling program that belongs to the Bentley programs. It allows the user to draw an existing distribution system or proposed systems in order to compute a variety of simulations. WaterCAD can help conduct several hydraulic analyses based on varied pipe characteristics and user demands. It can simulate the operating conditions of single pipe segments, valves, nodes, reservoirs, tanks, and pumps. The program can be cross-referenced with AutoCAD so that networks drawn on AutoCAD can be imported into

WaterCAD. The program allows exporting files into ArcGIS through the WaterGEMS platform in order to geo-reference the network.

For this study, WaterCAD was used as a source of data pertaining to pipe characteristics and hydraulic information (flow rates) for the Arroyo Grande distribution network. The hydraulic model was previously calibrated by WSC Inc. to reflect actual operating conditions and demands. The information for the network was exported into Excel so it may be processed and finally used within ArcGIS (See Appendix A).

4.2.2 MathWorks MATLAB and Microsoft Excel

MathWorks' MATLAB is a language program that allows numerical computation, data analysis and visualization of data through the use of coding. MATLAB uses processor-optimized libraries to execute vector and matrix computations. MATLAB allows for integration from other codes written in C, C++, Java, and .NET.

For this model, MATLAB was utilized as the primary calculation tool. It was utilized to complete step 1 of the model. A code was written so that it would reference text files containing specific pipe information (diameter, internal pipe pressure, percent of pipe covered by residential and industrial development, and length). The program was set up to calculate the number of years from date of installation to the first failure (NY) utilizing the Clark model (Eq. 3) for each individual pipe. The code uses Monte Carlo simulations in order to calculate Eq. 3 a total of 100,000 times for each individual pipe. See Appendix B for the MATLAB code.

Microsoft Excel is a spreadsheet application that aids in data organization, calculations, and analyses. It serves as a tool to create tables and figures to visually analyze data. For this model Excel was used as a secondary calculation tool and as an organizing tool. The data from WaterCAD was exported into Excel and was organized so that it could be exported as a text file to be referenced by MATLAB.

4.2.3 ESRI ArcGIS

ArcGIS is a geographic information program developed by Environmental System Research Institute (ESRI). ArcGIS allows users to geo-reference information in order to create visual representations in the form of exhibits, tables, and maps. It is a compatible with programs such as AutoCAD Civil 3D and HEC-RAS to conduct analyses and display information.

In this study, ArcGIS was used primarily as a visualization tool. The results and information exported from WaterCAD and MATLAB and was organized within Excel. The Excel spreadsheet was then exported into ArcGIS. Several Exhibits were created during the analysis in order to present the data as a visual. Figure 4.1 provides a visual of the City of Arroyo Grande WDS (See Appendix C for Larger Exhibit).

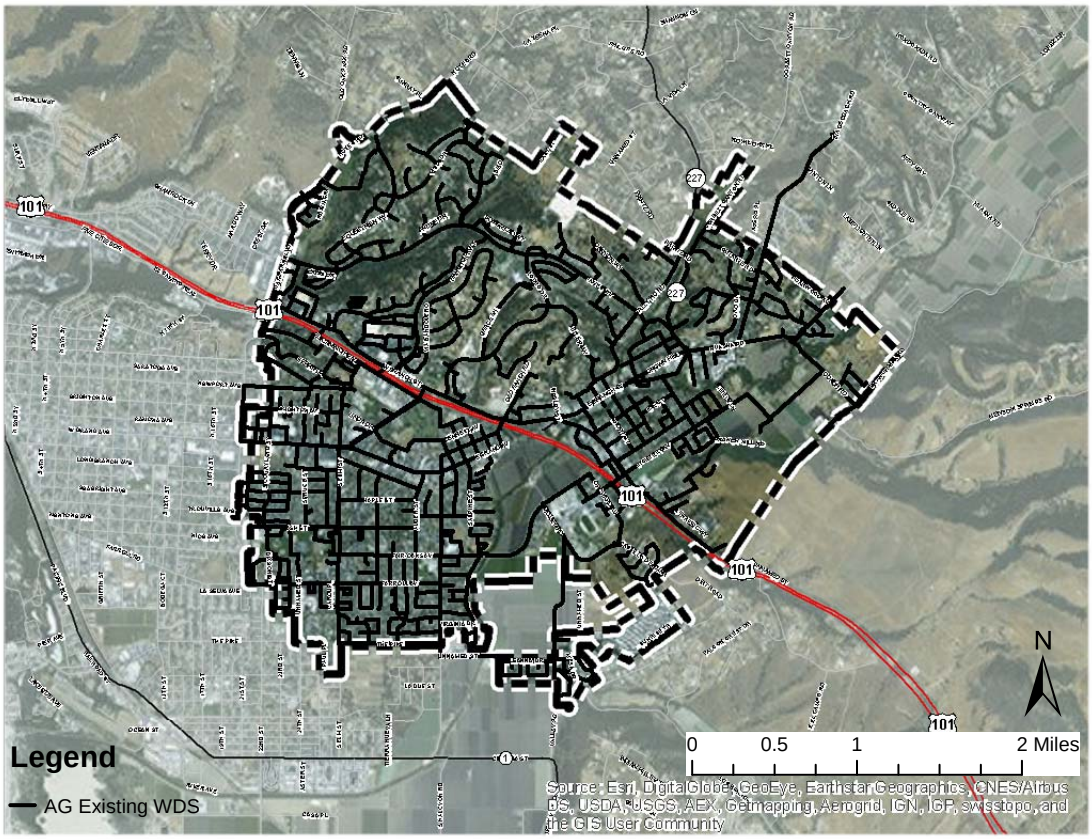

Figure 4.1 City of Arroyo Grande Existing Water Distribution System

The ArcGIS model utilized in this study contains data on the WDS for the City of Arroyo Grande along with the results from the model. It serves as a tool to manage data, display information visually, and in interest of this study, highlight the most critical pipes. It is a tool that can be utilized by city officials to efficiently convey information, update data, and create a maintenance/rehabilitation schedule for their WDS. ArcGIS also served as the primary means of comparison to Mr. Devera's Model as it allows for a visual comparison of the most critical pipes within the network.

4.2.3.1 Critical Components for Analysis within ArcGIS

There are several critical pieces of information within ArcGIS that allows for the efficient manipulation of data and results. This critical information and data was originally provided by WSC Inc. and was obtained from Dr. Shikha Rahman. This critical information consists primarily of the existing pipe information such as the FID pipe identification number, the full name of the pipe (roadway name), year of installation, demand (gallons per minute), diameter of pipe (inches), pipe material, and length (feet). This information is provided for each individual pipe and the data set as a whole is geo-referenced so that each pipe location within the model reflects its actual location beneath Arroyo Grande. This information (combined with a base map of Arroyo Grande) makes up the foundation for the risk assessment model (this GIS file is referred to as the base GIS shape file from here on).

The base GIS shape file, as mentioned above, is what the risk assessment model depends on for an accurate visual representation of the results. The FID pipe identification number is merely a numerical value assigned by ArcGIS for identification purposes. The full name of each pipe is relative to the roadway it lies underneath. All of the other information is reflective of each individual pipe and were imported from WaterCAD. This information is provided within Appendix A.

4.2.3.2 Data Additions to ArcGIS

Additional data was imported into the ArcGIS base shape file in order to complete the risk assessment. All additional data was either calculated via MATLAB and Excel or was manually inserted to represent the risk assessment methodology. The additional data was computed or specified based on the methodology highlighted in Chapter 3. The following paragraphs provide a detailed explanation of each additional data field inserted into the ArcGIS model.

The age of each pipe segment was calculated using Excel by subtracting the year of installation from the present year (2015). The values computed in Excel were then imported into the GIS attributes table by simply copying and pasting into a created "Pipe_Age" field.

The price per foot information was manually inserted into an Excel spreadsheet and was used to calculate the cost of repair within Excel. The repair cost, as mentioned in Chapter 3, was assumed to be equal to the price of the pipe only. The price of excavation, manual labor, and phasing was not incorporated into the replacement cost. It was assumed that there was a direct linear proportionality between the cost of pipe and all other costs. The cost of replacement was then scaled down based on Table 3.7. All three fields were inserted into the GIS attributes table as "Price ($)/ft", "RepairCost ($)", and "Cost Score" respectively.

The flow rate through each pipe was imported into Excel from WaterCAD and was scaled down using the criteria provided in Table 3.4. These fields were imported into the GIS attributes table as "Flow (gpm)" and "Flow_Score" respectively.

The Remaining Useful Life (RUL) of each pipe was calculated within Excel based on Eq. 12. Before this could be accomplished, the number of years from installation to first repair (NY) was calculated based on Eq.3 within MATLAB. The "LH" parameter within the equation, length of pipe exposed to corrosive soil, was set to the total length of the pipe for simplicity.

Determining the length of pipe exposed to corrosive soil would prove exhaustive and would require physical testing of soil. The assumption pertaining to the LH factor would still provide a comparison basis between pipes, which was the goal of the study, even if the accuracy of the equation was altered. The "RES" and "I" parameters were obtained by assigning values based on roadway classification and land uses surrounding the road. These values are provided below in Table 4.1. These values were based on the amount of passenger cars versus heavy (industrial) vehicles a street would experience.

Table 4.1 Percent Residential and Industrial Criteria

Land Use	% Residential	% Industrial
Multi-Family	100%	0.0%
Single Family	100%	0.0%
Office Professional	96%	4.0%
Commercial	96%	4.0%
Community	96%	4.0%
Mixed Use*	96%	4.0%
Agriculture	70%	30.0%
Highway	70%	30.0%
No Traffic	0%	0.0%

*Mixed Use designates a combination of land uses (i.e., residential and office professional)

Figure 4.2 provides an exhibit of land use designations for the city of Arroyo Grande. This information was obtained from WSC Inc. and was utilized to assign residential and industrial percentage cover for each pipe.

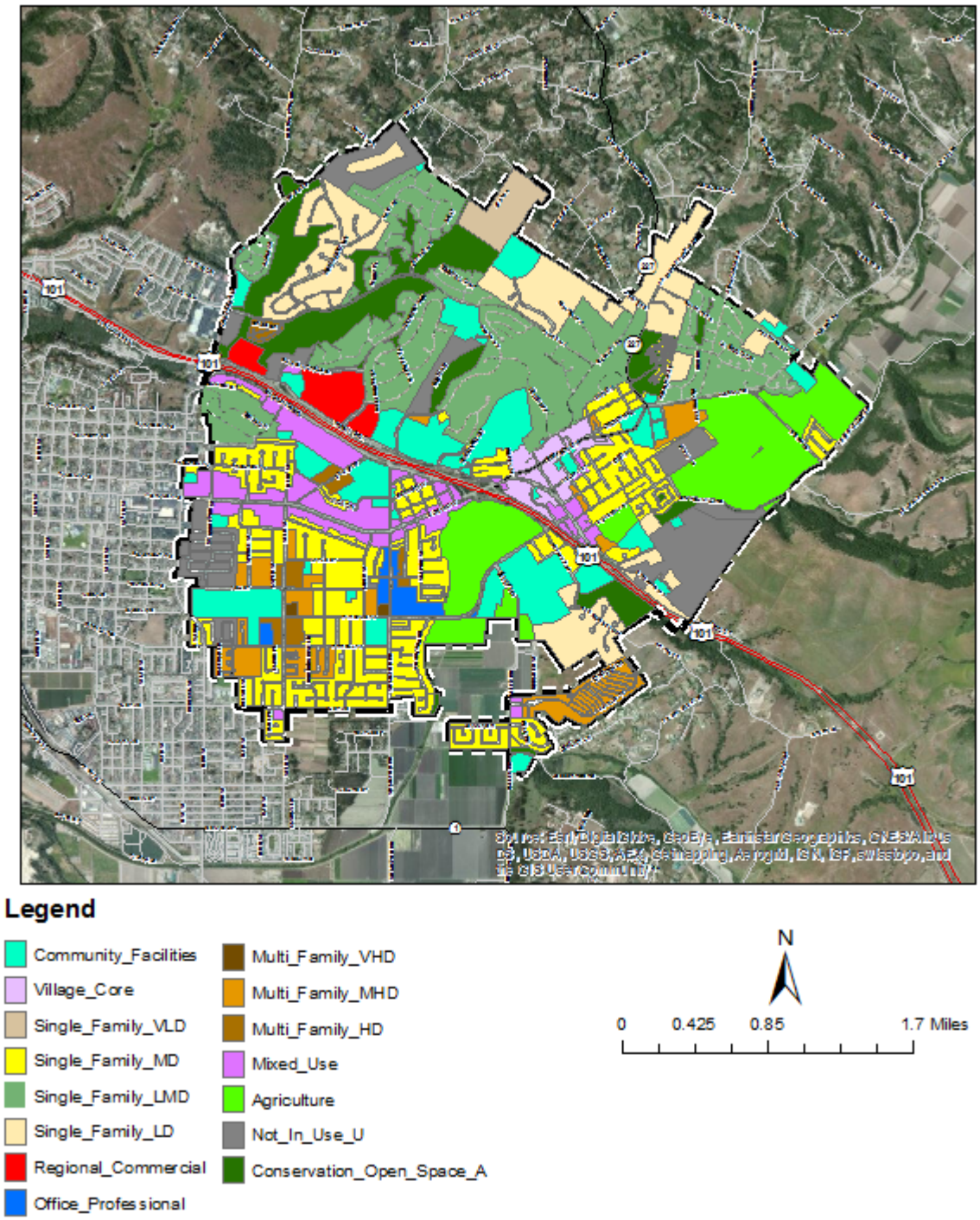

Figure 4.2 Arroyo Grande Land Use Designation Map

All other parameters within the equation (Eq. 3) were obtained from the WaterCAD and the base GIS shape file (Diameter and Pressure). After the NY for each pipe was calculated, the RUL was calculated within Excel. The RUL was adjusted based on break history (as per Eq. 13) and was assigned a probability of failure (PF) score based on Table 3.3. The RUL, Adjusted RUL, and PF score were imported from Excel into the GIS attributes table under the labels "RUL", "Adj_RUL" and "Prob_Fail_Score". The criticality scores (for Traffic, Hospitals, Fire Stations, Nursing Homes, Public and Private Schools) were input manually in Excel for each critical user. Criticality scores are based on proximity to a critical user (if closer than ¼ mile from the user, a number is assigned for that user, 0 if further than ¼ mile from user). The score designations are available in Table 3.5. A map highlighting the critical users and their influence zone is provided in Figure 4.3.

The critical user scores were summed and were multiplied by the PF score within excel to obtain the Risk of failure score. These values were exported from excel and were imported into the GIS attributes table per their respective category. These categories consist of "Traffic_Score", "Hospital", "Fire_Stn", Nursing_H", "School_Public", "School_Public", "Sum", and "Risk of Failure Score".

After all of the data was imported into ArcGIS, the risk assessment was completed by creating an exhibit highlighting the most critical pipes in the system. This exhibit is provided in Chapter 5 along with the assessment results.

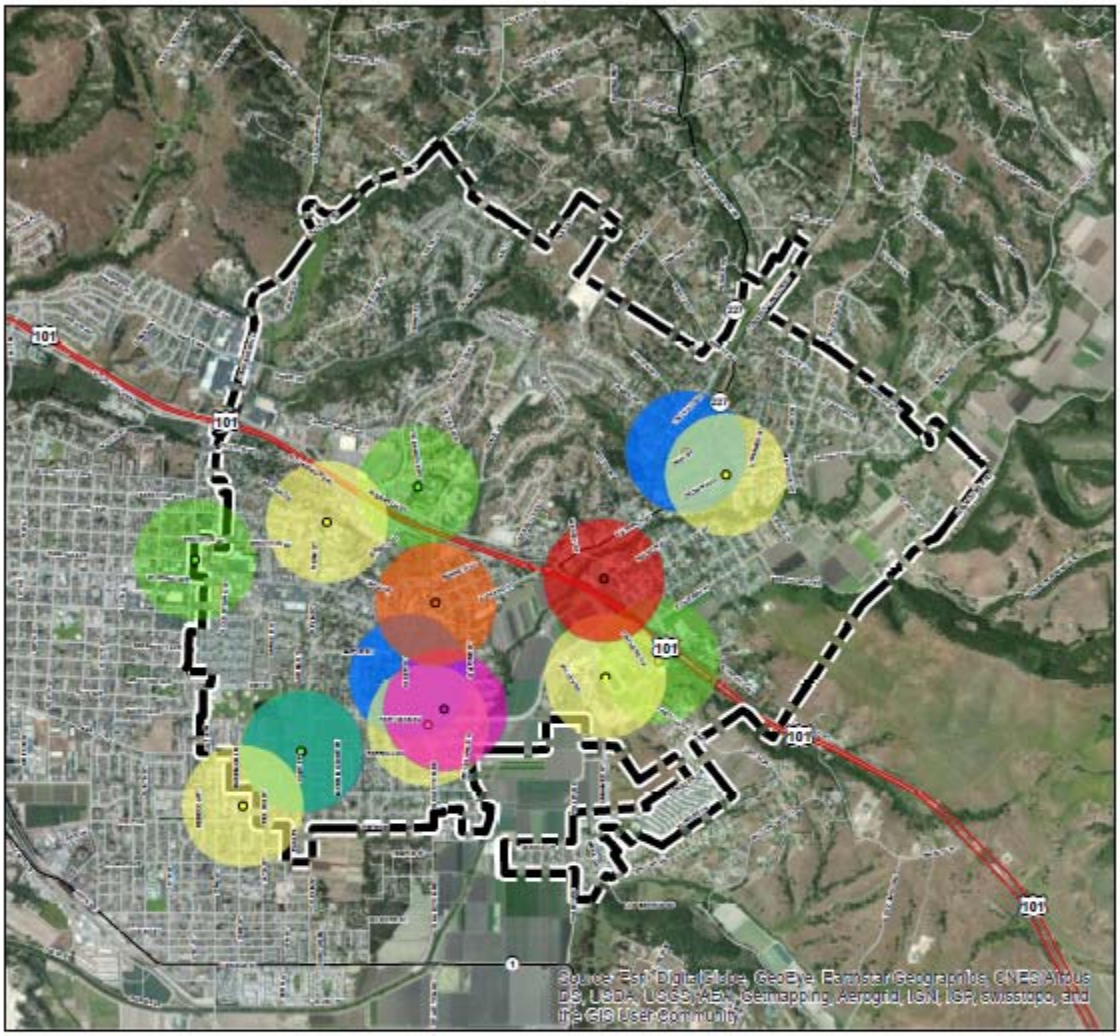

Figure 4.3 Arroyo Grande Critical Customers Exhibit

Chapter 5

Results

5.1 ArcGIS Simulation Results

The final risk assessment results are visually represented in Figure 5.1. This exhibit was created in ArcGIS. It highlights the most critical pipes in the system. The results provided three (3) pipes with a critical level of risk, four (4) pipes with a High level of risk, six (6) with a Medium level of risk, and three-thousand five-hundred and fifty-nine (3559) with a Low level of risk.

The ArcGIS exhibit was set so that it would reflect the ranking criteria presented in Table 3.9 (Chapter 3). The results for this model were compared to the results provided by Mr. Devera's model. This comparison is addressed in the next section.

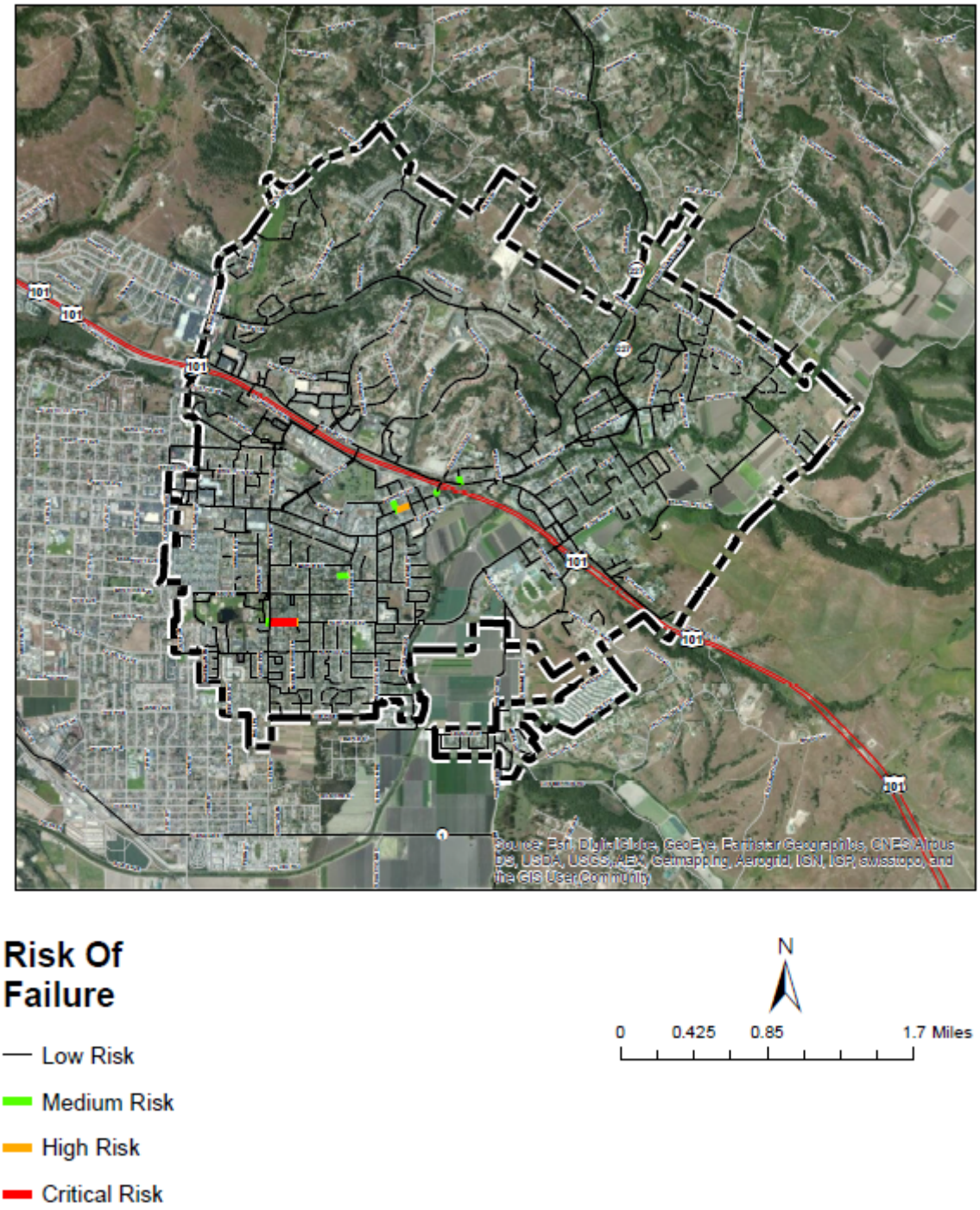

Figure 5.1 Arroyo Grande Risk Assessment Results Exhibit

5.2 Comparison to Previous Risk Analyses

This section provides a comparison between Mr. Devera's results to the current study. For simplicity, only the results will be addressed utilizing ArcGIS exhibits. Figure 5.2 provides Mr. Devera's results.

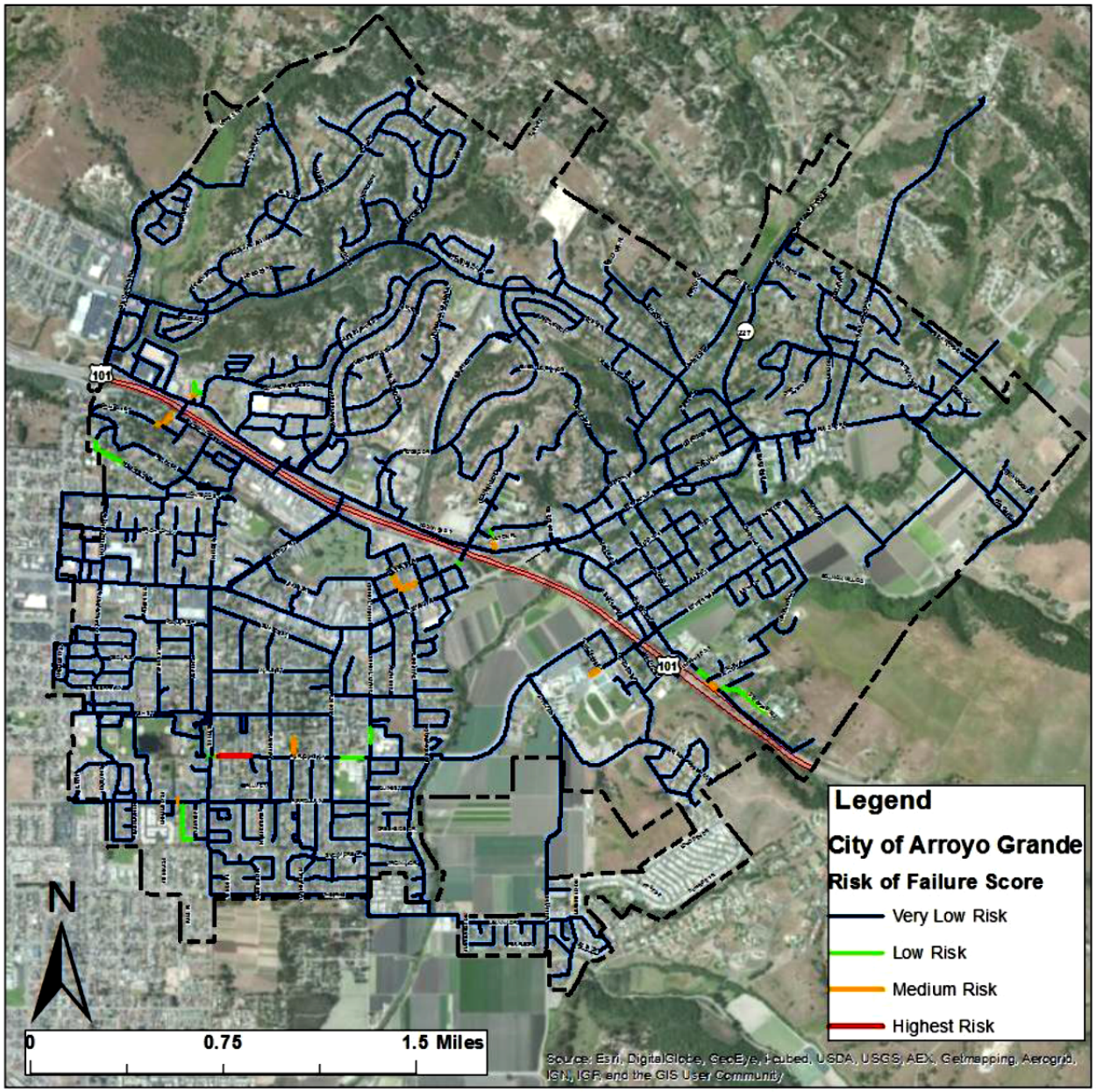

Figure 5.2 Jan Devera's Risk Assessment Model Results (Devera, 2013)

Comparing the Arc GIS exhibits, it is clear that the most critical pipes match up exactly. Both exhibits display Fair Oaks Avenue in red, meaning a critical level of risk. Beyond that, this model continues to match up quite well with Mr. Devera's model. Mr. Devera's model highlights more pipes than the current assessment, but this may be due to the differences in the Risk assessment criteria. The categorization criteria within this study (presented in Table 3.9) is different form Mr. Devera's due to the magnitude of risk scores possible within each model. After a more in-depth analysis of both results utilizing the ArcGIS attributes tables, it is apparent that a majority of pipes within the distribution network that had a high risk score were comparable. After the comparison, it is clear that although both models are not exactly the same, they both provide results that are very similar. Figure 5.3 provides a close-up view of Fair Oaks Avenue for the current risk assessment model.

Within the current assessment, all three pipes with a critical level of risk were installed in 1929. Two of them are cast iron pipes and one is an asbestos cement pipe. These are amongst the oldest pipes within the network, and their deterioration is expected. The length of the pipes range from 104ft to 411ft and the flow ranges from approximately 16gpm to 122gpm. The pipes are near a private school and a nursing home, and although the flow rates are not high, the PF score is the highest possible value. The criteria for the risk of failure are provided in Table 3.9.

This model is based on a statistical model that essentially calculates the probability of failure. By utilizing a statistical approach and incorporating more factors when calculating the RUL of a pipe, this model has increased it real-life applicability. The current study compared to Mr. Devera's, which is highly subjective and based mostly on intuition, would prove be more favorable within the engineering community because of its statistical approach. This model is only a framework for the determination of the probability of failure of a pipe, meaning that it is only hypothetical. However, it presents the opportunity to become a predictive model if it were to be calibrated using historical break data. Its validity and accuracy cannot be fully accepted as a

predictive model; however, its framework can serve as a mean to develop a maintenance schedule based on its hypothetical assigned priority. It is highly recommended that this model be applied to other WDSs in order to further prove its ability and its results. More recommendations for this model are provided in Chapter 6.

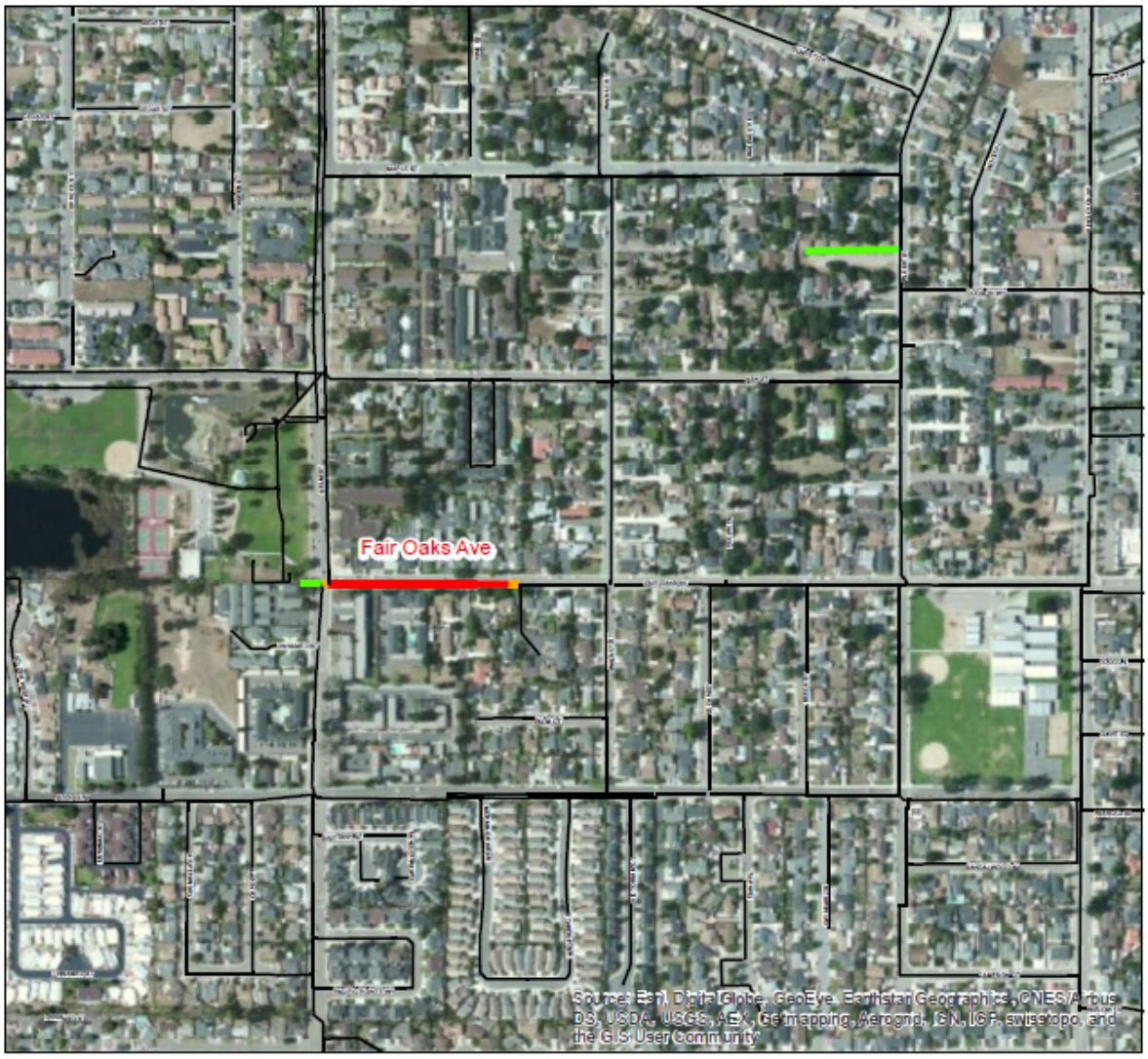

Figure 5.3 Close-Up of Fair Oaks Avenue

5.3 Optimal Conditions for Risk Assessment

Several assumptions were made throughout the extent of the model, which could skew results slightly. For an optimal representation of the Clark Model utilized to calculate the number of years from installation to the first failure, it would be necessary to provide accurate values for percent of the pipe covered by industrial development and residential development along with the length of pipe covered by corrosive soil.

Since the goal of this study was to incorporate a statistical and more technically intensive approach to a risk assessment model that would accurately represent a pipe's risk of failure, the assumptions were necessary. Since the same conditional parameters were applied to every single pipe with the same statistical model, the results reflect the Probability of Failure of a pipe and its risk. The results, 3 pipes with a critical risk, 4 pipes with a high risk, and 6 pipes with a medium risk, in a system of 3,572 pipes reflect the model's functionality.

Chapter 6

Conclusion and Recommendations

6.1 Summary and Evaluation of Results

With the results provided at the end of this study, it is clear that this model can successfully evaluate the physical conditions of each pipe in a water distribution system in order to assess its probability of failure and risk. The results highlighted 13 pipes in a system of 3572 pipes as having a notable level of risk. This model can prove to be highly beneficial for several municipalities because it would provide a framework for the maintenance and rehabilitation of their WDS.

This study provides proof that a risk assessment model has the potential to better allocate funds into a city's WDS. Through prioritization based on relative levels of risk, an entire potable water distribution system can be analyzed and assessed. This study also serves as an advocate for the use of modeling software. WaterCAD, ArcGIS, and MATLAB proved to be essential tools in this risk assessment model. ArcGIS is a great tool for visualization of data, record keeping, and management of information. WaterCAD allows the user the ability to calculate hydraulic operating conditions of pipe network, which is crucial in any WDS. Finally, MATLAB provided the capacity to efficiently run millions of calculations within seconds. It is highly recommended that municipalities turn to modeling software as a means of improving the way in which they operate their WDS.

6.2 Assessment of the Reliability of Data

All of the hydraulic information provided within this model was provided by the City of Arroyo Grande and by Water Systems Consulting (WSC) Inc., therefore it is believed that the data is reliable. It is highly recommended that municipalities obtain data for their WDS if they

would like to conduct a risk assessment. Not having accurate information for a WDS may prove difficult for a risk assessment model to be conducted and could render a model inaccurate or too expensive to employ.

6.3 Recommended Areas for Improvement and Future Research

Due to the lack of certain information, academic resources, and time constraints, several assumptions were made throughout this study. In the future, if time allows for it, traffic information should be better reflected within the model along with the percent of pipe covered by residential and industrial development. Other parameters (i.e., length exposed to corrosive soil) that are not readily available should also be reflected better if information becomes available. Also, the cost of replacement should be improved by incorporating other costs into the model as a means of avoiding any skewing of results.

Another recommendation for the improvement of the model is to better quantify the amount of people affected by the failure of a pipe. The flow rate through a pipe cannot accurately quantify the amount of people affected in the system. Also, it is recommended that the flowrates obtained by the WaterCAD model be confirmed. Due to limited academic resources and the licensing limitations of WaterCAD, the model was re-run. WaterCAD requires licensing based on the amount of pipes used, and having Arroyo Grande with a network of 3,572 pipes did not allow me the opportunity to confirm flow rates.

It is highly recommended that this model and Mr. Devera's model be applied to different water distribution systems in order to compare them further. Although the results provided by both models are similar for the City of Arroyo Grande, the results may differ if applied to a different WDS. Also, it is recommended that this model be calibrated using accurate historical break data as an attempt to make the model a predictive model instead of its current condition, a hypothetical framework for prioritization.

The main recommendation for any risk assessment model (be it improving this one or taking a different approach) is to utilize the power of ArcGIS, Excel, WaterCAD, MATLAB, or other programs within the model. Software programs allow individuals to perform calculations, create visuals, tables, or organize data in an efficient manner. The distribution network of potable water is a crucial system that requires the attention of municipal officials. Risk assessment models could prove to improve the way that maintenance and rehabilitation is conducted in a way that would save money and allow for the continued use of potable water: a source of economic and human prosperity.

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Appendix A: Arroyo Grande GIS Model Data and Results

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
0	PASEO ST	1987	8	298	PVC	2	1.75	28	12	3576	76	0	76	1	1	1	1	0	0	0	2	2	0	7	7
1	BRISCO RD	1982	4	5	PVC	0	0	33	5	25	71	0	71	1	1	1	3	0	0	0	0	2	0	7	7
2	BRISCO RD	1982	4	96	PVC	0	0	33	12	1152	72	0	72	1	1	1	3	0	0	0	0	2	0	7	7
3	BRISCO RD	1982	8	192	PVC	0	0	33	12	2304	72	0	72	1	1	1	3	0	0	0	0	2	0	7	7
4	BRISCO RD	1982	8	8	PVC	0	0	33	12	96	72	0	72	1	2	1	3	0	0	0	0	2	0	7	7
5	BRISCO RD	1982	8	82	PVC	0	0	33	12	984	72	0	72	1	2	1	3	0	0	0	0	2	0	8	8
6	RESERVOIR RD	2001	12	6	PVC	348	348.28	14	28	168	94	0	94	1	2	1	0	0	0	0	0	0	0	3	3
7	RESERVOIR RD	2001	12	7	PVC	224	223.51	14	28	196	94	0	94	1	1	1	0	0	0	0	0	0	0	3	3
8	RESERVOIR RD	2001	12	38	PVC	348	348.28	14	28	1064	94	0	94	1	1	1	0	0	0	0	0	0	0	2	2
9	RESERVOIR RD	2001	12	9	PVC	224	223.51	14	28	252	94	0	94	1	2	1	0	0	0	0	0	0	0	2	2
10	RESERVOIR RD	2001	12	8	PVC	348	348.28	14	28	224	94	0	94	1	2	1	0	0	0	0	0	0	0	3	3
11	RESERVOIR RD	2001	12	22	PVC	224	223.51	14	28	616	94	0	94	1	2	1	0	0	0	0	0	0	0	3	3
12	RESERVOIR RD	2001	12	11	PVC	348	348.28	14	28	308	94	0	94	1	2	1	0	0	0	0	0	0	0	3	3
13	RESERVOIR RD	2001	12	131	PVC	348	348.28	14	28	3668	94	0	94	1	1	1	0	0	0	0	0	0	0	3	3
14	W LE POINT ST	2007	8	5	PVC	0	0.44	8	12	60	97	0	97	1	1	1	1	0	4	0	0	0	0	7	7
15	W LE POINT ST	2007	8	105	PVC	0	0	8	12	1260	97	0	97	1	1	1	1	0	4	0	0	0	0	7	7
16	W LE POINT ST	2007	8	93	PVC	0	0.44	8	12	1116	97	0	97	1	1	1	1	0	4	0	0	0	0	7	7
17	LE POINT ST	2007	8	52	PVC	2	1.86	8	12	624	97	0	97	1	1	1	1	0	4	0	0	0	0	7	7
18	W LE POINT ST	2007	8	5	PVC	0	0	8	12	60	97	0	97	1	1	1	1	0	4	0	0	0	0	7	7
19	W LE POINT ST	2007	4	82	ACP	4	3.97	8	64	5248	97	0	97	1	1	2	1	0	4	0	0	0	0	8	8
20	LE POINT ST	1985	8	21	PVC	73	72.78	30	12	252	75	0	75	1	1	1	1	0	4	0	0	0	0	7	7
21	LE POINT ST	1985	8	10	PVC	73	72.78	30	12	120	75	0	75	1	1	1	1	0	4	0	0	0	0	7	7
22	W LE POINT ST	1985	4	6	ACP	4	3.97	30	42	252	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
23	LE POINT ST	2008	4	11	ACP	4	3.97	7	64	704	98	0	98	1	1	1	1	0	4	0	0	0	0	7	7
24	MAPLE ST	1967	6	83	ACP	4	4.17	48	55	4565	53	0	53	1	1	1	1	0	0	0	0	0	0	3	3
25	MAPLE ST	1967	6	7	ACP	25	25.07	48	55	385	54	0	54	1	1	1	1	0	0	0	0	0	0	3	3
26	MAPLE ST	1967	6	38	ACP	25	25.07	48	55	2090	53	0	53	1	2	1	1	0	0	0	0	0	0	3	3
27	S ELM ST	1964	10	103	ACP	228	227.96	51	69	7107	52	0	52	1	2	2	3	0	0	0	0	0	0	7	7
28	S ELM ST	1964	10	40	ACP	230	229.56	51	69	2760	52	0	52	1	2	1	3	0	0	0	0	0	0	6	6
29	S ELM ST	1964	10	178	ACP	233	232.87	51	69	12282	51	0	51	1	1	3	3	0	0	0	0	0	0	8	8
30	E GRAND AV	2002	12	23	PVC	0	0	13	8	184	88	0	88	1	1	1	4	0	0	0	0	0	2	8	8
31	E GRAND AV	2002	12	68	PVC	2	1.75	13	28	1904	93	0	93	1	1	1	4	0	0	0	0	0	2	8	8
32	E GRAND AV	2002	8	43	PVC	4	3.94	13	28	1204	93	0	93	1	2	1	4	0	0	0	0	0	2	8	8
33	S COURTLAND ST	2001	12	97	PVC	239	239.34	14	28	2716	92	0	92	1	2	1	1	0	0	0	0	0	2	6	6
34	E GRAND AV	2002	12	112	PVC	239	239.34	13	28	3136	93	0	93	1	1	1	4	0	0	0	0	0	2	9	9
35	DIXSON ST	1993	8	202	PVC	19	18.65	22	8	1616	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
36	DIXSON ST	1993	8	8	PVC	19	18.65	22	12	96	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
37	DIXSON ST	1993	8	8	PVC	19	18.65	22	12	96	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
38	DIXSON ST	1993	8	8	PVC	19	18.65	22	12	96	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
39	DIXSON ST	1993	8	8	PVC	20	19.56	22	12	96	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
40	DIXSON ST	1993	8	163	PVC	98	98.07	22	12	1956	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
41	ASH ST	2001	8	965	PVC	98	98.07	14	12	11580	88	0	88	1	1	3	3	0	0	0	0	0	0	7	7
42	BAKEMAN LN	1987	8	182	PVC	27	27.04	28	12	2184	76	0	76	1	1	1	1	0	0	0	2	0	2	7	7
43	BAKEMAN LN	1987	8	93	PVC	27	27.04	28	12	1116	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
44	BAKEMAN LN	1987	8	116	PVC	58	57.75	28	12	1392	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
45	BAKEMAN LN	1987	8	9	PVC	31	30.71	28	12	108	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
46	BAKEMAN LN	1987	8	11	PVC	22	22.23	28	12	132	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
47	FARROLL AV	1970	8	23	ACP	33	33.29	45	64	1472	57	0	57	1	1	1	1	0	0	0	2	2	2	9	9
48	BAKEMAN LN	1987	8	199	PVC	26	25.64	28	12	2388	76	0	76	1	1	1	1	0	0	0	2	0	2	7	7
49	BAKEMAN LN	1987	8	9	PVC	22	22.23	28	12	108	77	0	77	1	1	1	1	0	0	0	2	0	2	7	7
50	BAKEMAN LN	1987	8	154	PVC	19	19.27	28	12	1848	76	0	76	1	1	1	1	0	0	0	2	0	2	7	7
51	BAKEMAN LN	1987	8	10	PVC	22	22.23	28	12	120	77	0	77	1	1	1	1	0	0	0	2	0	2	7	7
52	GLENBROOK WY	2001	8	6	PVC	22	22.23	14	12	72	91	0	91	1	1	1	1	0	0	0	2	0	2	7	7
53	BAKEMAN LN	1987	8	10	PVC	22	22.23	28	12	120	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
54	BAKEMAN LN	1987	8	149	PVC	22	22.23	28	12	1788	76	0	76	1	1	1	1	0	0	0	2	2	2	9	9
55	BAKEMAN LN	1987	8	242	PVC	31	30.71	28	12	2904	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
56	BAKEMAN LN	1987	8	8	PVC	8	7.8	28	12	96	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
57	BAKEMAN LN	1987	8	140	PVC	26	26.2	28	12	1680	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
58	GLENBROOK WY	0	8	100	PVC	5	5.08	2	12	1200	102	0	102	1	1	1	1	0	0	0	2	2	2	9	9
59	GLENBROOK WY	0	8	180	PVC	8	7.8	2	12	2160	102	0	102	1	1	1	1	0	0	0	2	2	2	9	9
60	BAKEMAN LN	1987	8	8	PVC	8	7.8	28	12	96	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
61	BAKEMAN LN	1987	8	156	PVC	17	17.28	28	12	1872	76	0	76	1	1	1	1	0	0	0	0	2	0	5	5
62	BAKEMAN LN	1987	8	6	PVC	17	17.28	28	12	72	77	0	77	1	1	1	1	0	0	0	0	2	0	5	5
63	BAKEMAN LN	1987	8	38	PVC	31	30.71	28	12	456	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
64	BAKEMAN LN	1987	8	7	PVC	31	30.71	28	12	84	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
65	BAKEMAN LN	1987	8	10	PVC	31	30.71	28	12	120	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
66	BAKEMAN LN	1987	8	9	PVC	98	98.07	28	12	108	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
67	BAKEMAN LN	1987	8	12	PVC	17	17.28	28	12	144	77	0	77	1	1	1	1	0	0	0	0	2	0	5	5
68	BAKEMAN LN	1987	8	12	PVC	17	17.28	28	12	144	74	0	74	1	1	1	1	0	0	0	0	2	0	5	5
69	BAKEMAN LN	1987	8	6	PVC	22	22.23	28	12	72	77	0	77	1	1	1	1	0	0	0	2	2	2	9	9
70	BAKEMAN LN	1987	8	6	PVC	8	7.8	28	12	72	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
71	BAKEMAN LN	1987	8	7	PVC	98	98.07	28	12	84	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
72	ASH ST	1966	8	299	PVC	22	21.68	49	12	3588	55	0	55	1	1	1	3	0	0	0	0	0	0	5	5
73	ASH ST	1966	8	32	PVC	21	21.49	49	12	384	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
74	LAVENDER LN	2001	8	22	PVC	9	8.66	14	12	264	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
75	JASMINE PL	2001	8	167	PVC	9	8.66	14	12	2004	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
76	LAVENDER LN	2001	8	6	PVC	9	8.66	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
77	LILAC CT	2001	8	303	PVC	9	8.66	14	12	3636	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
78	JASMINE PL	2001	8	182	PVC	18	18.42	14	12	2184	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
79	JASMINE PL	2001	8	104	PVC	18	18.42	14	12	1248	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
80	PRIMEROSE CT	2001	8	251	PVC	0	0.24	14	12	3012	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
81	JASMINE PL	2001	8	6	PVC	0	0.24	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
82	JASMINE PL	2001	12	159	PVC	152	152.03	14	28	4452	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
83	S COURTLAND ST	2001	8	40	PVC	0	0.24	14	12	480	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
84	ASH ST	1966	8	7	PVC	18	18.42	49	12	84	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
85	STRAWBERRY AV	2001	8	139	PVC	42	41.61	14	12	1668	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
86	STRAWBERRY AV	2001	8	11	PVC	42	41.61	14	12	132	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
87	STRAWBERRY AV	2001	8	7	PVC	42	41.61	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
88	STRAWBERRY AV	2001	8	240	PVC	41	40.65	14	12	2880	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
89	BLACKBERRY AV	2001	8	5	PVC	41	40.65	14	12	60	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
90	BLACKBERRY AV	2001	8	330	PVC	41	40.65	14	12	3960	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
91	E GRAND AV	2002	6	114	ACP	19	19	13	55	6270	88	0	88	1	1	2	4	0	0	0	0	0	2	9	9
92	N COURTLAND ST	1981	8	7	PVC	0	0	34	12	84	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
93	RAMONA AV	2001	8	57	PVC	4	3.94	14	12	684	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
94	N COURTLAND ST	1981	8	156	PVC	4	3.94	34	12	1872	71	0	71	1	1	1	1	0	0	0	0	2	5	5
95	E GRAND AV	2002	8	22	PVC	7	6.61	13	12	264	92	0	92	1	1	1	4	0	0	0	0	2	8	8
96	RAMONA AV	2001	8	13	PVC	4	3.94	14	12	156	91	0	91	1	1	1	1	0	0	0	0	2	5	5
97	E GRAND AV	2002	8	107	PVC	4	3.94	13	12	1284	92	0	92	1	1	1	4	0	0	0	0	2	8	8
98	E GRAND AV	2002	8	51	PVC	4	3.94	13	12	612	92	0	92	1	1	1	4	0	0	0	0	2	8	8
99	E GRAND AV	2002	8	90	PVC	4	3.94	13	12	1080	92	0	92	1	1	1	4	0	0	0	0	2	8	8
100	E GRAND AV	2002	8	12	PVC	4	3.94	13	12	144	92	0	92	1	1	1	4	0	0	0	0	2	8	8
101	E GRAND AV	2002	8	49	PVC	4	3.94	13	12	588	92	0	92	1	1	1	4	0	0	0	0	2	8	8
102	RAMONA AV	2001	8	6	PVC	4	3.94	14	12	72	91	0	91	1	1	1	1	0	0	0	0	2	5	5
103	N COURTLAND ST	1981	8	140	PVC	0	0	34	12	1680	71	0	71	1	1	1	1	0	0	0	0	2	5	5
104	RAMONA AV	2001	8	65	PVC	3	3.47	14	12	780	91	0	91	1	1	1	1	0	0	0	0	2	5	5
105	RAMONA AV	2001	8	15	PVC	3	3.47	14	12	180	91	0	91	1	1	1	1	0	0	0	0	2	5	5
106	RAMONA AV	2001	8	57	PVC	7	7.07	14	12	684	91	0	91	1	1	1	1	0	0	0	0	2	5	5
107	E GRAND AV	2002	8	15	PVC	4	3.94	13	12	180	92	0	92	1	1	1	4	0	0	0	0	2	8	8
108	RAMONA AV	2001	8	8	PVC	0	0	14	12	96	91	0	91	1	1	1	1	0	0	0	0	2	5	5
109	RAMONA AV	2001	8	29	PVC	7	7.41	14	12	348	91	0	91	1	1	1	1	0	0	0	0	2	5	5
110	RAMONA AV	2001	8	179	PVC	14	14.48	14	12	2148	91	0	91	1	1	1	1	0	0	0	0	2	5	5
111	RAMONA AV	2001	8	8	PVC	0	0	14	12	96	91	0	91	1	1	1	1	0	0	0	0	2	5	5
112	N COURTLAND ST	1981	8	26	PVC	0	0	34	12	312	71	0	71	1	1	1	1	0	0	0	0	2	5	5
113	RAMONA AV	2001	8	450	PVC	3	3.47	14	12	5400	90	0	90	1	1	2	1	0	0	0	0	2	6	6
114	RAMONA AV	2001	8	7	PVC	0	0	14	12	84	91	0	91	1	1	1	1	0	0	0	0	2	5	5
115	N COURTLAND ST	1981	8	4	PVC	0	0	34	12	48	71	0	71	1	1	1	1	0	0	0	0	2	5	5
116	STONECREST DR	2001	8	370	PVC	11	11.13	14	12	4440	89	0	89	1	1	1	1	0	0	0	0	2	5	5
117	STONECREST DR	2001	8	520	PVC	20	20.36	14	12	6240	89	0	89	1	1	2	1	0	0	0	0	2	6	6
118	HILLCREST DR	1948	8	6	ACP	18	18.37	67	64	384	35	0	35	1	1	1	1	0	0	0	0	2	5	5
119	HILLCREST DR	1948	8	7	PVC	13	12.51	67	12	84	38	0	38	1	1	1	1	0	0	0	0	2	5	5
120	HILLCREST DR	1948	8	38	ACP	18	18.37	67	64	2432	37	0	37	1	1	1	1	0	0	0	0	2	5	5
121	HILLCREST DR	1948	8	9	PVC	13	12.51	67	12	108	38	0	38	1	1	1	1	0	0	0	0	2	5	5
122	HILLCREST DR	1948	8	8	ACP	18	18.37	67	64	512	38	0	38	1	1	1	1	0	0	0	0	2	5	5
123	STONECREST DR	2001	8	3	PVC	20	20.36	14	12	36	91	0	91	1	1	1	1	0	0	0	0	2	5	5
124	STONECREST DR	2001	8	120	PVC	20	20.36	14	12	1440	90	0	90	1	1	1	1	0	0	0	0	2	5	5
125	STONECREST DR	2001	8	10	PVC	20	20.36	14	12	120	91	0	91	1	1	1	1	0	0	0	0	2	5	5
126	HILLCREST DR	1948	8	97	ACP	18	18.37	67	64	6208	37	0	37	1	1	2	1	0	0	0	0	2	6	6
127	HILLCREST DR	1948	8	11	PVC	18	18.37	67	12	132	37	0	37	1	1	1	1	0	0	0	0	2	5	5
128	STONECREST DR	2001	8	108	PVC	6	6.13	14	12	1296	90	0	90	1	1	1	1	0	0	0	0	2	5	5
129	STONECREST DR	2001	8	4	PVC	11	11.13	14	12	48	90	0	90	1	1	1	1	0	0	0	0	2	5	5
130	STONECREST DR	2001	8	5	PVC	15	15.13	14	12	60	90	0	90	1	1	1	1	0	0	0	0	2	5	5
131	RODEO DR	1988	8	12	PVC	25	24.64	27	12	144	77	0	77	1	1	1	2	0	0	0	0	0	4	4
132	GRACE LN	2005	8	253	PVC	25	24.64	10	12	3036	94	0	94	1	1	1	1	0	0	0	0	0	3	3
133	GRACE LN	2005	8	288	PVC	25	24.64	10	12	3456	93	0	93	1	1	1	1	0	0	0	0	0	3	3
134	GRACE LN	2005	8	304	PVC	25	24.64	10	12	3648	93	0	93	1	1	1	1	0	0	0	0	0	3	3
135	GRACE LN	2005	8	215	PVC	25	24.64	10	12	2580	94	0	94	1	1	1	1	0	0	0	0	0	3	3
136	GRACE LN	2005	8	341	PVC	25	24.64	10	12	4092	93	0	93	1	1	1	1	0	0	0	0	0	3	3
137	RODEO DR	2005	8	316	PVC	25	24.64	10	12	3792	93	0	93	1	1	1	2	0	0	0	0	0	4	4
138	GRACE LN	2005	8	347	PVC	25	24.64	10	12	4164	94	0	94	1	1	1	1	0	0	0	0	0	3	3
139	GRACE LN	1988	8	325	PVC	25	24.64	27	12	3900	77	0	77	1	1	1	1	0	0	0	0	0	3	3
140	VALLEY RD	1967	10	1679	PVC	152	151.52	48	19	31901	52	0	52	1	1	3	1	0	0	0	0	2	9	9
141	CORBETT CANYON RD	1973	8	1293	PVC	68	67.56	42	12	15516	58	0	58	1	1	3	0	0	0	0	0	0	4	4
142	CORBETT CANYON RD	1973	8	122	ACP	137	136.85	42	64	7808	61	0	61	1	1	2	0	0	0	0	0	0	3	3
143	CORBETT CANYON RD	1973	8	918	ACP	137	136.85	42	64	58752	59	0	59	1	1	4	0	0	0	0	0	0	5	5
144	STAGECOACH RD	1976	8	8	ACP	136	136.43	39	64	512	64	0	64	1	1	1	1	0	0	0	0	0	3	3
145	BENNETT AV	1967	4	11	ACP	10	9.76	48	42	462	53	0	53	1	1	1	1	0	0	0	0	0	3	3
146	OLD RANCH RD	1997	6	53	PVC	7	7.16	18	8	424	87	0	87	1	1	1	0	0	0	0	0	0	2	2
147	MILLER WY	1977	8	150	ACP	34	33.5	38	64	9600	65	0	65	1	1	2	1	0	0	0	0	0	4	4
148	MILLER WY	1977	8	11	ACP	27	26.78	38	64	704	65	0	65	1	1	1	1	0	0	0	0	0	3	3
149	HUEBNER LN	1981	10	95	PVC	122	122.06	34	19	1805	73	0	73	1	1	1	0	0	0	0	0	0	2	2
150	E CHERRY AV	1982	4	392	ACP	11	10.61	33	42	16464	67	0	67	1	1	3	1	0	0	0	0	0	5	5
151	LOS OLIVOS LN	1982	6	222	ACP	27	26.61	33	55	12210	68	0	68	1	1	3	1	0	0	0	0	0	5	5
152	CORRAL PL	1975	6	118	ACP	0	0	40	55	6490	62	0	62	1	1	2	1	0	0	0	0	0	4	4
153	TEMPUS CR	1981	8	16	ACP	14	14.47	34	55	880	68	0	68	1	1	1	1	0	0	0	0	0	3	3
154	PLATINO LN	1982	6	438	ACP	12	12.09	33	55	24090	67	0	67	1	1	3	1	0	0	0	0	0	5	5
155	TEMPUS CR	1981	8	9	ACP	14	14.47	34	64	576	68	0	68	1	1	1	1	0	0	0	0	0	3	3
156	ORO DR	1975	8	4	ACP	29	29.15	40	64	256	65	0	65	1	1	1	1	0	0	0	0	0	3	3
157	E CHERRY AV	1982	4	829	PVC	14	13.98	33	5	4145	66	0	66	1	1	1	1	0	0	0	0	0	3	3
158	STANLEY AV	1982	6	349	ACP	13	13.39	33	55	19195	68	0	68	1	1	3	1	0	0	0	0	2	7	7
159	STANLEY AV	1982	6	26	ACP	13	13.39	33	55	1430	69	0	69	1	1	1	1	0	0	0	0	2	5	5
160	HUASNA RD	1967	6	379	ACP	34	34.3	48	55	20845	53	0	53	1	2	3	2	0	0	0	0	2	8	8
161	PASEO ST	1987	12	7	ACP	232	231.65	28	77	539	76	0	76	1	1	1	1	0	0	0	2	2	8	8
162	TALLY HO RD	1977	12	393	PVC	77	76.74	38	28	11004	67	0	67	1	1	3	2	0	0	0	2	0	8	8
163	CANYON WY	1950	8	434	ACP	23	23.14	65	64	27776	36	0	36	1	1	3	1	0	0	0	2	0	7	7
164	TALLY HO RD	1977	8	42	ACP	11	10.73	38	77	3234	69	0	69	1	1	1	2	0	0	0	0	0	4	4
165	RIDGEVIEW WY	1978	8	547	ACP	11	10.73	37	64	35008	64	0	64	1	1	3	1	0	0	0	0	0	5	5
166	EQUESTRIAN WY	1980	12	375	PVC	0	0	35	28	10500	70	0	70	1	1	3	1	0	0	0	0	0	5	5
167	MEADOW WY	1990	8	304	ACP	9	9.08	25	64	19456	76	0	76	1	1	3	1	0	0	0	0	0	5	5
168	VIA VAQUERO	1992	8	796	PVC	15	14.56	23	12	9552	79	0	79	1	1	2	1	0	0	0	0	0	4	4
169	N VIA FIRENZE CT	2001	8	6	PVC	4	4.08	14	12	72	91	0	91	1	1	1	1	0	0	0	0	2	5	5
170	N VIA FIRENZE CT	2001	8	6	PVC	4	4.08	14	12	72	91	0	91	1	1	1	1	0	0	0	0	2	5	5
171	N VIA FIRENZE CT	2001	8	5	PVC	4	4.08	14	12	60	91	0	91	1	1	1	1	0	0	0	0	2	5	5
172	TRAFFIC WY	1958	12	15	PVC	94	93.52	57	28	420	49	0	49	1	1	1	1	0	4	0	0	2	9	9
173	ALLEN ST	0	12	32	PVC	188	187.6	2	8	256	100	0	100	1	1	1	1	0	0	0	0	0	3	3
174	ALLEN ST	0	12	11	PVC	131	131.05	2	8	88	100	0	100	1	1	1	1	0	0	0	0	0	3	3
175	CROSS ST	1975	6	23	ACP	6	6.16	40	42	966	61	0	61	1	1	1	1	0	0	0	0	0	3	3
176	GARDEN ST	1971	10	14	ACP	138	137.87	44	69	966	59	0	59	1	1	1	1	0	0	0	0	2	5	5
177	NELSON ST	1991	12	25	PVC	88	87.88	24	12	300	81	0	81	1	1	1	1	0	0	0	0	0	3	3
178	BRIDGE ST	1977	12	12	ACP	229	229.33	38	55	660	66	0	66	1	2	1	1	0	0	0	0	0	3	3
179	BRIDGE ST	1977	12	12	ACP	229	229.33	38	77	924	66	0	66	1	2	1	1	0	4	0	0	0	8	8
180	S MASON ST	1995	12	7	ACP	213	212.72	20	77	539	84	0	84	1	1	1	1	0	0	0	0	0	4	4
181	LE POINT TR	1985	6	193	ACP	37	36.53	30	69	13317	73	0	73	1	1	3	1	0	0	0	2	2	9	9
182	CROWN TR	1982	4	12	CIP	0	0.48	33	18	216	53	0	53	1	1	1	1	0	0	0	2	0	5	5
183	GARDEN ST	1971	4	412	ACP	30	29.74	44	69	28428	58	0	58	1	1	3	1	0	0	0	0	2	7	7
184	E BRANCH ST	0	10	10	ACP	138	137.87	2	69	690	101	0	101	1	1	1	1	0	0	0	2	2	7	7
185	TRAFFIC WY	1969	8	27	PVC	30	29.74	46	28	756	60	0	60	1	1	1	1	0	4	0	0	0	7	7
186	TRAFFIC WY	1969	8	17	PVC	30	29.74	46	12	204	59	0	59	1	1	1	1	0	4	0	0	0	7	7
187	TRAFFIC WY	1969	8	11	PVC	47	46.79	46	12	132	59	0	59	1	1	1	1	0	4	0	0	0	7	7

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
188	W BRANCH ST	2008	8	10	PVC	61	61.03	7	12	120	98	0	98	1	1	1	4	0	4	0	0	0	0	10	10
189	LE POINT ST	1985	4	227	ACP	4	3.97	30	64	14528	75	0	75	1	1	3	1	0	4	0	0	0	0	9	9
190	TRAFFIC WY	1969	8	17	PVC	55	55.32	46	12	204	59	0	59	1	1	1	1	0	4	0	0	0	0	7	7
191	SHORT ST	1982	2	14	PVC	0	0	33	2	28	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
192	LE POINT ST	1985	8	6	PVC	73	72.78	30	12	72	75	0	75	1	1	1	1	0	4	0	0	0	0	7	7
193	LE POINT ST	1985	8	6	PVC	73	72.78	30	12	72	75	0	75	1	1	1	1	0	4	0	0	0	0	7	7
194	LE POINT ST	1985	4	148	ACP	1	1.24	30	64	9472	75	0	75	1	1	2	1	0	4	0	0	0	0	8	8
195	LE POINT ST	1985	4	6	ACP	1	1.24	30	42	252	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
196	MILLER WY	1977	8	5	PVC	77	77.31	38	12	60	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
197	LE POINT ST	1985	8	8	PVC	77	77.31	30	12	96	75	0	75	1	1	1	1	0	0	0	0	0	0	3	3
198	MILLER WY	1977	8	6	PVC	77	77.31	38	8	48	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
199	MILLER WY	1977	8	6	PVC	77	77.31	38	28	168	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
200	LE POINT ST	1985	4	214	ACP	1	1.24	30	64	13696	75	0	75	1	1	3	1	0	0	0	0	0	0	5	5
201	MILLER WY	1977	6	42	ACP	0	0	38	55	2310	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
202	LE POINT ST	2011	4	286	ACP	1	1.24	4	64	18304	101	0	101	1	1	3	1	0	4	0	0	0	0	9	9
203	LE POINT ST	1985	12	33	PVC	78	78.01	30	28	924	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
204	LE POINT ST	1985	12	14	PVC	230	230.08	30	28	392	77	0	77	1	2	1	1	0	0	0	0	0	0	3	3
205	LE POINT ST	1985	12	13	PVC	230	230.08	30	28	364	77	0	77	1	1	1	1	0	0	0	0	0	0	4	4
206	MILLER WY	1977	12	135	PVC	77	77.31	38	28	3780	68	0	68	1	2	1	1	0	0	0	0	0	0	3	3
207	S MASON ST	1995	12	7	ACP	213	212.72	20	77	539	86	0	86	1	2	1	1	0	0	0	0	0	0	4	4
208	S MASON ST	1995	12	32	ACP	269	268.68	20	77	2464	84	0	84	1	2	1	1	0	0	0	0	0	0	4	4
209	S MASON ST	1995	12	7	ACP	213	212.72	20	77	539	84	0	84	1	2	1	1	0	0	0	0	0	0	4	4
210	OLOHAN ALY	1992	12	103	PVC	204	204.47	23	28	2884	83	0	83	1	1	1	1	0	0	0	0	0	0	4	4
211	E BRANCH ST	0	12	7	ACP	213	212.72	2	77	539	104	0	104	1	2	1	1	0	0	0	0	0	0	3	3
212	E BRANCH ST	0	12	17	ACP	213	212.72	2	77	1309	102	0	102	1	2	1	1	0	0	0	0	0	0	4	4
213	E BRANCH ST	0	12	14	ACP	213	212.72	2	77	1078	102	0	102	1	1	1	1	0	0	0	0	0	0	4	4
214	OLOHAN ALY	1992	2	193	PVC	0	0	23	2	386	79	0	79	1	2	1	1	0	0	0	0	0	0	3	3
215	SHORT ST	1982	2	29	PVC	0	0	33	28	812	71	0	71	1	2	1	1	0	4	0	0	0	0	8	8
216	E BRANCH ST	0	12	17	ACP	211	211.11	2	77	1309	102	0	102	1	2	1	1	0	4	0	0	0	0	8	8
217	E BRANCH ST	0	12	136	ACP	211	211.11	2	77	10472	101	0	101	1	2	3	1	0	4	0	0	0	0	10	10
218	W BRANCH ST	1977	12	256	ACP	208	207.67	38	77	19712	65	0	65	1	1	3	4	0	4	0	0	0	0	13	13
219	NEVADA ST	2008	8	169	PVC	61	61.03	7	12	2028	98	0	98	1	2	1	1	0	4	0	0	0	0	7	7
220	W BRANCH ST	1977	8	27	PVC	61	61.03	38	28	756	66	0	66	1	1	1	4	0	4	0	0	0	0	11	11
221	BRIDGE ST	1977	6	18	PVC	31	31.02	38	8	144	66	0	66	1	2	1	1	0	0	0	0	0	0	3	3
222	BRIDGE ST	1977	12	11	ACP	229	229.33	38	77	847	66	0	66	1	1	1	1	0	4	0	0	0	0	8	8
223	OLOHAN ALY	1992	6	143	PVC	31	31.02	23	8	1144	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
224	NEVADA ST	2008	8	194	PVC	64	64.25	7	12	2328	98	0	98	1	2	1	1	0	4	0	0	0	0	7	7
225	BRIDGE ST	1977	12	340	ACP	229	229.33	38	77	26180	65	0	65	1	1	3	1	0	4	0	0	0	0	10	10
226	NELSON ST	1991	6	10	PVC	23	22.7	24	8	80	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
227	BRIDGE ST	1977	6	96	PVC	23	22.7	38	8	768	66	0	66	1	2	1	1	0	0	0	0	0	0	3	3
228	SHORT ST	1982	2	279	PVC	0	0	33	28	7812	70	0	70	1	2	2	1	0	4	0	0	0	0	9	9
229	E BRANCH ST	0	12	11	ACP	208	207.67	2	77	847	102	0	102	1	2	1	1	0	4	0	0	0	0	8	8
230	E BRANCH ST	0	12	9	ACP	208	207.67	2	77	693	102	0	102	1	1	1	1	0	4	0	0	0	0	8	8
231	NELSON ST	1991	8	22	PVC	43	42.78	24	12	264	81	0	81	1	1	1	1	0	4	0	0	0	0	7	7
232	BRIDGE ST	1977	6	12	PVC	23	22.7	38	12	144	67	0	67	1	1	1	1	0	4	0	0	0	0	7	7
233	NELSON ST	1991	6	221	PVC	23	22.7	24	8	1768	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
234	TRAFFIC WY	1969	6	145	PVC	23	22.7	46	12	1740	59	0	59	1	1	1	1	0	4	0	0	0	0	7	7
235	TRAFFIC WY	1969	8	18	PVC	47	46.79	46	12	216	59	0	59	1	1	1	1	0	4	0	0	0	0	7	7
236	TRAFFIC WY	1969	8	225	PVC	47	46.79	46	12	2700	58	0	58	1	1	1	1	0	4	0	0	0	0	7	7
237	TRAFFIC WY	1969	8	48	PVC	18	18.42	46	12	576	59	0	59	1	1	1	1	0	4	0	0	0	0	7	7
238	TRAFFIC WY	1969	12	374	PVC	15	14.65	46	28	10472	59	0	59	1	1	3	1	0	4	0	0	0	0	9	9
239	STATION WY	1982	8	18	PVC	30	29.74	33	12	216	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
240	STATION WY	1982	8	126	PVC	45	45.27	33	12	1512	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
241	E BRANCH ST	0	12	186	PVC	149	148.51	2	28	5208	104	0	104	1	2	2	1	0	0	0	0	0	0	4	4
242	E BRANCH ST	0	12	127	ACP	269	269.07	2	77	9779	101	0	101	1	2	2	1	0	0	0	0	0	0	5	5
243	E BRANCH ST	0	12	10	ACP	269	268.68	2	77	770	102	0	102	1	1	1	1	0	0	0	0	0	0	4	4
244	STATION WY	1982	8	17	PVC	30	29.74	33	12	204	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
245	NELSON ST	1991	8	11	PVC	47	46.65	24	12	132	81	0	81	1	1	1	1	0	4	0	0	0	0	7	7
246	SHORT ST	1982	6	12	PVC	2	1.68	33	12	144	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
247	SHORT ST	1982	8	13	PVC	47	46.65	33	12	156	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
248	NELSON ST	1991	8	11	PVC	47	46.65	24	8	88	78	0	78	1	1	1	1	0	0	0	0	0	0	3	3
249	NELSON ST	1991	6	268	PVC	2	1.68	24	8	2144	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
250	SHORT ST	1982	6	162	PVC	2	1.68	33	12	1944	71	0	71	1	1	1	1	0	4	0	0	0	0	7	7
251	NELSON ST	1991	12	6	PVC	88	87.88	24	28	168	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
252	NELSON ST	1991	12	26	PVC	88	87.88	24	28	728	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
253	TRAFFIC WY	1969	8	80	PVC	39	39.16	46	12	960	59	0	59	1	1	1	1	0	4	0	0	0	0	7	7
254	TRAFFIC WY	1969	8	13	PVC	55	55.32	46	12	156	59	0	59	1	1	1	1	0	4	0	0	0	0	7	7
255	POOLE ST	1956	8	222	PVC	39	39.16	59	12	2664	45	0	45	1	1	1	1	0	4	0	0	0	0	7	7
256	POOLE ST	1956	8	205	PVC	43	42.83	59	12	2460	45	0	45	1	1	1	1	0	4	0	0	0	0	7	7
257	E BRANCH ST	0	6	7	PVC	0	0	2	8	56	102	0	102	1	1	1	1	0	0	0	0	0	0	3	3
258	S MASON ST	1995	6	8	PVC	0	0	20	8	64	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
259	S MASON ST	1995	6	28	PVC	0	0	20	8	224	84	0	84	1	2	1	1	0	0	0	0	0	0	3	3
260	OLOHAN ALY	1992	12	200	PVC	204	204.47	23	28	5600	83	0	83	1	2	2	1	0	0	0	0	0	0	5	5
261	S MASON ST	1995	12	25	PVC	204	204.47	20	28	700	86	0	86	1	2	1	1	0	0	0	0	0	0	4	4
262	S MASON ST	1995	12	268	PVC	203	202.95	20	28	7504	86	0	86	1	1	2	1	0	0	0	0	0	0	5	5
263	BRIDGE ST	1977	6	203	PVC	24	24.06	38	8	1624	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
264	TRAFFIC WY	1969	8	425	PVC	55	55.32	46	12	5100	58	0	58	1	1	2	1	0	4	0	0	0	0	8	8
265	CROWN HILL	1982	12	62	ACP	2	1.57	33	77	4774	71	0	71	1	1	1	1	0	0	0	2	0	0	5	5
266	CROWN HILL	1982	8	8	PVC	108	107.51	33	19	152	70	0	70	1	2	1	1	0	0	0	2	0	0	5	5
267	CROWN HILL	1982	8	8	PVC	108	107.51	33	28	224	71	0	71	1	1	1	1	0	0	0	2	0	0	6	6
268	CROWN HILL	1982	8	8	PVC	108	107.51	33	12	96	72	0	72	1	1	1	1	0	0	0	2	0	0	5	5
269	CROWN HILL	1982	8	8	PVC	108	107.51	33	28	224	71	0	71	1	2	1	1	0	0	0	2	0	0	5	5
270	E BRANCH ST	0	12	255	ACP	269	269.07	2	77	19635	101	0	101	1	1	3	1	0	0	0	2	0	0	8	8
271	CROWN HILL	1982	8	16	PVC	108	107.51	33	12	192	72	0	72	1	1	1	1	0	0	0	2	0	0	5	5
272	LE POINT TR	1985	6	6	ACP	37	36.53	30	55	330	72	0	72	1	1	1	1	0	0	0	2	2	0	7	7
273	LE POINT TR	1985	6	119	ACP	37	36.53	30	55	6545	72	0	72	1	1	2	1	0	0	0	2	2	0	8	8
274	LE POINT TR	1985	6	42	ACP	37	36.53	30	69	2898	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
275	CROWN HILL	1982	6	9	ACP	37	36.53	33	55	495	69	0	69	1	1	1	1	0	0	0	2	2	0	7	7
276	E BRANCH ST	0	10	236	ACP	138	137.87	2	69	16284	100	0	100	1	2	3	1	0	0	0	2	2	0	9	9
277	E BRANCH ST	0	10	19	ACP	274	274.39	2	69	1311	101	0	101	1	2	1	1	0	0	0	2	2	0	8	8
278	E BRANCH ST	0	10	13	ACP	138	137.87	2	69	897	101	0	101	1	1	1	1	0	0	0	2	2	0	8	8
279	WHITELEY ST	1980	6	10	PVC	0	0	35	8	80	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
280	IDE ST	1981	4	13	ACP	4	4.33	34	42	546	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
281	NELSON ST	1991	8	82	PVC	4	4.33	24	12	984	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
282	NELSON ST	1991	8	300	PVC	0	0.1	24	12	3600	80	0	80	1	1	1	1	0	0	0	0	0	3	3
283	NELSON ST	1991	8	11	PVC	29	28.81	24	12	132	81	0	81	1	1	1	1	0	0	0	0	0	3	3
284	WHITELEY ST	1980	8	13	PVC	29	28.81	35	12	156	70	0	70	1	1	1	1	0	0	0	0	0	3	3
285	WHITELEY ST	1980	6	252	PVC	0	0	35	8	2016	69	0	69	1	1	1	1	0	0	0	0	0	3	3
286	WHITELEY ST	1980	8	43	PVC	33	33.44	35	12	516	70	0	70	1	1	1	1	0	0	0	0	0	3	3
287	WHITELEY ST	1980	8	14	PVC	29	28.81	35	12	168	70	0	70	1	1	1	1	0	0	0	0	0	3	3
288	WHITELEY ST	1980	8	12	PVC	29	28.81	35	8	96	69	0	69	1	1	1	1	0	0	0	0	0	3	3
289	POOLE ST	1992	6	10	ACP	28	27.96	23	55	550	79	0	79	1	1	1	1	0	0	0	0	0	3	3
290	POOLE ST	1992	6	14	ACP	28	27.96	23	64	896	82	0	82	1	1	1	1	0	0	0	0	0	3	3
291	IDE ST	1981	8	11	PVC	27	26.89	34	5	55	67	0	67	1	1	1	1	0	0	0	0	0	3	3
292	IDE ST	1981	4	284	ACP	5	5.27	34	42	11928	66	0	66	1	1	3	1	0	0	0	0	0	5	5
293	WHITELEY ST	1980	8	18	PVC	27	26.89	35	12	216	70	0	70	1	1	1	1	0	0	0	0	0	3	3
294	IDE ST	1981	8	10	PVC	27	26.89	34	12	120	71	0	71	1	1	1	1	0	0	0	0	0	3	3
295	IDE ST	1981	4	230	ACP	11	11.17	34	42	9660	66	0	66	1	1	2	1	0	0	0	0	0	4	4
296	NELSON ST	1991	4	245	ACP	4	4.33	24	42	10290	76	0	76	1	1	3	1	0	0	0	0	0	5	5
297	IDE ST	1981	4	348	ACP	30	29.74	34	42	14616	66	0	66	1	1	3	1	0	0	0	0	2	7	7
298	IDE ST	1981	4	13	ACP	11	11.17	34	42	546	67	0	67	1	1	1	1	0	0	0	0	0	3	3
299	IDE ST	1981	4	14	ACP	11	11.17	34	55	770	68	0	68	1	1	1	1	0	0	0	0	0	3	3
300	GARDEN ST	1971	4	10	ACP	30	29.74	44	42	420	57	0	57	1	1	1	1	0	0	0	0	2	5	5
301	CROSS ST	1975	6	19	ACP	0	0	40	55	1045	62	0	62	1	1	1	1	0	0	0	0	0	3	3
302	PACIFIC COAST RAILWAY PL	1982	4	294	ACP	6	6.09	33	42	12348	67	0	67	1	1	3	1	0	0	0	0	0	5	5
303	CROSS ST	1975	6	18	ACP	6	6.16	40	55	990	62	0	62	1	1	1	1	0	0	0	0	0	3	3
304	CROSS ST	1975	6	28	ACP	0	0	40	55	1540	62	0	62	1	1	1	1	0	0	0	0	0	3	3
305	HAWKINS CT	1984	6	155	ACP	6	6.16	31	55	8525	70	0	70	1	1	2	1	0	0	0	0	0	4	4
306	PACIFIC COAST RAILWAY PL	1982	6	244	ACP	6	6.09	33	55	13420	68	0	68	1	1	3	1	0	0	0	0	0	5	5
307	LE POINT ST	1985	12	289	PVC	230	230.08	30	28	8092	76	0	76	1	1	2	1	0	0	0	0	0	4	4
308	POOLE ST	1992	8	311	PVC	0	0	23	12	3732	81	0	81	1	1	1	1	0	0	0	0	0	3	3
309	NELSON ST	1991	8	228	PVC	29	28.81	24	12	2736	80	0	80	1	1	1	1	0	0	0	0	0	3	3
310	S MASON ST	1995	8	288	PVC	37	36.62	20	12	3456	84	0	84	1	1	1	1	0	0	0	0	0	3	3
311	IDE ST	1981	4	83	ACP	4	4.33	34	42	3486	67	0	67	1	1	1	1	0	0	0	0	0	3	3
312	E BRANCH ST	2001	10	391	ACP	138	137.87	14	69	26979	88	0	88	1	1	3	1	0	0	0	2	2	9	9
313	LE POINT TR	1985	6	28	ACP	37	36.53	30	55	1540	72	0	72	1	1	1	1	0	0	0	2	2	7	7
314	POOLE ST	1992	6	37	ACP	28	27.96	23	55	2035	79	0	79	1	1	1	1	0	0	0	0	0	3	3
315	POOLE ST	1992	6	244	PVC	25	24.86	23	8	1952	78	0	78	1	1	1	1	0	0	0	0	0	3	3
316	S MASON ST	1995	12	425	PVC	84	84.38	20	28	11900	85	0	85	1	1	3	1	0	0	0	0	0	5	5
317	POOLE ST	1956	8	27	PVC	43	42.83	59	12	324	46	0	46	1	1	1	1	0	4	0	0	0	7	7
318	ALLEN ST	1991	12	13	PVC	200	199.84	24	28	364	82	0	82	1	1	1	1	0	0	0	0	0	3	3
319	S MASON ST	1995	12	9	PVC	200	199.84	20	28	252	86	0	86	1	1	1	1	0	0	0	0	0	3	3
320	ALLEN ST	0	12	20	PVC	117	117.17	2	28	560	104	0	104	1	1	1	1	0	0	0	0	0	3	3
321	ALLEN ST	1991	12	10	PVC	200	199.84	24	28	280	82	0	82	1	1	1	1	0	0	0	0	0	3	3
322	ALLEN ST	1991	12	608	PVC	122	122.4	24	28	17024	81	1	73	1	1	3	1	0	0	0	0	0	5	5
323	PACIFIC COAST RAILWAY PL	1982	12	15	PVC	119	118.79	33	8	120	69	0	69	1	1	1	1	0	0	0	0	0	3	3
324	PACIFIC COAST RAILWAY PL	1982	12	14	PVC	119	118.79	33	28	392	73	0	73	1	1	1	1	0	0	0	0	0	3	3
325	PACIFIC COAST RAILWAY PL	1982	12	13	PVC	119	118.79	33	28	364	74	0	74	1	1	1	1	0	0	0	0	0	3	3
326	ALLEN ST	0	12	22	PVC	119	118.79	2	28	616	104	0	104	1	1	1	1	0	0	0	0	0	3	3
327	ALLEN ST	0	12	262	PVC	121	120.58	2	28	7336	104	0	104	1	1	2	1	0	0	0	0	0	4	4
328	ALLEN ST	0	12	12	PVC	131	131.05	2	28	336	105	0	105	1	1	1	1	0	0	0	0	0	3	3
329	CROSS ST	1975	6	22	ACP	9	9.15	40	55	1210	62	0	62	1	1	1	1	0	0	0	0	0	3	3
330	CROSS ST	1975	6	222	ACP	6	6.16	40	55	12210	61	0	61	1	2	3	1	0	0	0	0	0	5	5
331	NELSON ST	1991	12	14	PVC	203	202.95	24	28	392	82	0	82	1	1	1	1	0	0	0	0	0	4	4
332	S MASON ST	1995	12	15	PVC	203	202.95	20	12	180	85	0	85	1	1	1	1	0	0	0	0	0	3	3
333	NELSON ST	1991	8	118	PVC	76	76.47	24	12	1416	81	0	81	1	1	1	1	0	4	0	0	0	7	7
334	NELSON ST	1991	12	6	PVC	88	87.88	24	28	168	82	0	82	1	1	1	1	0	0	0	0	0	3	3
335	S MASON ST	1995	12	454	PVC	88	87.88	20	28	12712	85	0	85	1	1	3	1	0	0	0	0	0	5	5
336	E CHERRY AV	1982	6	33	ACP	10	10.11	33	64	2112	72	0	72	1	1	1	1	0	0	0	0	0	3	3
337	PACIFIC COAST RAILWAY PL	1989	8	91	PVC	71	70.78	26	12	1092	79	0	79	1	1	1	1	0	0	0	0	0	3	3
338	LAUNA LN	1982	6	58	ACP	13	12.56	33	55	3190	69	0	69	1	1	1	1	0	0	0	0	0	3	3
339	E CHERRY AV	1982	6	9	ACP	10	10.11	33	55	495	69	0	69	1	1	1	1	0	0	0	0	0	3	3
340	LAUNA LN	1982	6	7	ACP	27	26.61	33	55	385	69	0	69	1	1	1	1	0	0	0	0	0	3	3
341	LAUNA LN	1982	6	18	ACP	27	26.61	33	55	990	69	0	69	1	1	1	1	0	0	0	0	0	3	3
342	LAUNA LN	1982	6	58	ACP	27	26.61	33	55	3190	69	0	69	1	1	1	1	0	0	0	0	0	3	3
343	E CHERRY AV	1982	6	11	ACP	10	10.11	33	64	704	72	0	72	1	1	1	1	0	0	0	0	0	3	3
344	E CHERRY AV	1982	10	155	ACP	53	53.06	33	69	10695	70	0	70	1	1	3	1	0	0	0	0	0	5	5
345	CROSS ST	1975	12	7	PVC	131	131.05	40	28	196	67	0	67	1	1	1	1	0	0	0	0	0	3	3
346	FARM HOUSE PL	1999	8	12	PVC	9	8.97	16	12	144	89	0	89	1	1	1	1	0	0	0	0	0	3	3
347	MYRTLE ST	1972	6	13	ACP	6	5.52	43	55	715	59	0	59	1	1	1	1	0	0	0	0	2	5	5
348	GARDEN ST	1971	10	10	ACP	121	120.79	44	77	770	60	0	60	1	1	1	1	0	0	0	0	0	3	3
349	GARDEN ST	1971	10	339	ACP	121	120.79	44	69	23391	58	0	58	1	1	3	1	0	0	0	0	0	5	5
350	GARDEN ST	1971	10	8	ACP	121	120.79	44	69	552	59	0	59	1	1	1	1	0	0	0	0	0	3	3
351	GARDEN ST	1971	12	370	ACP	153	152.57	44	77	28490	59	0	59	1	1	3	1	0	0	0	0	0	5	5
352	E CHERRY AV	1982	10	8	ACP	121	120.79	33	69	552	70	0	70	1	1	1	1	0	0	0	0	0	3	3
353	GARDEN ST	1971	10	11	ACP	121	120.79	44	64	704	61	0	61	1	1	1	1	0	0	0	0	0	3	3
354	GARDEN ST	1971	8	41	PVC	68	67.73	44	12	492	61	0	61	1	1	1	1	0	0	0	0	0	3	3
355	E CHERRY AV	1982	12	12	ACP	153	152.57	33	98	1176	72	0	72	1	1	1	1	0	0	0	0	0	3	3
356	GROVE CT	1999	8	178	PVC	23	22.77	16	12	2136	89	0	89	1	1	1	1	0	0	0	0	0	3	3
357	FARM HOUSE PL	1999	8	224	PVC	23	22.91	16	12	2688	89	0	89	1	1	1	1	0	0	0	0	0	3	3
358	FARM HOUSE PL	1999	8	117	PVC	23	22.91	16	12	1404	89	0	89	1	1	1	1	0	0	0	0	0	3	3
359	E CHERRY AV	1982	8	261	PVC	75	74.83	33	12	3132	71	0	71	1	1	1	1	0	0	0	0	0	3	3
360	LOS OLIVOS LN	1982	8	330	PVC	68	67.73	33	12	3960	71	0	71	1	1	1	1	0	0	0	0	0	3	3
361	E CHERRY AV	1982	6	241	ACP	27	26.61	33	55	13255	68	0	68	1	1	3	1	0	0	0	0	0	5	5
362	GARDEN ST	1999	8	188	PVC	26	26.2	16	12	2256	89	0	89	1	1	1	1	0	0	0	0	0	3	3
363	GARDEN ST	1999	8	13	PVC	26	26.2	16	12	156	89	0	89	1	1	1	1	0	0	0	0	0	3	3
364	GARDEN ST	1999	8	11	PVC	26	26.2	16	12	132	89	0	89	1	1	1	1	0	0	0	0	0	3	3
365	E CHERRY AV	1982	12	21	ACP	153	152.57	33	77	1617	71	0	71	1	1	1	1	0	0	0	0	0	3	3
366	E CHERRY AV	1982	12	43	ACP	30	30	33	77	3311	71	0	71	1	1	1	1	0	0	0	0	0	3	3
367	E CHERRY AV	1982	12	10	ACP	153	152.57	33	77	770	71	0	71	1	1	1	1	0	0	0	0	0	3	3
368	E CHERRY AV	1982	16	629	ACP	184	183.64	33	98	61642	70	0	70	1	1	4	1	0	0	0	0	0	6	6
369	GARDEN ST	1971	10	13	ACP	30	29.69	44	42	546	57	0	57	1	1	1	1	0	0	0	0	0	3	3
370	GARDEN ST	1971	10	10	ACP	30	29.69	44	69	690	59	0	59	1	1	1	1	0	0	0	0	0	3	3
371	GARDEN ST	1971	10	9	ACP	30	29.69	44	69	621	59	0	59	1	1	1	1	0	0	0	0	0	3	3
372	GARDEN ST	1971	10	22	ACP	106	106.09	44	69	1518	59	0	59	1	1	1	1	0	0	0	0	0	3	3
373	E CHERRY AV	1982	4	8	ACP	10	9.5	33	42	336	68	0	68	1	1	1	1	0	0	0	0	0	3	3
374	MYRTLE ST	1972	6	11	ACP	6	5.52	43	55	605	59	0	59	1	1	1	1	0	0	0	0	2	5	5
375	MYRTLE ST	1972	6	10	ACP	6	5.52	43	55	550	59	0	59	1	1	1	1	0	0	0	0	2	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
376	MYRTLE ST	1972	6	43	ACP	6	5.52	43	55	2365	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
377	NOGUERA PL	1972	6	329	ACP	6	5.52	43	55	18095	58	0	58	1	1	3	1	0	0	0	0	0	0	5	5
378	E CHERRY AV	1982	4	13	PVC	14	13.98	33	5	65	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
379	LIERY ST	1991	4	601	PVC	4	3.65	24	8	4808	79	0	79	1	1	1	1	0	0	0	0	2	0	5	5
380	LIERLY LN	0	4	7	PVC	4	3.65	2	5	35	102	0	102	1	1	1	1	0	0	0	0	0	0	3	3
381	E CHERRY AV	1982	4	1021	ACP	10	9.5	33	42	42882	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
382	CLARENCE AV	1987	2	208	CIP	0	0	28	10	2080	56	0	56	1	1	1	1	0	0	0	0	2	0	5	5
383	HUASNA RD	1967	6	9	ACP	13	13.39	48	55	495	54	0	54	1	2	1	2	0	0	0	2	2	0	8	8
384	E BRANCH ST	1971	10	430	ACP	274	274.39	44	69	29670	58	0	58	1	1	3	1	0	0	0	2	2	0	10	10
385	HAWKINS CT	1984	6	91	ACP	0	0	31	55	5005	71	0	71	1	1	2	1	0	0	0	0	0	0	4	4
386	MYRTLE ST	1972	10	254	ACP	106	106.09	43	69	17526	59	0	59	1	1	3	1	0	0	0	0	0	0	5	5
387	E CHERRY AV	1982	4	11	ACP	10	9.5	33	30	330	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
388	E CHERRY AV	1982	2	538	ACP	1	0.85	33	30	16140	24	0	24	1	1	3	1	0	0	0	0	0	0	5	5
389	LIERLY LN	2001	4	714	PVC	14	13.98	14	5	3570	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
390	GROVE CT	1999	8	377	PVC	23	22.77	16	12	4524	88	0	88	1	1	1	1	0	0	0	0	0	0	3	3
391	LE POINT TR	1985	6	408	ACP	37	36.53	30	64	26112	75	0	75	1	1	3	1	0	0	0	2	2	0	9	9
392	CROWN HILL	1982	10	20	ACP	593	593.37	33	64	1280	70	0	70	1	1	1	1	0	0	0	2	2	0	7	7
393	CLARENCE AV	1987	2	9	CIP	0	0	28	10	90	57	0	57	1	1	1	1	0	0	0	0	2	0	5	5
394	CLARENCE AV	1987	2	478	CIP	0	0	28	50	23900	76	0	76	1	1	3	1	0	0	0	0	2	0	7	7
395	HUASNA RD	1967	6	44	ACP	0	0	48	64	2816	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
396	HUASNA RD	1967	6	13	ACP	0	0	48	55	715	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
397	HUASNA RD	1967	6	155	ACP	36	36.46	48	55	8525	54	0	54	1	1	2	2	0	0	0	0	2	0	7	7
398	PLATA RD	1973	6	18	ACP	4	4.01	42	55	990	60	0	60	1	1	1	1	0	0	0	0	2	0	5	5
399	ORO DR	1975	8	30	ACP	21	21.39	40	64	1920	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
400	ORO DR	1975	8	24	PVC	29	29.15	40	12	288	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
401	ORO DR	1975	6	497	ACP	12	12.09	40	55	27335	60	0	60	1	1	3	1	0	0	0	0	0	0	5	5
402	PLATINO LN	1982	8	519	ACP	22	21.5	33	64	33216	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
403	PLATINO LN	1982	8	309	ACP	4	4.44	33	64	19776	69	0	69	1	1	3	1	0	0	0	0	0	0	5	5
404	STAGECOACH RD	1976	8	124	ACP	2	2.37	39	64	7936	64	0	64	1	1	2	1	0	0	0	0	0	0	4	4
405	STAGECOACH RD	1976	8	368	ACP	32	32.15	39	64	23552	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
406	LA PAZ CR	1978	8	64	ACP	6	6.15	37	64	4096	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
407	PLATINO LN	1997	8	286	ACP	2	2.48	18	64	18304	83	0	83	1	1	3	1	0	0	0	0	0	0	5	5
408	LA CRESTA DR	1978	8	14	ACP	32	32.15	37	64	896	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
409	LA CRESTA DR	1978	8	9	PVC	1	0.93	37	12	108	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
410	LA CRESTA DR	1978	8	333	ACP	2	2.12	37	64	21312	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
411	WILDWOOD DR	1981	8	9	ACP	0	0	34	64	576	69	0	69	1	1	1	1	0	0	0	2	2	0	7	7
412	TEMPUS CR	1981	8	10	ACP	20	19.6	34	64	640	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
413	OAKWOOD CT	1981	8	62	ACP	0	0	34	64	3968	68	0	68	1	1	1	1	0	0	0	2	2	0	7	7
414	PLATINO LN	1997	6	176	ACP	1	0.61	18	55	9680	83	0	83	1	1	2	1	0	0	0	0	0	0	4	4
415	CALLIE CT	1980	6	12	PVC	1	0.96	35	8	96	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
416	CROWN HILL	1982	6	88	ACP	13	13.39	33	64	5632	70	0	70	1	5	2	1	0	0	0	2	2	0	8	8
417	CORBETT CANYON RD	1973	10	22	ACP	1036	1036	42	69	1518	61	0	61	1	1	1	1	0	0	0	2	2	0	11	11
418	E CHERRY AV	1982	4	522	ACP	10	9.5	33	42	21924	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
419	HUEBNER LN	0	16	47	ACP	186	185.98	2	98	4606	103	0	103	1	1	1	1	0	0	0	0	0	0	3	3
420	CORBETT CANYON RD	1973	8	15	PVC	128	127.64	42	12	180	64	0	64	1	1	1	0	0	0	0	2	2	0	6	6
421	STANLEY AV	1982	6	527	ACP	13	13.39	33	55	28985	67	0	67	1	3	3	1	0	0	0	2	2	0	9	9
422	CROWN HILL	1982	8	19	PVC	128	127.64	33	19	361	70	0	70	1	1	1	1	0	0	0	2	2	0	9	9
423	HUASNA RD	1967	6	61	ACP	13	13.39	48	64	3904	55	0	55	1	1	1	2	0	0	0	2	2	0	8	8
424	UNNAMED ST	0	8	269	PVC	4	4.4	2	12	3228	100	0	100	1	1	1	1	0	0	0	2	2	0	7	7
425	HUASNA RD	1967	6	15	ACP	0	0	48	64	960	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
426	HUASNA RD	1967	6	10	ACP	36	36.46	48	64	640	55	0	55	1	1	1	2	0	0	0	0	2	0	6	6
427	HUASNA RD	1967	6	8	ACP	36	36.46	48	55	440	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
428	HUASNA RD	1967	6	10	ACP	36	36.46	48	64	640	55	0	55	1	1	1	2	0	0	0	0	2	0	6	6
429	ORO DR	1975	8	162	ACP	126	125.54	40	64	10368	62	0	62	1	1	3	1	0	0	0	0	2	0	7	7
430	HUASNA RD	1967	8	203	ACP	115	115.15	48	64	12992	54	0	54	1	1	3	2	0	0	0	0	2	0	8	8
431	HUASNA RD	1967	6	11	ACP	34	34.3	48	64	704	55	0	55	1	1	1	2	0	0	0	0	2	0	6	6
432	HUASNA RD	1967	8	145	ACP	135	135.27	48	64	9280	54	0	54	1	1	2	2	0	0	0	0	2	0	7	7
433	HUASNA RD	1967	6	8	ACP	34	34.3	48	55	440	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
434	HUASNA RD	1967	6	10	ACP	34	34.3	48	64	640	55	0	55	1	1	1	2	0	0	0	0	2	0	6	6
435	ORO DR	1975	8	41	ACP	104	104.04	40	64	2624	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
436	HUASNA RD	1967	8	9	PVC	4	4.4	48	12	108	57	0	57	1	1	1	2	0	0	0	0	2	0	6	6
437	HUASNA RD	1967	6	20	ACP	0	0	48	55	1100	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
438	HUASNA RD	1967	8	34	ACP	162	162	48	64	2176	55	0	55	1	1	1	2	0	0	0	0	2	0	6	6
439	HUASNA RD	1967	8	37	PVC	4	4.4	48	12	444	57	0	57	1	1	1	2	0	0	0	0	2	0	6	6
440	HUASNA RD	1967	8	290	PVC	4	4.4	48	12	3480	54	0	54	1	1	1	2	0	0	0	0	2	0	6	6
441	HUASNA RD	1967	8	20	ACP	162	162	48	64	1280	55	0	55	1	1	1	2	0	0	0	0	2	0	6	6
442	PLATA RD	1973	6	349	ACP	4	4.01	42	55	19195	59	0	59	1	1	3	1	0	0	0	0	2	0	7	7
443	ORO DR	1975	6	20	ACP	4	4.01	40	64	1280	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
444	ORO DR	1975	8	319	ACP	8	8	40	64	20416	62	0	62	1	1	3	1	0	0	0	0	2	0	7	7
445	PLATA RD	1973	6	23	ACP	4	4.01	42	55	1265	60	0	60	1	1	1	1	0	0	0	0	2	0	5	5
446	ORO DR	1975	8	7	ACP	21	21.39	40	64	448	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
447	TEMPUS CR	1981	8	9	ACP	6	6.43	34	64	576	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
448	TEMPUS CR	1981	8	351	ACP	11	10.57	34	64	22464	67	0	67	1	1	3	1	0	0	0	0	2	0	7	7
449	OAKWOOD CT	1981	8	7	ACP	6	6.43	34	64	448	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
450	OAKWOOD CT	1981	8	16	ACP	6	6.43	34	64	1024	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
451	OAKWOOD CT	1981	8	9	ACP	3	2.71	34	64	576	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
452	OAKWOOD CT	1981	8	7	ACP	0	0	34	64	448	68	0	68	1	1	1	1	0	0	0	2	2	0	7	7
453	OAKWOOD CT	1981	8	477	ACP	0	0	34	64	30528	67	0	67	1	1	3	1	0	0	0	0	2	0	7	7
454	WILDWOOD DR	1981	8	7	ACP	0	0	34	64	448	69	0	69	1	1	1	1	0	0	0	2	2	0	7	7
455	TEMPUS CR	1981	8	253	ACP	14	14.47	34	64	16192	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
456	TEMPUS CR	1981	8	463	ACP	11	10.57	34	64	29632	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
457	TEMPUS CR	1981	8	7	ACP	20	19.6	34	64	448	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
458	TEMPUS CR	1981	8	10	ACP	14	14.47	34	64	640	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
459	TEMPUS CR	1981	8	12	ACP	20	19.6	34	64	768	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
460	TEMPUS CR	1981	8	418	ACP	15	14.68	34	64	26752	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
461	PLATINO LN	1982	8	24	ACP	20	19.6	33	64	1536	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
462	PLATINO LN	1982	8	18	ACP	4	4.44	33	64	1152	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
463	PLATINO LN	1982	8	12	ACP	4	4.44	33	64	768	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
464	PLATINO LN	1982	8	338	ACP	4	4.44	33	64	21632	69	0	69	1	1	3	1	0	0	0	0	0	0	5	5
465	STAGECOACH RD	1976	8	17	ACP	35	35.36	39	64	1088	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
466	TOYON PL	1975	8	470	ACP	0	0	40	64	30080	61	0	61	1	1	3	1	0	0	0	0	0	0	5	5
467	STAGECOACH RD	1976	8	19	ACP	35	35.36	39	64	1216	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
468	STAGECOACH RD	1976	8	171	ACP	35	35.36	39	64	10944	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
469	STAGECOACH RD	1976	8	12	ACP	35	35.36	39	64	768	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
470	STAGECOACH RD	1976	8	73	ACP	32	32.15	39	64	4672	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
471	LA CRESTA DR	1978	8	497	ACP	8	8.24	37	64	31808	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
472	LA CRESTA DR	1978	8	9	ACP	8	8.24	37	64	576	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
473	LA CRESTA DR	1978	8	27	PVC	1	0.93	37	12	324	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
474	LA CRESTA DR	1978	8	6	PVC	1	0.93	37	12	72	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
475	PLATINO LN	1997	8	86	ACP	7	6.55	18	64	5504	84	0	84	1	1	2	1	0	0	0	0	0	0	4	4
476	MARIPOSA CR	1978	8	48	ACP	11	11.46	37	64	3072	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
477	PLATINO LN	1997	8	9	ACP	7	6.55	18	64	576	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
478	PLATINO LN	1997	8	36	ACP	2	2.48	18	64	2304	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
479	PLATINO LN	1997	8	12	ACP	16	16.49	18	64	768	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
480	PLATINO LN	1997	8	10	ACP	16	16.49	18	64	640	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
481	PLATINO LN	1997	8	173	ACP	11	11.46	18	64	11072	83	0	83	1	1	3	1	0	0	0	0	0	0	5	5
482	PLATINO LN	1997	8	15	ACP	16	16.49	18	55	825	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
483	PLATINO LN	1997	8	116	ACP	16	16.49	18	64	7424	84	0	84	1	1	2	1	0	0	0	0	0	0	4	4
484	LA CRESTA DR	1978	8	7	ACP	32	32.15	37	64	448	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
485	LA CRESTA DR	1978	8	233	ACP	8	8.24	37	64	14912	64	0	64	1	1	3	1	0	0	0	0	0	0	5	5
486	LA CRESTA DR	1978	8	41	ACP	17	17.39	37	64	2624	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
487	LA CRESTA DR	1978	8	7	ACP	32	32.15	37	64	448	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
488	STAGECOACH RD	1976	8	433	ACP	17	16.68	39	64	27712	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
489	STAGECOACH RD	1976	8	12	ACP	14	13.59	39	64	768	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
490	ORO DR	1975	8	24	ACP	0	0	40	64	1536	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
491	PLATINO LN	1982	8	66	ACP	0	0	33	64	4224	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
492	ORO DR	1975	6	11	ACP	42	42.02	40	55	605	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
493	ORO DR	1975	8	337	ACP	0	0	40	64	21568	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
494	ORO DR	1975	8	13	PVC	29	29.15	40	12	156	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
495	ORO DR	1975	6	13	ACP	42	42.02	40	55	715	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
496	STAGECOACH RD	1976	8	12	ACP	110	110.3	39	64	768	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
497	ZOGATA WY	1992	8	140	PVC	7	6.62	23	12	1680	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
498	ZOGATA WY	1992	8	13	PVC	7	6.62	23	12	156	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
499	ZOGATA WY	1992	8	10	PVC	7	6.62	23	12	120	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
500	STAGECOACH RD	1976	8	12	ACP	17	16.68	39	64	768	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
501	STAGECOACH RD	1976	8	362	ACP	17	16.68	39	64	23168	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
502	HUASNA RD	1967	6	808	PVC	1	0.96	48	12	9696	52	0	52	1	1	2	2	0	0	0	0	0	0	5	5
503	CALLIE CT	1980	6	16	PVC	0	0	35	8	128	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
504	CALLIE CT	1980	6	115	PVC	1	0.96	35	8	920	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
505	CALLIE CT	1980	6	89	PVC	1	0.96	35	12	1068	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
506	HUASNA RD	1967	8	14	ACP	89	89.22	48	64	896	55	0	55	1	1	1	0	0	0	0	0	0	0	2	2
507	HUASNA RD	1967	8	10	ACP	115	115.15	48	64	640	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
508	HUASNA RD	1967	8	17	ACP	115	115.15	48	64	1088	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
509	STAGECOACH RD	1976	8	400	ACP	115	115.15	39	64	25600	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
510	ORO DR	1975	8	354	ACP	0	0	40	64	22656	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
511	ORO DR	1975	8	9	ACP	8	8	40	64	576	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
512	ORO DR	1975	8	249	ACP	21	21.39	40	64	15936	62	0	62	1	1	3	1	0	0	0	0	2	0	7	7
513	TEMPUS CR	1981	8	6	ACP	11	10.57	34	64	384	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
514	HUASNA RD	1967	6	352	ACP	0	0	48	55	19360	53	0	53	1	1	3	2	0	0	0	0	2	0	8	8
515	CROWN HILL	1982	4	9	ACP	16	15.71	33	42	378	69	0	69	1	1	1	1	0	0	0	2	2	0	7	7
516	LE POINT ST	1985	4	290	ACP	0	0.11	30	30	8700	28	0	28	1	1	2	1	0	0	0	0	0	0	6	4
517	MCKINLEY ST	1976	4	15	ACP	16	16.21	39	55	825	63	0	63	1	1	1	1	0	0	0	2	2	0	7	7
518	PASEO ST	1987	6	17	PVC	25	24.51	28	12	204	77	0	77	1	2	1	1	0	0	0	2	2	0	7	7
519	PASEO ST	1987	12	170	ACP	235	234.95	28	77	13090	76	0	76	1	1	3	1	0	0	0	2	2	0	10	10
520	PASEO ST	1987	12	10	ACP	374	373.66	28	77	770	76	0	76	1	2	1	1	0	0	0	2	2	0	7	7
521	PASEO ST	1987	12	462	ACP	232	231.65	28	77	35574	75	0	75	1	1	3	1	0	0	0	2	2	0	10	10
522	MILLER WY	1977	6	22	ACP	12	11.77	38	55	1210	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
523	MILLER WY	1977	6	19	ACP	4	4.31	38	55	1045	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
524	TALLY HO RD	1977	12	11	PVC	235	235.38	38	12	132	67	0	67	1	1	1	2	0	0	0	2	0	0	6	6
525	VIA LA BARRANCA	1992	8	13	ACP	45	45.26	23	55	715	79	0	79	1	1	1	1	0	0	0	2	0	0	5	5
526	VIA LA BARRANCA	1992	8	7	ACP	45	45.26	23	64	448	80	0	80	1	1	1	1	0	0	0	2	0	0	5	5
527	VIA LA BARRANCA	1992	8	12	ACP	58	58.15	23	64	768	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
528	VIA LA BARRANCA	1992	8	12	ACP	58	58.15	23	55	660	79	0	79	1	1	1	1	0	0	0	0	0	0	3	3
529	TALLY HO RD	1977	8	7	ACP	23	23.14	38	64	448	65	0	65	1	1	1	2	0	0	0	2	0	0	6	6
530	VIA LA BARRANCA	1992	8	19	ACP	46	46.19	23	55	1045	79	0	79	1	1	1	1	0	0	0	2	0	0	5	5
531	LE POINT ST	1985	4	449	CIP	16	15.73	30	18	8082	54	0	54	1	1	2	1	0	0	0	2	0	0	6	6
532	CROWN HILL	1982	8	176	PVC	136	136.01	33	12	2112	72	0	72	1	1	1	1	0	0	0	2	2	0	7	7
533	CALLIE CT	1980	6	16	PVC	0	0	35	8	128	70	0	70	1	5	1	1	0	0	0	0	0	0	3	3
534	CORBETT CANYON RD	1973	10	54	ACP	594	593.81	42	69	3726	61	0	61	1	1	1	1	0	0	0	2	2	0	11	11
535	CROWN HILL	1982	8	47	PVC	136	136.01	33	12	564	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
536	CROWN HILL	1982	8	13	PVC	138	138.35	33	12	156	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
537	MCKINLEY ST	1976	4	231	ACP	16	15.71	39	42	9702	62	0	62	1	1	2	1	0	0	0	2	2	0	8	8
538	CROWN HILL	1982	8	6	PVC	138	138.35	33	12	72	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
539	CROWN HILL	1982	8	403	PVC	128	127.64	33	12	4836	71	0	71	1	1	1	1	0	0	0	2	2	0	7	7
540	CROWN HILL	1982	4	10	ACP	16	15.71	33	64	640	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
541	CROWN HILL	1982	4	8	ACP	16	15.71	33	64	512	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
542	MCKINLEY ST	1976	6	21	ACP	43	43.26	39	55	1155	63	0	63	1	1	1	1	0	0	0	2	2	0	7	7
543	CROWN TR	1982	4	42	ACP	18	18.14	33	42	1764	68	0	68	1	1	1	1	0	0	0	2	2	0	7	7
544	LE POINT ST	1985	4	14	ACP	18	18.14	30	42	588	71	0	71	1	1	1	1	0	0	0	2	0	0	5	5
545	LE POINT ST	1985	4	5	ACP	18	18.14	30	42	210	56	0	56	1	1	1	1	0	0	0	2	0	0	5	5
546	LE POINT ST	1985	4	4	ACP	18	18.14	30	42	168	71	0	71	1	1	1	1	0	0	0	2	2	0	7	7
547	MAY ST	1980	4	481	ACP	18	18.14	35	55	26455	68	0	68	1	1	3	1	0	0	0	2	2	0	9	9
548	MAY ST	1980	6	106	PVC	15	15.28	35	8	848	69	0	69	1	1	1	1	0	0	0	2	2	0	7	7
549	PASEO ST	1987	6	194	PVC	25	24.51	28	8	1552	76	0	76	1	1	1	1	0	0	0	2	2	0	7	7
550	PASEO ST	1987	6	12	PVC	25	24.51	28	8	96	77	0	77	1	1	1	1	0	0	0	2	2	0	7	7
551	PASEO ST	1987	8	145	PVC	2	1.75	28	12	1740	77	0	77	1	1	1	1	0	0	0	2	2	0	7	7
552	PASEO ST	1987	6	382	PVC	25	24.51	28	8	3056	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
553	MAY ST	1980	6	32	ACP	32	31.87	35	55	1760	67	0	67	1	1	1	1	0	0	0	2	2	0	7	7
554	MAY ST	1980	6	273	ACP	36	35.55	35	55	15015	66	0	66	1	1	3	1	0	0	0	2	2	0	9	9
555	LE POINT ST	1985	4	23	ACP	16	16.21	30	42	966	72	0	72	1	1	1	1	0	0	0	2	2	0	7	7
556	MCKINLEY ST	1976	4	16	ACP	11	10.57	39	42	672	63	0	63	1	1	1	1	0	0	0	2	2	0	7	7
557	MCKINLEY ST	1976	4	14	ACP	16	16.21	39	42	588	63	0	63	1	1	1	1	0	0	0	2	2	0	7	7
558	LE POINT ST	1985	4	282	ACP	16	16.21	30	42	11844	71	0	71	1	1	3	1	0	0	0	2	2	0	9	9
559	LE POINT ST	1985	4	11	ACP	11	10.57	30	42	462	56	0	56	1	1	1	1	0	0	0	2	2	0	7	7
560	CORBETT CANYON RD	1973	6	220	ACP	45	45.33	42	55	12100	59	0	59	1	1	3	1	0	0	0	2	2	0	9	9
561	MCKINLEY ST	1976	6	192	ACP	43	43.26	39	42	8064	62	0	62	1	1	2	1	0	0	0	2	2	0	8	8
562	MCKINLEY ST	1976	6	120	ACP	43	43.26	39	55	6600	63	0	63	1	3	2	1	0	0	0	2	2	0	8	8
563	CROWN HILL	1982	10	14	ACP	594	593.81	33	77	1078	71	0	71	1	3	1	1	0	0	0	2	2	0	9	9

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
564	CORBETT CANYON RD	1973	6	213	ACP	45	45.33	42	77	16401	62	0	62	1	1	3	1	0	0	0	2	2	0	11	11
565	CORBETT CANYON RD	1973	6	6	ACP	45	45.33	42	55	330	60	0	60	1	2	1	1	0	0	0	2	2	0	7	7
566	LE POINT ST	1985	6	225	ACP	45	45.33	30	77	17325	73	0	73	1	2	3	1	0	0	0	2	2	0	10	10
567	LE POINT ST	1985	12	9	ACP	375	374.9	30	77	693	74	0	74	1	1	1	1	0	0	0	2	2	0	8	8
568	LE POINT ST	1985	12	14	ACP	375	374.9	30	42	588	71	0	71	1	2	1	1	0	0	0	2	2	0	7	7
569	CORBETT CANYON RD	1973	12	20	ACP	375	374.9	42	77	1540	62	0	62	1	1	1	1	0	0	0	2	2	0	8	8
570	CORBETT CANYON RD	1973	12	10	ACP	136	135.64	42	77	770	62	0	62	1	2	1	1	0	0	0	2	2	0	7	7
571	PASEO ST	1987	12	3	ACP	232	231.65	28	77	231	76	0	76	1	1	1	1	0	0	0	2	2	0	8	8
572	PASEO ST	1987	12	117	ACP	232	231.65	28	42	4914	76	0	76	1	2	1	1	0	0	0	2	2	0	7	7
573	TALLY HO RD	1977	12	369	PVC	205	204.96	38	28	10332	67	0	67	1	2	3	2	0	0	0	2	0	0	9	9
574	TALLY HO RD	1977	12	10	ACP	232	232.45	38	77	770	69	0	69	1	1	1	2	0	0	0	2	0	0	7	7
575	TALLY HO RD	1977	12	10	ACP	232	232.45	38	77	770	66	0	66	1	2	2	2	0	0	0	2	0	0	7	7
576	TALLY HO RD	1977	12	8	ACP	232	232.45	38	77	616	66	1	59	1	2	1	2	0	0	0	2	0	0	7	7
577	TALLY HO RD	1977	12	9	ACP	232	232.45	38	77	693	66	1	59	1	1	1	2	0	0	0	2	0	0	7	7
578	TALLY HO RD	1977	12	72	ACP	73	73.02	38	77	5544	66	0	66	1	2	2	2	0	0	0	2	0	0	7	7
579	TALLY HO RD	1977	12	459	PVC	209	209.16	38	28	12852	67	0	67	1	1	3	2	0	0	0	2	0	0	9	9
580	TALLY HO RD	1977	12	11	ACP	232	232.45	38	77	847	69	1	62	1	1	1	2	0	0	0	2	0	0	6	6
581	JAMES WY	1984	12	448	ACP	73	73.02	31	77	34496	72	0	72	1	1	3	3	0	0	0	2	0	0	9	9
582	JAMES WY	1984	12	399	ACP	63	62.58	31	77	30723	72	0	72	1	1	3	3	0	0	0	2	0	0	9	9
583	TALLY HO RD	1977	12	133	PVC	77	76.74	38	28	3724	68	0	68	1	1	1	2	0	0	0	2	0	0	6	6
584	TALLY HO RD	1977	8	17	ACP	23	23.14	38	77	1309	69	0	69	1	1	1	2	0	0	0	2	0	0	6	6
585	TALLY HO RD	1977	8	47	ACP	23	23.14	38	64	3008	64	0	64	1	1	1	2	0	0	0	2	0	0	6	6
586	TALLY HO RD	1977	8	11	ACP	23	23.14	38	77	847	69	0	69	1	1	1	2	0	0	0	2	0	0	6	6
587	PASEO ST	1987	12	372	ACP	139	138.71	28	77	28644	75	0	75	1	2	3	1	0	0	0	2	2	0	9	9
588	CORBETT CANYON RD	1973	12	7	ACP	374	373.66	42	77	539	62	0	62	1	2	1	1	0	0	0	2	2	0	8	8
589	CORBETT CANYON RD	1973	12	4	ACP	374	373.66	42	77	308	62	0	62	1	2	1	1	0	0	0	2	2	0	8	8
590	CORBETT CANYON RD	1973	12	4	ACP	374	373.66	42	77	308	62	0	62	1	1	1	1	0	0	0	2	2	0	8	8
591	CORBETT CANYON RD	1973	12	23	ACP	374	373.66	42	64	1472	61	0	61	1	1	1	1	0	0	0	2	2	0	7	7
592	WILDWOOD DR	1981	8	19	ACP	0	0	34	64	1216	69	0	69	1	1	1	1	0	0	0	2	2	0	7	7
593	CORBETT CANYON RD	1973	8	83	ACP	0	0	42	64	5312	60	0	60	1	2	2	1	0	0	0	2	2	0	8	8
594	LE POINT ST	1985	12	481	PVC	230	230.08	30	28	13468	75	0	75	1	1	3	1	0	0	0	2	0	0	8	8
595	TALLY HO RD	1977	6	8	PVC	0	0	38	8	64	67	0	67	1	1	1	2	0	0	0	2	0	0	6	6
596	TALLY HO RD	1977	6	233	PVC	0	0	38	8	1864	66	0	66	1	2	1	2	0	0	0	2	0	0	6	6
597	TALLY HO RD	1977	12	36	PVC	235	235.38	38	28	1008	68	0	68	1	1	1	2	0	0	0	2	0	0	7	7
598	VIA LA BARRANCA	1992	8	26	PVC	32	31.56	23	12	312	82	0	82	1	2	1	1	0	0	0	2	0	0	5	5
599	TALLY HO RD	1977	6	198	PVC	0	0	38	28	5544	68	0	68	1	1	2	2	0	0	0	2	0	0	8	8
600	VIA LA BARRANCA	1992	8	247	ACP	40	40.14	23	64	15808	79	0	79	1	1	3	1	0	0	0	2	0	0	7	7
601	VIA LA BARRANCA	1992	8	16	PVC	33	33.41	23	12	192	82	0	82	1	1	1	1	0	0	0	2	0	0	5	5
602	VIA LA BARRANCA	1992	8	26	ACP	40	40.14	23	64	1664	80	0	80	1	1	1	1	0	0	0	2	0	0	5	5
603	VIA LA BARRANCA	1992	8	177	ACP	45	45.26	23	64	11328	79	0	79	1	1	3	1	0	0	0	2	0	0	7	7
604	VIA LA BARRANCA	1992	8	8	ACP	45	45.26	23	64	512	80	0	80	1	1	1	1	0	0	0	2	0	0	5	5
605	VIA LA BARRANCA	1992	6	221	ACP	3	3.15	23	55	12155	78	0	78	1	1	3	1	0	0	0	2	0	0	7	7
606	VIA LA BARRANCA	1992	6	115	ACP	2	2.4	23	55	6325	79	0	79	1	1	2	1	0	0	0	2	0	0	6	6
607	VIA LA BARRANCA	1992	8	11	ACP	46	46.19	23	64	704	80	0	80	1	1	1	1	0	0	0	2	0	0	5	5
608	VIA LA BARRANCA	1992	8	247	ACP	51	50.85	23	64	15808	79	0	79	1	1	3	1	0	0	0	2	0	0	7	7
609	VIA LA BARRANCA	1992	8	11	ACP	46	46.19	23	64	704	80	0	80	1	1	1	1	0	0	0	2	0	0	5	5
610	VIA LA BARRANCA	1992	8	40	ACP	46	46.19	23	64	2560	80	0	80	1	1	1	1	0	0	0	2	0	0	5	5
611	VIA LA BARRANCA	1992	8	14	ACP	58	58.15	23	64	896	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
612	VIA LA BARRANCA	1992	8	40	ACP	53	52.95	23	64	2560	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
613	VIA LA BARRANCA	1992	6	124	ACP	3	2.71	23	55	6820	79	0	79	1	1	2	1	0	0	0	0	0	0	4	4
614	MILLER CR	1977	6	114	ACP	4	4.31	38	55	6270	63	0	63	1	1	2	1	0	0	0	0	0	0	4	4
615	MILLER WY	1977	6	483	ACP	12	11.77	38	55	26565	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
616	MILLER WY	1977	6	15	ACP	12	11.77	38	55	825	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
617	MILLER CR	1977	6	29	ACP	4	4.31	38	55	1595	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
618	MILLER WY	1977	8	315	ACP	25	24.53	38	64	20160	64	0	64	1	1	3	1	0	0	0	0	0	0	5	5
619	MILLER WY	1977	8	102	ACP	0	0	38	64	6528	65	0	65	1	1	2	1	0	0	0	0	0	0	4	4
620	MILLER WY	1977	8	21	ACP	27	26.78	38	64	1344	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
621	MILLER WY	1977	8	17	ACP	0	0	38	64	1088	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
622	MILLER WY	1977	8	10	ACP	0	0	38	64	640	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
623	MILLER WY	1977	8	235	ACP	32	31.7	38	64	15040	64	0	64	1	1	3	1	0	0	0	0	0	0	5	5
624	MILLER WY	1977	8	10	ACP	31	31.17	38	64	640	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
625	MILLER WY	1977	8	153	PVC	39	38.51	38	12	1836	64	0	64	1	2	1	1	0	0	0	0	0	0	3	3
626	CORBETT CANYON RD	1973	12	190	ACP	374	373.66	42	77	14630	61	0	61	1	2	3	1	0	0	0	2	2	0	10	10
627	PASEO ST	1987	8	376	PVC	2	1.75	28	28	10528	75	0	75	1	1	3	1	0	0	0	2	2	0	10	10
628	MILLER WY	1977	8	81	PVC	35	34.74	38	12	972	67	0	67	1	2	1	1	0	0	0	0	0	0	3	3
629	E GRAND AV	2002	8	11	ACP	251	251.18	13	64	704	89	0	89	1	1	1	4	0	0	0	0	0	0	7	7
630	OAK ST	1982	12	12	PVC	251	251.06	33	8	96	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
631	CORNWALL AV	1976	6	15	ACP	42	42.03	39	55	825	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
632	BELL ST	1964	12	23	PVC	297	296.91	51	8	184	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
633	BENNETT AV	1967	6	328	ACP	30	29.91	48	55	18040	53	0	53	1	1	3	1	0	0	0	0	0	0	5	5
634	BELL ST	1964	4	17	ACP	2	1.71	51	42	714	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
635	BELL ST	1964	4	16	ACP	10	9.76	51	55	880	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
636	N ALPINE ST	1960	6	321	ACP	10	9.76	55	42	13482	45	0	45	1	1	3	1	0	0	0	0	0	0	5	5
637	N ALPINE ST	0	6	25	ACP	10	9.76	2	42	1050	99	0	99	1	1	1	1	0	0	0	0	0	0	3	3
638	BENNETT AV	1967	4	6	CIP	13	12.74	48	18	108	37	0	37	1	1	1	1	0	0	0	0	0	0	3	3
639	W BRANCH ST	1977	4	317	CIP	4	4.33	38	123	38991	65	0	65	1	1	3	4	0	0	0	0	0	0	8	8
640	TRAFFIC WY	1969	12	187	PVC	14	14.48	46	28	5236	60	0	60	1	1	2	1	0	4	0	0	0	0	8	8
641	VERNON ST	1929	4	178	ACP	16	15.87	86	42	7476	15	0	15	3	1	2	1	0	0	0	0	0	0	4	12
642	W BRANCH ST	1977	12	41	ACP	52	52.3	38	69	2829	65	0	65	1	1	1	4	0	0	0	0	0	2	8	8
643	RODEO DR	1988	10	8	ACP	17	17.04	27	69	552	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
644	RODEO DR	1988	12	19	PVC	9	8.69	27	19	361	78	0	78	1	2	1	2	0	0	0	0	0	0	4	4
645	RESERVOIR RD	2001	8	589	PVC	9	9.26	14	28	16492	92	0	92	1	1	3	0	0	0	0	0	0	0	5	5
646	LARCHMONT DR	1982	6	225	ACP	16	15.87	33	55	12375	69	0	69	1	1	3	1	0	0	0	0	0	0	5	5
647	LARCHMONT DR	1982	6	272	ACP	17	16.89	33	55	14960	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
648	LARCHMONT DR	1982	6	406	ACP	22	21.92	33	55	22330	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
649	WESLEY ST	1982	6	22	ACP	22	21.92	33	55	1210	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
650	WESLEY ST	1982	6	191	ACP	22	21.92	33	64	12224	54	0	54	1	1	3	1	0	4	0	0	0	0	9	9
651	OLD RANCH RD	1997	6	14	PVC	7	7.16	18	8	112	87	0	87	1	1	1	0	0	0	0	0	0	0	2	2
652	OLD RANCH RD	1997	8	83	PVC	2	1.88	18	12	996	86	0	86	1	2	1	0	0	0	0	0	0	0	2	2
653	W BRANCH ST	1977	6	557	ACP	2	1.59	38	77	42889	64	0	64	1	1	3	4	0	4	0	0	0	0	13	13
654	W BRANCH ST	1977	4	8	CIP	4	4.33	38	18	144	47	0	47	1	1	1	4	0	0	0	0	0	0	6	6
655	VERNON ST	1929	4	13	CIP	29	29.02	86	18	234	15	0	15	3	1	1	1	0	0	0	0	0	0	3	9
656	VERNON ST	1929	4	7	CIP	29	29.02	86	18	126	0	0	0	10	1	1	1	0	0	0	0	0	0	3	30
657	W BRANCH ST	1929	4	207	CIP	29	29.02	86	18	3726	-1	0	-1	10	1	1	4	0	0	0	0	0	0	6	60

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
658	VERNON ST	1964	4	8	CIP	29	29.02	51	18	144	35	0	35	1	1	1	1	0	0	0	0	0	3	3
659	RESERVOIR RD	0	12	21	PVC	337	337.27	2	5	105	84	0	84	1	2	1	0	0	0	0	0	0	2	2
660	RESERVOIR RD	2001	8	183	PVC	9	9.26	14	28	5124	93	0	93	1	2	2	0	0	0	0	0	0	4	4
661	RESERVOIR RD	2001	12	291	PVC	337	337.27	14	28	8148	92	0	92	1	2	2	0	0	0	0	0	0	4	4
662	RESERVOIR RD	2001	12	18	PVC	337	337.27	14	28	504	93	0	93	1	1	1	0	0	0	0	0	0	3	3
663	WESLEY ST	1982	8	37	PVC	28	28.2	33	12	444	69	0	69	1	1	1	1	0	4	0	0	0	7	7
664	WESLEY ST	1982	8	14	PVC	28	28.2	33	12	168	72	0	72	1	1	1	1	0	4	0	0	0	7	7
665	WESLEY ST	1982	8	12	PVC	28	28.2	33	12	144	72	0	72	1	2	1	1	0	4	0	0	0	7	7
666	W BRANCH ST	1977	8	66	PVC	28	28.2	38	28	1848	66	0	66	1	1	1	4	0	4	0	0	0	11	11
667	WESLEY ST	1982	8	101	ACP	0	0.02	33	64	6464	69	0	69	1	1	2	1	0	4	0	0	0	8	8
668	W BRANCH ST	1977	6	8	ACP	2	1.59	38	55	440	64	0	64	1	2	1	4	0	0	0	0	0	6	6
669	W BRANCH ST	1977	6	32	ACP	2	1.59	38	77	2464	66	0	66	1	1	1	4	0	4	0	0	0	11	11
670	W BRANCH ST	1977	6	91	ACP	2	1.59	38	55	5005	63	0	63	1	1	2	4	0	0	0	0	0	7	7
671	W BRANCH ST	1977	6	18	ACP	2	1.59	38	55	990	64	0	64	1	2	1	4	0	0	0	0	0	6	6
672	W BRANCH ST	1977	12	279	PVC	14	14.48	38	28	7812	65	0	65	1	2	2	4	0	4	0	0	0	12	12
673	WESLEY ST	1982	8	80	PVC	28	28.2	33	28	2240	71	0	71	1	1	1	1	0	4	0	0	0	8	8
674	WESLEY ST	1982	6	286	ACP	22	21.92	33	64	18304	53	0	53	1	1	3	1	0	4	0	0	0	9	9
675	W BRANCH ST	1977	12	12	PVC	14	14.48	38	28	336	68	0	68	1	1	1	4	0	4	0	0	0	10	10
676	VERNON ST	1964	4	282	CIP	13	13.15	51	18	5076	34	0	34	1	1	2	0	0	0	0	0	0	3	3
677	RESERVOIR RD	0	8	30	PVC	9	9.26	2	12	360	104	0	104	1	1	1	0	0	0	0	0	0	2	2
678	RESERVOIR RD	0	6	16	PVC	7	7.16	2	8	128	103	0	103	1	1	1	0	0	0	0	0	0	2	2
679	OLD RANCH RD	1997	8	5	PVC	3	3.22	18	12	60	87	0	87	1	1	1	1	0	0	0	0	0	3	3
680	OLD RANCH RD	1997	8	323	PVC	3	3.22	18	12	3876	86	0	86	1	1	1	1	0	0	0	0	0	3	3
681	OLD RANCH RD	1997	8	5	PVC	2	1.88	18	12	60	86	0	86	1	1	1	1	0	0	0	0	0	3	3
682	OLD RANCH RD	1997	8	11	PVC	6	5.73	18	12	132	87	0	87	1	1	1	1	0	0	0	0	0	3	3
683	N ALPINE ST	1960	4	335	ACP	3	3	55	42	14070	45	0	45	1	1	3	1	0	0	0	0	0	5	5
684	BENNETT AV	1967	4	310	ACP	10	9.76	48	42	13020	52	0	52	1	1	3	1	0	0	0	0	0	5	5
685	N ALPINE ST	1929	4	297	CIP	11	11.11	86	18	5346	-1	0	-1	10	1	2	1	0	0	0	0	0	4	40
686	N ALPINE ST	0	4	17	CIP	13	12.74	2	18	306	83	0	83	1	1	1	1	0	0	0	0	0	3	3
687	N RENA ST	1979	4	344	ACP	24	23.87	36	42	14448	64	0	64	1	1	3	1	0	0	0	0	0	5	5
688	BENNETT AV	1967	6	7	ACP	10	9.76	48	55	385	54	0	54	1	1	1	1	0	0	0	0	0	3	3
689	N ALPINE ST	1960	6	5	ACP	10	9.76	55	55	275	47	0	47	1	1	1	1	0	0	0	0	0	3	3
690	BENNETT AV	1967	4	6	ACP	10	9.76	48	42	252	53	0	53	1	1	1	1	0	0	0	0	0	3	3
691	BENNETT AV	1967	6	305	ACP	39	39.36	48	55	16775	53	0	53	1	1	3	1	0	0	0	0	0	5	5
692	BELL ST	1964	6	14	ACP	22	22.05	51	55	770	51	0	51	1	1	1	1	0	0	0	0	0	3	3
693	BENNETT AV	1967	6	14	ACP	22	22.05	48	55	770	54	0	54	1	1	1	1	0	0	0	0	0	3	3
694	BENNETT AV	1967	6	7	ACP	39	39.36	48	55	385	54	0	54	1	1	1	1	0	0	0	0	0	3	3
695	CORNWALL AV	2011	8	281	CIP	195	195.38	4	50	14050	82	0	82	1	1	3	1	0	0	4	0	0	9	9
696	OAK ST	1982	8	7	CIP	195	195.38	33	50	350	54	0	54	1	1	1	1	0	0	4	0	0	7	7
697	OAK ST	1982	8	8	CIP	195	195.38	33	50	400	54	0	54	1	1	1	1	0	0	4	0	0	7	7
698	CORNWALL AV	1976	8	23	CIP	195	195.38	39	32	736	63	0	63	1	1	1	1	0	0	0	0	0	3	3
699	BENNETT AV	1967	6	325	ACP	39	39.36	48	55	17875	53	0	53	1	1	3	1	0	0	0	0	0	5	5
700	OAK ST	1982	8	26	CIP	195	195.38	33	50	1300	54	0	54	1	1	1	1	0	0	4	0	0	7	7
701	CORNWALL AV	2011	8	8	CIP	195	195.38	4	50	400	83	0	83	1	1	1	1	0	0	4	0	0	7	7
702	BELL ST	1964	6	13	ACP	32	31.88	51	64	832	36	0	36	1	1	1	1	0	0	4	0	0	7	7
703	BELL ST	1964	6	16	ACP	32	31.88	51	55	880	51	0	51	1	1	1	1	0	0	0	0	0	3	3
704	BELL ST	1964	6	310	ACP	22	22.05	51	55	17050	50	0	50	1	1	3	1	0	0	0	0	0	5	5
705	BELL ST	1964	8	312	CIP	99	99.03	51	50	15600	35	0	35	1	1	3	1	0	0	4	0	0	9	9
706	BELL ST	1964	6	8	ACP	32	31.88	51	55	440	51	0	51	1	1	1	1	0	0	0	0	0	3	3
707	BELL ST	1964	6	10	ACP	32	31.88	51	64	640	36	0	36	1	1	1	1	0	0	4	0	0	7	7
708	BELL ST	1964	8	27	CIP	86	86.5	51	50	1350	54	0	54	1	1	1	1	0	0	4	0	0	7	7
709	N ALPINE ST	1929	4	21	CIP	11	10.76	86	50	1050	1	0	1	10	1	1	1	0	0	4	0	0	7	70
710	N ALPINE ST	1929	4	10	CIP	11	10.76	86	18	180	-1	0	-1	10	1	1	1	0	0	0	0	0	3	30
711	N ALPINE ST	1929	8	322	CIP	84	84.05	86	50	16100	0	0	0	10	2	3	1	0	0	4	0	0	9	90
712	CORNWALL AV	2011	8	47	ACP	256	255.96	4	64	3008	98	0	98	1	3	1	1	0	0	0	0	0	4	4
713	EL CAMINO REAL	1929	8	54	ACP	256	255.96	86	64	3456	1	0	1	10	3	1	3	0	0	0	0	0	7	70
714	EL CAMINO REAL	1929	8	85	PVC	0	0	86	12	1020	1	0	1	10	2	1	0	0	0	0	0	0	7	40
715	EL CAMINO REAL	2011	8	247	ACP	256	255.96	4	64	15808	98	0	98	1	1	3	3	0	0	0	0	0	8	8
716	EL CAMINO REAL	1929	8	9	PVC	0	0	86	12	108	19	0	19	2	1	1	3	0	0	0	0	0	5	10
717	E GRAND AV OFF-RAMP	0	8	9	PVC	0	0	2	12	108	103	0	103	1	1	1	5	0	0	0	0	0	7	7
718	E GRAND AV OFF-RAMP	0	8	6	PVC	0	0	2	12	72	103	0	103	1	1	1	5	0	0	0	0	0	7	7
719	W BRANCH ST	1977	10	148	ACP	17	17.04	38	69	10212	65	0	65	1	1	3	4	0	0	0	0	0	2	10	10
720	W BRANCH ST	1977	12	13	ACP	52	52.3	38	77	1001	66	0	66	1	1	1	4	0	0	0	0	0	2	8	8
721	W BRANCH ST	1977	12	399	ACP	52	52.3	38	77	30723	65	0	65	1	1	3	4	0	0	0	0	0	2	10	10
722	W BRANCH ST	1977	12	12	ACP	52	52.3	38	77	924	66	0	66	1	1	1	4	0	0	0	0	0	2	8	8
723	W BRANCH ST	1977	10	126	ACP	17	17.04	38	69	8694	65	0	65	1	1	2	4	0	0	0	0	0	2	9	9
724	W BRANCH ST	1977	10	8	ACP	0	0	38	69	552	65	0	65	1	1	1	4	0	0	0	0	0	2	8	8
725	W BRANCH ST	1977	10	9	ACP	0	0	38	69	621	65	0	65	1	1	1	4	0	0	0	0	0	2	8	8
726	W BRANCH ST	1977	10	79	ACP	17	17.04	38	69	5451	65	0	65	1	1	2	4	0	0	0	0	0	2	9	9
727	RODEO DR	1988	10	22	ACP	0	0	27	69	1518	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
728	RODEO DR	1988	10	11	ACP	17	17.04	27	69	759	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
729	RODEO DR	1988	10	10	ACP	17	17.04	27	69	690	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
730	RODEO DR	1988	10	9	ACP	17	17.04	27	69	621	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
731	W BRANCH ST	1977	10	9	ACP	17	17.04	38	69	621	65	0	65	1	1	1	4	0	0	0	0	0	2	8	8
732	MERCEDES LN	1988	10	452	PVC	21	20.65	27	19	8588	77	0	77	1	1	2	1	0	0	0	0	0	4	4
733	MERCEDES LN	1988	10	12	PVC	21	20.65	27	19	228	78	0	78	1	2	1	1	0	0	0	0	0	3	3
734	CORNWALL AV	2011	8	13	ACP	256	255.96	4	64	832	98	0	98	1	1	1	1	0	0	0	0	0	4	4
735	RODEO DR	1988	10	19	ACP	17	17.04	27	69	1311	77	0	77	1	2	1	2	0	0	0	0	0	2	6	6
736	W BRANCH ST	1977	12	77	CIP	324	324.03	38	123	9471	50	0	50	1	1	2	4	0	0	0	0	0	8	8
737	N HWY 101	0	12	32	ACP	200	199.59	2	77	2464	102	0	102	1	2	1	0	0	0	0	0	0	2	2
738	W BRANCH ST	1977	12	54	ACP	200	199.59	38	77	4158	50	0	50	1	1	1	0	0	0	0	0	0	3	3
739	W BRANCH ST	1977	12	1199	ACP	69	69.34	38	77	92323	62	0	62	1	1	5	0	0	0	0	0	0	2	8	8
740	MERCEDES LN	1988	10	497	PVC	17	17.22	27	19	9443	77	0	77	1	1	2	1	0	0	0	0	0	4	4
741	OLD RANCH RD	1997	8	459	PVC	6	5.73	18	12	5508	86	0	86	1	1	2	1	0	0	0	0	0	4	4
742	RODEO DR	1988	12	13	PVC	9	8.69	27	28	364	79	0	79	1	1	1	2	0	0	0	0	0	4	4
743	VIA VAQUERO	1992	8	459	PVC	23	22.8	23	12	5508	81	0	81	1	1	2	1	0	0	0	0	0	2	6	6
744	EMERALD BAY DR	1988	12	7	PVC	44	44.03	27	19	133	79	0	79	1	1	1	1	0	0	0	0	0	3	3
745	MERCEDES LN	1997	10	133	PVC	5	5.08	18	19	2527	88	0	88	1	1	1	1	0	0	0	0	0	3	3
746	MERCEDES LN	1988	8	61	PVC	6	5.73	27	12	732	78	0	78	1	1	1	1	0	0	0	0	0	3	3
747	MERCEDES LN	1988	10	13	PVC	21	20.65	27	19	247	78	0	78	1	1	1	1	0	0	0	0	0	3	3
748	MERCEDES LN	1988	10	357	PVC	5	5.08	27	19	6783	78	0	78	1	1	2	1	0	0	0	0	0	4	4
749	MERCEDES LN	1988	10	9	PVC	5	5.08	27	19	171	79	0	79	1	1	1	1	0	0	0	0	0	3	3
750	MERCEDES LN	1988	10	5	PVC	5	5.08	27	12	60	78	0	78	1	1	1	1	0	0	0	0	0	3	3
751	MERCEDES LN	1997	10	9	PVC	5	5.08	18	19	171	88	0	88	1	1	1	1	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
752	MERCEDES LN	1988	10	407	PVC	21	20.65	27	19	7733	77	0	77	1	1	2	1	0	0	0	0	0	0	4	4
753	RODEO DR	1988	12	71	PVC	9	8.69	27	19	1349	78	0	78	1	1	1	2	0	0	0	0	0	0	4	4
754	RODEO DR	1988	10	109	PVC	32	32.33	27	19	2071	78	0	78	1	1	1	2	0	0	0	0	0	0	4	4
755	RODEO DR	1988	12	383	PVC	9	8.69	27	28	10724	78	0	78	1	1	3	2	0	0	0	0	0	0	6	6
756	RODEO DR	1988	10	14	PVC	25	24.64	27	19	266	78	0	78	1	1	1	2	0	0	0	0	0	0	4	4
757	RODEO DR	1988	10	21	PVC	0	0	27	19	399	78	0	78	1	1	1	2	0	0	0	0	0	0	4	4
758	RODEO DR	1988	10	267	PVC	0	0	27	19	5073	77	0	77	1	1	2	2	0	0	0	0	0	0	5	5
759	GRACE LN	1988	10	105	PVC	0	0	27	19	1995	78	0	78	1	1	1	1	0	0	0	0	0	2	5	5
760	EMERALD BAY DR	1988	12	52	PVC	44	44.03	27	28	1456	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
761	RODEO DR	1988	12	11	PVC	28	27.53	27	28	308	79	0	79	1	1	1	2	0	0	0	0	0	0	4	4
762	RODEO DR	1988	12	538	PVC	28	27.53	27	28	15064	78	0	78	1	1	3	2	0	0	0	0	0	0	6	6
763	RODEO DR	1988	12	16	PVC	9	8.69	27	28	448	79	0	79	1	1	1	2	0	0	0	0	0	0	4	4
764	RODEO DR	1988	10	15	PVC	0	0	27	19	285	78	0	78	1	1	1	2	0	0	0	0	0	2	6	6
765	EMERALD BAY DR	1988	8	113	PVC	0	0	27	12	1356	78	0	78	1	1	1	1	0	0	0	0	0	0	3	3
766	RODEO DR	1988	8	321	PVC	39	38.51	27	12	3852	77	0	77	1	1	1	2	0	0	0	0	0	0	4	4
767	EMERALD BAY DR	1988	12	9	PVC	44	44.03	27	12	108	78	0	78	1	1	1	1	0	0	0	0	0	0	3	3
768	RODEO DR	1988	12	13	PVC	44	44.03	27	12	156	78	0	78	1	1	1	2	0	0	0	0	0	0	4	4
769	EMERALD BAY DR	1988	12	7	PVC	44	44.03	27	28	196	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
770	RODEO DR	1988	10	349	PVC	88	88.49	27	19	6631	78	0	78	1	1	2	2	0	0	0	0	0	0	5	5
771	EMERALD BAY DR	1988	8	308	PVC	0	0	27	12	3696	78	0	78	1	1	1	1	0	0	0	0	0	0	3	3
772	VIA VAQUERO	1992	8	458	PVC	23	22.54	23	12	5496	81	0	81	1	1	2	1	0	0	0	0	0	0	4	4
773	AVENIDA DE DIAMANTE	1992	8	9	PVC	10	9.69	23	12	108	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
774	AVENIDA DE DIAMANTE	1992	8	30	PVC	30	30.48	23	12	360	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
775	AVENIDA DE DIAMANTE	1992	8	12	PVC	40	39.85	23	8	96	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
776	VIA VAQUERO	1992	8	9	PVC	1	1.32	23	12	108	82	0	82	1	1	1	1	0	0	0	0	0	2	5	5
777	VIA VAQUERO	1992	8	307	PVC	14	13.61	23	12	3684	81	0	81	1	1	1	1	0	0	0	0	0	2	5	5
778	WESLEY ST	1982	6	11	PVC	0	0	33	8	88	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
779	WESLEY ST	1982	6	17	PVC	0	0	33	8	136	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
780	WESLEY ST	1982	6	15	PVC	0	0	33	8	120	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
781	WESLEY ST	1982	6	13	PVC	0	0	33	8	104	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
782	CUERDA CORTE	1985	6	8	PVC	0	0	30	8	64	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
783	HUEBNER LN	1981	10	7	PVC	122	122.06	34	19	133	73	0	73	1	1	1	1	0	0	0	0	0	0	3	3
784	ORCHID LN	1971	8	52	ACP	3	2.56	44	64	3328	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
785	S TRAFFIC WY	1987	8	15	ACP	5	5.3	28	64	960	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
786	S TRAFFIC WY	1987	8	6	ACP	0	0	28	64	384	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
787	LAUNA LN	1982	6	165	ACP	15	15.42	33	55	9075	68	0	68	1	1	2	1	0	0	0	0	0	0	4	4
788	LAUNA LN	1982	4	293	ACP	11	10.61	33	55	16115	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
789	FARM HOUSE PL	1999	8	48	PVC	9	8.97	16	12	576	89	0	89	1	1	1	1	0	0	0	0	0	0	3	3
790	HILLSDALE CT	0	8	14	PVC	9	8.97	2	12	168	103	0	103	1	1	1	1	0	0	0	0	0	0	3	3
791	HILLSIDE CT	1999	8	405	PVC	9	8.97	16	12	4860	88	0	88	1	1	1	1	0	0	0	0	0	0	3	3
792	LOS OLIVOS LN	1982	8	210	PVC	9	8.97	33	12	2520	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
793	HUEBNER LN	1981	10	11	PVC	122	122.06	34	12	132	72	0	72	1	1	1	0	0	0	0	0	0	0	2	2
794	TRINITY AV	1982	10	335	PVC	122	122.06	33	19	6365	73	0	73	1	1	2	0	0	0	0	0	0	0	3	3
795	TRINITY AV	1982	8	59	PVC	0	0	33	12	708	73	0	73	1	1	1	0	0	0	0	0	0	0	2	2
796	TRINITY AV	1982	8	11	PVC	0	0	33	12	132	73	0	73	1	1	1	0	0	0	0	0	0	0	2	2
797	TRINITY AV	1982	8	59	PVC	0	0	33	12	708	73	0	73	1	1	1	0	0	0	0	0	0	0	2	2
798	HUEBNER LN	1981	10	3	PVC	122	122.06	34	19	57	73	0	73	1	1	1	1	0	0	0	0	0	0	3	3
799	TRINITY AV	1982	10	11	PVC	119	118.88	33	19	209	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
800	TRINITY AV	1982	10	430	PVC	119	118.88	33	19	8170	72	0	72	1	1	2	1	0	0	0	0	0	0	4	4
801	ORCHID LN	1971	8	478	ACP	7	6.6	44	64	30592	57	0	57	1	1	3	1	0	0	0	0	0	2	7	7
802	S TRAFFIC WY	1987	8	25	ACP	0	0	28	64	1600	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
803	S TRAFFIC WY	1987	8	66	ACP	6	6.24	28	64	4224	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
804	S TRAFFIC WY	1987	8	51	ACP	5	5.3	28	64	3264	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
805	S TRAFFIC WY	1987	8	6	ACP	0	0	28	64	384	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
806	HUEBNER LN	1981	10	306	PVC	122	122.06	34	19	5814	72	0	72	1	1	2	0	0	0	0	0	0	0	3	3
807	TRINITY AV	1982	10	304	PVC	113	112.67	33	19	5776	72	0	72	1	1	2	1	0	0	0	0	0	2	6	6
808	COACH RD	1964	8	18	PVC	5	5.39	51	5	90	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
809	COACH RD	1964	4	17	ACP	0	0.26	51	69	1173	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
810	TANNER LN	1982	6	8	ACP	4	4.05	33	55	440	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
811	TANNER LN	1982	6	591	ACP	4	4.05	33	55	32505	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
812	FLORA RD	1963	6	9	ACP	11	11.23	52	55	495	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
813	COACH RD	1964	4	809	ACP	6	5.88	51	42	33978	48	0	48	1	1	3	1	0	0	0	0	0	0	5	5
814	COACH RD	1964	4	12	ACP	0	0.26	51	42	504	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
815	COACH RD	1964	10	188	ACP	27	27.13	51	69	12972	52	0	52	1	1	3	1	0	0	0	0	0	0	5	5
816	COACH RD	1964	10	13	ACP	36	35.58	51	69	897	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
817	COACH RD	1964	10	14	ACP	36	35.58	51	69	966	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
818	COACH RD	1964	4	8	ACP	0	0.26	51	42	336	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
819	COACH RD	1964	8	24	PVC	5	5.39	51	12	288	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
820	COACH RD	1964	8	225	ACP	3	3.34	51	64	14400	51	0	51	1	1	3	1	0	0	0	0	0	0	5	5
821	COACH RD	1964	4	655	ACP	0	0.26	51	42	27510	48	0	48	1	1	3	1	0	0	0	0	0	0	5	5
822	COACH RD	1964	8	13	PVC	5	5.39	51	12	156	55	0	55	1	1	1	1	0	0	0	0	0	0	3	3
823	RESERVOIR RD	0	8	21	PVC	0	0	2	12	252	104	0	104	1	2	1	0	0	0	0	0	0	0	2	2
824	RESERVOIR RD	2001	12	169	CIP	324	324.13	14	123	20787	74	0	74	1	2	3	0	0	0	0	0	0	0	5	5
825	W BRANCH ST	1977	12	6	CIP	324	324.03	38	123	738	50	0	50	1	1	1	4	0	0	0	0	0	0	7	7
826	W BRANCH ST	1977	12	12	CIP	324	324.03	38	50	600	67	0	67	1	3	1	4	0	0	0	0	0	0	6	6
827	S HWY 101	0	8	235	PVC	0	0	2	12	2820	84	0	84	1	1	1	5	0	0	0	0	0	0	9	9
828	GREENWOOD DR	1963	6	47	ACP	1	1.41	52	55	2585	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
829	GREENWOOD DR	1963	6	89	ACP	1	1.41	52	55	4895	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
830	TANNER LN	1982	6	32	ACP	4	4.05	33	55	1760	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
831	TANNER LN	1982	6	9	ACP	4	4.05	33	64	576	70	0	70	1	1	1	1	0	0	0	0	0	0	3	3
832	TANNER LN	1982	6	148	ACP	4	4.05	33	64	9472	70	0	70	1	1	2	1	0	0	0	0	0	0	4	4
833	FLORA RD	1963	6	52	ACP	11	10.66	52	55	2860	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
834	FLORA RD	1963	10	159	ACP	27	27.13	52	69	10971	51	0	51	1	1	3	1	0	0	0	0	0	0	5	5
835	FLORA RD	1963	10	9	ACP	27	27.13	52	55	495	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
836	FLORA RD	1963	10	8	ACP	27	27.13	52	69	552	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
837	FLORA RD	1963	6	133	ACP	11	11.23	52	69	9177	51	0	51	1	1	2	1	0	0	0	0	0	0	4	4
838	BRANCH MILL RD	1969	8	35	PVC	1	0.54	46	12	420	60	0	60	1	1	1	1	0	0	0	0	0	0	3	3
839	COACH RD	1964	8	807	PVC	5	5.39	51	12	9684	52	0	52	1	1	2	1	0	0	0	0	0	0	4	4
840	HUASNA RD	1967	10	90	ACP	60	59.93	48	64	5760	55	0	55	1	1	2	0	0	0	0	0	0	0	3	3
841	PEARWOOD AV	1960	6	14	ACP	12	11.63	55	55	770	47	0	47	1	1	1	1	0	0	0	0	0	0	3	3
842	ROSEWOOD LN	1958	8	31	ACP	19	19.49	57	55	1705	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
843	PRADERA CT	1992	8	9	PVC	3	3.39	23	12	108	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
844	LA CRESTA DR	1978	8	59	ACP	1	1.21	37	64	3776	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
845	LA CRESTA DR	1978	8	47	PVC	0	0	37	12	564	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
846	HUASNA RD	1967	8	6	ACP	3	3.49	48	64	384	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
847	VARD LOOMIS LN	1981	8	484	ACP	28	27.62	34	64	30976	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
848	VARD LOOMIS LN	1981	8	10	ACP	16	15.97	34	55	550	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
849	COACH RD	1964	4	14	ACP	6	5.88	51	69	966	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
850	VARD LOOMIS LN	1981	8	186	ACP	4	4.2	34	64	11904	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
851	IKEDA WY	1981	8	79	ACP	7	7.48	34	64	5056	68	0	68	1	1	2	1	0	0	0	0	0	0	4	4
852	VARD LOOMIS LN	1981	8	8	ACP	7	7.48	34	64	512	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
853	VARD LOOMIS LN	1981	8	9	ACP	7	7.48	34	64	576	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
854	VARD LOOMIS LN	1981	8	199	ACP	16	15.97	34	64	12736	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
855	VARD LOOMIS CT	1982	6	139	ACP	0	0	33	55	7645	69	0	69	1	1	2	1	0	0	0	0	0	0	4	4
856	VARD LOOMIS LN	1981	8	8	ACP	16	15.97	34	64	512	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
857	VARD LOOMIS LN	1981	8	35	ACP	16	15.97	34	64	2240	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
858	VARD LOOMIS LN	1981	8	206	ACP	16	15.97	34	64	13184	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
859	VARD LOOMIS LN	1981	8	39	ACP	21	20.64	34	64	2496	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
860	HUASNA RD	1967	10	20	ACP	60	59.93	48	69	1380	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
861	HUASNA RD	1967	8	471	ACP	29	29.29	48	64	30144	53	0	53	1	1	3	2	0	0	0	0	0	0	6	6
862	HUASNA RD	1967	8	8	ACP	28	27.62	48	64	512	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
863	HUASNA RD	1967	10	8	ACP	60	59.93	48	69	552	55	0	55	1	1	1	0	0	0	0	0	0	0	2	2
864	VARD LOOMIS LN	1981	8	434	ACP	7	7.48	34	64	27776	67	0	67	1	1	3	1	0	0	0	0	0	0	5	5
865	HUASNA RD	1967	8	40	ACP	3	3.49	48	64	2560	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
866	HUASNA RD	1967	8	70	ACP	3	3.49	48	64	4480	55	0	55	1	1	1	2	0	0	0	0	0	0	4	4
867	ROSEWOOD LN	1958	8	192	ACP	19	19.49	57	64	12288	45	0	45	1	1	3	1	0	0	0	0	0	0	5	5
868	LA CRESTA DR	1978	8	9	ACP	17	16.95	37	64	576	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
869	LA CRESTA DR	1978	8	9	ACP	17	16.95	37	64	576	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
870	LA CRESTA DR	1978	8	263	ACP	3	3.49	37	64	16832	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
871	LA CRESTA DR	1978	8	10	ACP	17	16.95	37	64	640	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
872	LA CRESTA DR	1978	8	204	PVC	0	0	37	12	2448	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
873	LA CRESTA DR	1978	8	21	PVC	12	12.33	37	12	252	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
874	PRADERA CT	1992	8	7	PVC	3	3.39	23	12	84	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
875	PRADERA CT	1992	8	7	PVC	3	3.39	23	12	84	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
876	PRADERA CT	1992	8	200	PVC	10	10.01	23	12	2400	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
877	LA CRESTA DR	1978	8	42	PVC	3	3.39	37	12	504	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
878	PRADERA CT	1992	8	271	PVC	1	1.17	23	12	3252	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
879	ROSEWOOD LN	1958	8	28	ACP	19	19.49	57	64	1792	46	0	46	1	1	1	1	0	0	0	0	0	0	3	3
880	ROSEWOOD LN	1958	8	188	ACP	14	14.07	57	64	12032	45	0	45	1	1	3	1	0	0	0	0	0	0	5	5
881	ROSEWOOD LN	1958	8	7	ACP	19	19.49	57	64	448	46	0	46	1	1	1	1	0	0	0	0	0	0	3	3
882	ROSEWOOD LN	1958	6	472	ACP	0	0	57	55	25960	44	0	44	1	1	3	1	0	0	0	0	0	0	5	5
883	PEARWOOD AV	1960	8	8	ACP	1	1.05	55	64	512	48	0	48	1	1	1	1	0	0	0	0	0	0	3	3
884	PEARWOOD AV	1960	6	7	ACP	12	11.63	55	55	385	47	0	47	1	1	1	1	0	0	0	0	0	0	3	3
885	PEARWOOD AV	1960	8	512	ACP	1	1.05	55	64	32768	46	0	46	1	1	3	1	0	0	0	0	0	0	5	5
886	PEARWOOD AV	1960	6	565	ACP	12	11.63	55	55	31075	45	0	45	1	1	3	1	0	0	0	0	0	0	5	5
887	PEARWOOD AV	1960	8	107	ACP	1	1.05	55	64	6848	47	0	47	1	1	2	1	0	0	0	0	0	0	4	4
888	COACH RD	1964	8	1202	ACP	28	27.62	51	69	82938	49	0	49	1	1	5	1	0	0	0	0	0	0	7	7
889	FLORA RD	1963	6	543	ACP	11	11.23	52	55	29865	49	0	49	1	1	3	1	0	0	0	0	0	0	5	5
890	STAGECOACH RD	1976	6	10	ACP	1	1.01	39	55	550	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
891	STAGECOACH RD	1976	8	7	ACP	110	110.3	39	64	448	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
892	CORBETT CANYON RD	1973	8	7	ACP	1	1.21	42	64	448	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
893	ORO DR	1975	8	176	ACP	46	46.05	40	64	11264	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
894	CAMPANA PL	1978	6	7	ACP	0	0	37	55	385	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
895	ZOGATA WY	1992	8	367	PVC	42	41.62	23	12	4404	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
896	CORBETT CANYON RD	1973	8	12	ACP	12	12.44	42	55	660	60	0	60	1	1	1	1	0	0	0	0	0	0	3	3
897	CORBETT CANYON RD	1973	6	483	PVC	0	0	42	12	5796	59	0	59	1	1	2	1	0	0	0	0	0	0	4	4
898	CORBETT CANYON RD	1973	12	1589	ACP	136	135.64	42	77	122353	57	0	57	1	1	5	1	0	0	0	2	2	0	11	11
899	PRINTZ RD	0	12	9	ACP	118	118.15	2	77	693	102	0	102	1	1	1	1	0	0	0	0	0	0	3	3
900	PLOMO CT	1978	6	52	ACP	1	1.01	37	64	3328	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
901	STAGECOACH RD	1976	6	10	ACP	1	1.01	39	64	640	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
902	PLOMO CT	1978	6	208	ACP	1	1.01	37	55	11440	64	0	64	1	1	3	1	0	0	0	0	0	0	5	5
903	STAGECOACH RD	1976	8	239	ACP	43	43.26	39	64	15296	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
904	STAGECOACH RD	1976	8	4	ACP	110	110.3	39	64	256	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
905	COBRE PL	1978	6	413	ACP	0	0	37	64	26432	64	0	64	1	1	3	1	0	0	0	0	0	0	5	5
906	GULARTE RD	1987	8	5	ACP	110	110.3	28	64	320	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
907	GULARTE RD	1987	8	359	PVC	28	27.76	28	12	4308	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
908	ZOGATA WY	1992	8	399	ACP	85	84.96	23	64	25536	78	0	78	1	1	3	1	0	0	0	0	0	0	5	5
909	STAGECOACH RD	1976	8	145	ACP	136	136.43	39	64	9280	63	0	63	1	1	2	1	0	0	0	0	0	0	4	4
910	ZOGATA WY	1992	8	285	PVC	44	44.06	23	12	3420	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
911	ZOGATA WY	1992	8	7	PVC	44	44.06	23	12	84	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
912	ZOGATA WY	1992	8	360	PVC	42	41.62	23	12	4320	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
913	ZOGATA WY	1992	8	7	PVC	42	41.62	23	12	84	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
914	GULARTE RD	1987	6	129	PVC	1	0.91	28	8	1032	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
915	GULARTE RD	1987	6	10	PVC	1	0.91	28	12	120	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
916	GULARTE RD	1987	6	9	PVC	1	0.91	28	8	72	76	0	76	1	1	1	1	0	0	0	0	0	0	3	3
917	ZOGATA WY	1992	8	181	PVC	33	33.43	23	12	2172	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
918	GULARTE RD	1987	8	6	PVC	28	27.76	28	12	72	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
919	GULARTE RD	1987	8	41	PVC	28	27.76	28	12	492	77	0	77	1	1	1	1	0	0	0	0	0	0	3	3
920	GULARTE RD	1987	8	6	ACP	110	110.3	28	64	384	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
921	STAGECOACH RD	1976	8	21	ACP	110	110.3	39	64	1344	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
922	STAGECOACH RD	1976	8	10	ACP	85	84.96	39	64	640	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
923	COBRE PL	1978	6	6	ACP	0	0	37	55	330	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
924	COBRE PL	1978	6	473	ACP	0	0	37	55	26015	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
925	GULARTE RD	1987	8	23	ACP	64	63.7	28	64	1472	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
926	COBRE PL	1978	6	8	ACP	0	0	37	64	512	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
927	GULARTE RD	1987	8	13	ACP	62	62.23	28	64	832	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
928	CAMPANA PL	1978	8	139	ACP	62	62.23	37	64	8896	65	0	65	1	1	2	1	0	0	0	0	0	0	4	4
929	CAMPANA PL	1978	6	7	ACP	0	0	37	64	448	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
930	CAMPANA PL	1978	6	7	ACP	0	0	37	64	448	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
931	CAMPANA PL	1978	6	533	ACP	0	0	37	55	29315	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
932	GULARTE RD	1987	8	180	ACP	53	53.11	28	64	11520	74	0	74	1	1	3	1	0	0	0	0	0	0	5	5
933	ORO DR	1975	8	263	ACP	46	46.05	40	64	16832	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
934	ORO DR	1975	8	7	ACP	46	46.05	40	64	448	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
935	ORO DR	1975	8	253	ACP	48	48.39	40	64	16192	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
936	ORO DR	1975	8	6	ACP	48	48.39	40	64	384	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
937	GULARTE RD	1987	8	105	ACP	48	48.39	28	64	6720	74	0	74	1	1	2	1	0	0	0	0	0	0	4	4
938	GULARTE RD	1987	8	7	ACP	50	49.99	28	64	448	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
939	GULARTE RD	1987	8	105	ACP	1	0.89	28	55	5775	73	0	73	1	1	2	1	0	0	0	0	0	0	4	4

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
940	GULARTE RD	1987	8	7	ACP	50	49.99	28	64	448	74	0	74	1	1	1	1	0	0	0	0	0	3	3
941	GULARTE RD	1987	8	7	ACP	50	49.99	28	64	448	74	0	74	1	1	1	1	0	0	0	0	0	3	3
942	GULARTE RD	1987	8	17	ACP	0	0	28	64	1088	75	0	75	1	1	1	1	0	0	0	0	0	3	3
943	CORBETT CANYON RD	1973	8	404	ACP	1	1.21	42	64	25856	59	0	59	1	1	3	1	0	0	0	0	0	5	5
944	CORBETT CANYON RD	1973	8	10	ACP	5	4.58	42	64	640	61	0	61	1	1	1	1	0	0	0	0	0	3	3
945	CORBETT CANYON RD	1973	8	25	ACP	1	1.21	42	64	1600	61	0	61	1	1	1	1	0	0	0	0	0	3	3
946	PRINTZ RD	0	8	224	ACP	12	12.44	2	64	14336	100	0	100	1	1	3	1	0	0	0	0	0	5	5
947	PRINTZ RD	0	8	11	ACP	17	17.48	2	64	704	101	0	101	1	1	1	1	0	0	0	0	0	3	3
948	PRINTZ RD	0	12	167	ACP	118	118.16	2	77	12859	102	0	102	1	1	3	1	0	0	0	0	0	5	5
949	PRINTZ RD	0	8	15	ACP	17	17.48	2	77	1155	102	0	102	1	1	1	1	0	0	0	0	0	3	3
950	PRINTZ RD	0	12	7	ACP	118	118.16	2	77	539	102	0	102	1	1	1	1	0	0	0	0	0	3	3
951	PRINTZ RD	0	12	9	ACP	118	118.15	2	77	693	102	0	102	1	1	1	1	0	0	0	0	0	3	3
952	CORBETT CANYON RD	1973	6	8	PVC	0	0	42	8	64	63	0	63	1	1	1	1	0	0	0	0	0	3	3
953	CORBETT CANYON RD	1973	6	619	PVC	0	0	42	8	4952	61	0	61	1	1	1	1	0	0	0	0	0	3	3
954	CORBETT CANYON RD	1973	6	6	PVC	0	0	42	8	48	63	0	63	1	1	1	1	0	0	0	0	0	3	3
955	CORBETT CANYON RD	1973	8	4	ACP	2	2.37	42	64	256	61	0	61	1	1	1	1	0	0	0	0	0	3	3
956	STAGECOACH RD	1976	8	1335	ACP	136	136.43	39	64	85440	60	0	60	1	1	5	0	0	0	0	0	0	6	6
957	PEARWOOD AV	1960	6	101	ACP	0	0	55	55	5555	47	0	47	1	1	2	1	0	0	0	0	0	4	4
958	RODEO DR	1988	12	7	PVC	12	11.52	27	28	196	80	0	80	1	1	1	2	0	0	0	0	0	4	4
959	WESLEY ST	1982	6	317	PVC	0	0	33	8	2536	70	0	70	1	1	1	1	0	0	0	0	0	3	3
960	WESLEY ST	1982	6	155	PVC	0	0	33	8	1240	71	0	71	1	1	1	1	0	0	0	0	0	3	3
961	MILLER WY	1977	6	614	PVC	0	0	38	8	4912	65	0	65	1	1	1	1	0	0	0	0	0	3	3
962	RODEO DR	1988	12	511	PVC	12	11.52	27	28	14308	78	0	78	1	1	3	2	0	0	0	0	0	6	6
963	RIDGEVIEW WY	1978	8	11	ACP	11	10.73	37	64	704	66	0	66	1	1	1	1	0	0	0	0	0	3	3
964	RIDGEVIEW WY	1978	8	116	PVC	6	5.64	37	12	1392	69	0	69	1	1	1	1	0	0	0	0	0	3	3
965	RIDGEVIEW WY	1978	8	11	PVC	6	5.64	37	12	132	69	0	69	1	1	1	1	0	0	0	0	0	3	3
966	VIA LA BARRANCA	1992	8	484	ACP	58	58.15	23	64	30976	79	0	79	1	1	3	1	0	0	0	0	0	5	5
967	JAMES WY	1975	12	554	ACP	4	3.6	40	77	42658	65	0	65	1	1	3	3	0	0	0	0	0	7	7
968	JAMES WY	1975	12	16	ACP	3	2.77	40	77	1232	66	0	66	1	1	1	3	0	0	0	0	0	5	5
969	JAMES WY	1975	12	7	PVC	45	44.94	40	28	196	67	0	67	1	1	1	3	0	0	0	0	0	5	5
970	QUAIL RIDGE CT	1995	8	14	PVC	6	6.14	20	12	168	86	0	86	1	1	1	1	0	0	0	0	0	3	3
971	QUAIL RIDGE CT	1995	8	14	PVC	6	6.14	20	12	168	86	0	86	1	1	1	1	0	0	0	0	0	3	3
972	QUAIL RIDGE CT	1995	8	14	PVC	6	6.14	20	12	168	86	0	86	1	1	1	1	0	0	0	0	0	3	3
973	SPANISH MOSS LN	1988	6	15	PVC	16	16.47	27	8	120	77	0	77	1	1	1	1	0	0	0	0	0	3	3
974	JAMES WY	1975	12	10	ACP	4	3.6	40	64	640	65	0	65	1	1	1	3	0	0	0	0	0	5	5
975	TALLY HO RD	1977	12	444	PVC	103	102.72	38	28	12432	67	0	67	1	1	3	2	0	0	0	2	0	8	8
976	TALLY HO RD	1977	12	334	PVC	103	102.72	38	28	9352	68	0	68	1	1	2	2	0	0	0	0	0	5	5
977	RIDGEVIEW WY	1978	8	12	ACP	11	10.73	37	77	924	67	0	67	1	1	1	1	0	0	0	0	0	3	3
978	TALLY HO RD	1977	12	20	ACP	116	115.56	38	77	1540	66	0	66	1	1	1	2	0	0	0	0	0	4	4
979	WHITE CT	1987	8	34	PVC	6	5.64	28	12	408	78	0	78	1	1	1	1	0	0	0	0	0	3	3
980	RIDGEVIEW WY	1978	8	244	PVC	6	5.64	37	12	2928	68	0	68	1	1	1	1	0	0	0	0	0	3	3
981	WHITE CT	1987	8	116	PVC	0	0	28	12	1392	78	0	78	1	1	1	1	0	0	0	0	0	3	3
982	CANYON WY	1950	8	458	ACP	1	1.14	65	64	29312	36	0	36	1	1	3	1	0	0	0	2	0	7	7
983	CANYON WY	1950	8	363	ACP	1	1.14	65	64	23232	37	0	37	1	1	3	1	0	0	0	0	0	5	5
984	CANYON WY	1950	6	415	PVC	0	0	65	8	3320	39	0	39	1	1	1	1	0	0	0	0	0	3	3
985	CANYON WY	1950	6	12	PVC	0	0	65	8	96	40	0	40	1	1	1	1	0	0	0	0	0	3	3
986	CANYON WY	1950	6	19	PVC	0	0	65	12	228	38	0	38	1	1	1	1	0	0	0	0	0	3	3
987	CANYON WY	1950	6	17	PVC	0	0	65	12	204	40	0	40	1	1	1	1	0	0	0	0	0	3	3
988	CANYON WY	1995	12	291	ACP	0	0	20	77	22407	82	0	82	1	1	3	1	0	0	0	0	0	5	5
989	VILLAGE GLEN DR	1995	12	7	PVC	17	17.02	20	12	84	83	0	83	1	1	1	1	0	0	0	0	0	3	3
990	JAMES WY	1984	12	39	ACP	63	62.58	31	77	3003	73	0	73	1	1	1	3	0	0	0	0	0	5	5
991	JAMES WY	1975	8	102	ACP	58	58.15	40	77	7854	64	0	64	1	1	2	3	0	0	0	0	0	6	6
992	JAMES WY	1975	8	14	ACP	58	58.15	40	77	1078	64	0	64	1	1	1	3	0	0	0	0	0	5	5
993	JAMES WY	1975	8	10	ACP	58	58.15	40	64	640	63	0	63	1	1	1	3	0	0	0	0	0	5	5
994	JAMES WY	1975	12	26	ACP	0	0	40	77	2002	65	0	65	1	1	1	3	0	0	0	0	0	5	5
995	JAMES WY	1975	12	297	ACP	3	2.77	40	77	22869	63	0	63	1	1	3	3	0	0	0	0	0	7	7
996	JAMES WY	1975	12	300	ACP	3	2.77	40	77	23100	63	0	63	1	1	3	3	0	0	0	0	0	7	7
997	JAMES WY	1975	12	10	ACP	3	2.77	40	77	770	63	0	63	1	1	1	3	0	0	0	0	0	5	5
998	JAMES WY	1975	12	172	PVC	15	14.66	40	28	4816	66	0	66	1	1	1	3	0	0	0	0	0	5	5
999	MESQUITE LN	1985	12	146	ACP	4	3.6	30	77	11242	73	0	73	1	1	3	1	0	0	0	0	0	5	5
1000	VILLAGE GLEN DR	1995	12	16	PVC	15	14.66	20	28	448	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1001	VILLAGE GLEN DR	1995	12	7	PVC	17	17.02	20	28	196	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1002	VILLAGE GLEN DR	1995	12	59	PVC	17	17.02	20	28	1652	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1003	VILLAGE GLEN DR	1995	8	562	ACP	3	3.38	20	77	43274	82	0	82	1	1	3	1	0	0	0	0	0	5	5
1004	VILLAGE GLEN DR	1995	12	6	PVC	17	17.02	20	28	168	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1005	VILLAGE GLEN DR	1995	12	166	PVC	22	21.98	20	28	4648	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1006	VILLAGE GLEN DR	1995	12	175	PVC	22	21.98	20	28	4900	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1007	VILLAGE GLEN DR	1995	12	363	PVC	35	35.24	20	28	10164	86	0	86	1	1	3	1	0	0	0	0	0	5	5
1008	HIDDEN OAK RD	1995	12	63	PVC	35	35.24	20	28	1764	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1009	HIDDEN OAK RD	1995	12	14	PVC	45	44.94	20	28	392	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1010	HIDDEN OAK RD	1995	12	11	PVC	45	44.94	20	28	308	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1011	QUAIL RIDGE CT	1995	12	168	PVC	6	6.14	20	12	2016	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1012	HIDDEN OAK RD	1995	12	11	PVC	45	44.94	20	28	308	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1013	HIDDEN OAK RD	1995	8	110	PVC	6	6.14	20	12	1320	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1014	QUAIL RIDGE CT	1995	8	223	PVC	0	0	20	12	2676	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1015	MESQUITE LN	1985	12	9	ACP	4	3.6	30	77	693	74	0	74	1	1	1	1	0	0	0	0	0	3	3
1016	MESQUITE LN	1985	8	144	PVC	52	51.78	30	12	1728	74	0	74	1	1	1	1	0	0	0	0	0	3	3
1017	JAMES WY	1975	12	14	PVC	48	48.18	40	28	392	67	0	67	1	1	1	3	0	0	0	0	0	5	5
1018	SPANISH MOSS LN	1988	6	15	PVC	13	12.71	27	8	120	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1019	SPANISH MOSS LN	1988	6	229	PVC	16	16.47	27	8	1832	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1020	SPANISH MOSS LN	1988	6	31	PVC	16	16.47	27	12	372	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1021	SPANISH MOSS LN	1988	8	247	PVC	32	31.59	27	12	2964	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1022	MESQUITE LN	1985	8	44	PVC	28	28.33	30	12	528	75	0	75	1	1	1	1	0	0	0	0	0	3	3
1023	CANYON WY	1995	12	34	ACP	0	0	20	77	2618	83	0	83	1	1	1	1	0	0	0	0	0	3	3
1024	JAMES WY	1975	12	54	PVC	45	44.94	40	28	1512	67	0	67	1	1	1	3	0	0	0	0	0	5	5
1025	SPANISH MOSS LN	1988	6	471	PVC	13	12.71	27	8	3768	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1026	MESQUITE LN	1985	8	402	PVC	24	23.8	30	12	4824	74	0	74	1	1	1	1	0	0	0	0	0	3	3
1027	RODEO DR	1988	10	73	PVC	93	92.89	27	19	1387	78	0	78	1	1	1	2	0	0	0	0	0	4	4
1028	GRACE LN	1988	6	8	PVC	5	5.47	27	12	96	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1029	AVENIDA DE DIAMANTE	1992	8	590	PVC	40	39.85	23	12	7080	80	0	80	1	1	2	1	0	0	0	0	0	4	4
1030	AVENIDA DE DIAMANTE	1992	6	13	PVC	7	7.16	23	12	156	82	0	82	1	2	1	1	0	0	0	0	0	3	3
1031	VIA POCA	1992	8	15	PVC	88	88.16	23	28	420	84	0	84	1	1	1	1	0	0	0	0	0	4	4
1032	VIA POCA	1992	8	15	PVC	88	88.16	23	12	180	83	0	83	1	1	1	1	0	0	0	0	0	3	3
1033	REFUGIO PL	1992	8	6	PVC	91	91.06	23	12	72	82	0	82	1	1	1	1	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1034	AVENIDA DE DIAMANTE	1992	6	13	PVC	7	7.16	23	8	104	81	0	81	1	1	1	1	0	0	0	0	0	3	3
1035	JAMES WY	1975	10	16	PVC	107	107.3	40	19	304	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1036	SOMBRILLO WY	1998	10	6	PVC	4	3.54	17	19	114	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1037	ROSEMARY LN	0	8	7	PVC	110	109.96	2	12	84	103	0	103	1	1	1	1	0	0	0	0	0	3	3
1038	ROSEMARY LN	2001	10	165	PVC	33	33.4	14	19	3135	90	0	90	1	1	1	1	0	0	0	0	0	3	3
1039	ROSEMARY LN	2001	10	12	PVC	16	16.22	14	19	228	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1040	ROSEMARY LN	2001	8	868	PVC	110	109.96	14	12	10416	89	0	89	1	1	3	1	0	0	0	0	0	5	5
1041	SALIDA DEL SOL	1998	10	12	PVC	7	7.12	17	19	228	88	0	88	1	4	1	1	0	0	0	0	0	3	3
1042	JAMES WY	1975	12	15	PVC	705	705.31	40	43	645	67	0	67	1	1	1	3	0	0	0	0	0	8	8
1043	RODEO DR	1988	10	12	PVC	93	92.89	27	19	228	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1044	RODEO DR	1988	10	259	PVC	93	92.89	27	19	4921	78	0	78	1	1	1	2	0	0	0	0	0	4	4
1045	RODEO DR	1988	10	8	PVC	93	92.89	27	19	152	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1046	RODEO DR	1988	8	13	PVC	13	12.67	27	19	247	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1047	RODEO DR	1988	8	13	PVC	13	12.67	27	12	156	78	0	78	1	1	1	2	0	0	0	0	0	4	4
1048	RODEO DR	1988	8	13	PVC	13	12.67	27	12	156	78	0	78	1	1	1	2	0	0	0	0	0	4	4
1049	RODEO DR	1988	10	504	PVC	109	108.82	27	19	9576	77	0	77	1	1	2	2	0	0	0	0	0	5	5
1050	RODEO DR	1988	8	198	PVC	27	27.43	27	12	2376	77	0	77	1	1	1	2	0	0	0	0	0	4	4
1051	CHAPARRAL LN	1987	6	84	PVC	5	5.47	28	8	672	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1052	CHAPARRAL LN	1987	6	7	PVC	5	5.47	28	8	56	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1053	CHAPARRAL LN	1987	6	29	PVC	0	0	28	8	232	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1054	GRACE LN	1988	6	7	PVC	5	5.47	27	8	56	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1055	RODEO DR	1988	8	157	PVC	13	12.67	27	12	1884	77	0	77	1	1	1	2	0	0	0	0	0	4	4
1056	GRACE LN	1988	6	231	PVC	5	5.47	27	8	1848	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1057	GRACE LN	1988	6	7	PVC	5	5.47	27	8	56	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1058	CHAPARRAL LN	1987	6	100	PVC	20	20.37	28	8	800	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1059	MESQUITE LN	1985	8	199	PVC	24	23.8	30	12	2388	75	0	75	1	1	1	1	0	0	0	0	0	3	3
1060	MESQUITE LN	1985	8	8	PVC	24	23.8	30	12	96	75	0	75	1	1	1	1	0	0	0	0	0	3	3
1061	CHAPARRAL LN	1987	8	209	PVC	19	19.31	28	12	2508	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1062	CHAPARRAL LN	1987	6	7	PVC	23	22.63	28	8	56	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1063	CHAPARRAL LN	1987	6	8	PVC	23	22.63	28	12	96	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1064	CHAPARRAL LN	1987	6	98	PVC	23	22.63	28	8	784	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1065	CHAPARRAL LN	1987	6	7	PVC	23	22.63	28	8	56	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1066	SPANISH MOSS LN	1988	6	257	PVC	13	12.71	27	8	2056	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1067	SPANISH MOSS LN	1988	6	8	PVC	13	12.71	27	8	64	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1068	SPANISH MOSS LN	1988	6	179	PVC	4	4.21	27	8	1432	77	0	77	1	1	1	1	0	0	0	0	0	3	3
1069	SPANISH MOSS LN	1988	6	11	PVC	4	4.21	27	8	88	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1070	CHAPARRAL LN	1987	6	245	PVC	4	4.21	28	8	1960	76	0	76	1	1	1	1	0	0	0	0	0	3	3
1071	RODEO DR	1988	10	7	PVC	109	108.82	27	19	133	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1072	RODEO DR	1988	10	80	PVC	109	108.82	27	19	1520	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1073	JAMES WY	1975	10	176	PVC	110	109.58	40	19	3344	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1074	JAMES WY	1975	12	360	PVC	45	44.94	40	28	10080	66	0	66	1	2	3	3	0	0	0	0	0	7	7
1075	JAMES WY	1975	12	39	PVC	77	77.12	40	28	1092	67	0	67	1	1	1	3	0	0	0	0	0	6	6
1076	RODEO DR	1988	8	276	PVC	20	20.21	27	12	3312	78	0	78	1	1	1	2	0	0	0	0	0	4	4
1077	RODEO DR	1988	12	15	PVC	77	77.12	27	28	420	80	0	80	1	1	1	2	0	0	0	0	0	4	4
1078	JAMES WY	1975	12	15	PVC	77	77.12	40	19	285	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1079	JAMES WY	1975	12	15	PVC	77	77.12	40	12	180	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1080	RODEO DR	1988	8	9	PVC	20	20.21	27	12	108	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1081	RODEO DR	1988	8	129	PVC	20	20.21	27	12	1548	78	0	78	1	1	1	2	0	0	0	0	0	4	4
1082	JAMES WY	1975	8	216	PVC	20	20.21	40	12	2592	65	0	65	1	1	1	3	0	0	0	0	0	5	5
1083	JAMES WY	1975	8	17	PVC	20	20.21	40	12	204	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1084	JAMES WY	1975	8	13	PVC	20	20.21	40	12	156	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1085	JAMES WY	1975	8	31	PVC	2	1.71	40	12	372	65	0	65	1	1	1	3	0	0	0	0	0	5	5
1086	JAMES WY	1975	8	33	PVC	20	20.21	40	28	924	67	0	67	1	1	1	3	0	0	0	0	0	5	5
1087	RODEO DR	1988	12	456	PVC	77	77.12	27	28	12768	79	0	79	1	1	3	2	0	0	0	0	0	6	6
1088	RODEO DR	1988	8	63	PVC	20	20.21	27	12	756	79	0	79	1	1	1	2	0	0	0	0	0	4	4
1089	JAMES WY	1975	12	69	PVC	45	44.94	40	28	1932	67	0	67	1	1	1	3	0	0	0	0	0	5	5
1090	HIDDEN OAK RD	1995	12	212	PVC	45	44.94	20	28	5936	86	0	86	1	1	2	1	0	0	0	0	0	4	4
1091	HIDDEN OAK RD	1995	8	25	PVC	0	0	20	12	300	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1092	HIDDEN OAK RD	1995	8	20	PVC	0	0	20	12	240	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1093	HIDDEN OAK RD	1995	8	150	PVC	0	0	20	12	1800	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1094	HIDDEN OAK RD	1995	8	42	PVC	0	0	20	12	504	86	0	86	1	1	1	1	0	0	0	0	0	3	3
1095	GRACE LN	1988	8	11	PVC	27	27.43	27	12	132	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1096	GRACE LN	1988	8	23	PVC	27	27.43	27	12	276	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1097	GRACE LN	1988	8	24	PVC	27	27.43	27	12	288	78	0	78	1	1	1	1	0	0	0	0	0	3	3
1098	GRACE LN	1988	8	8	PVC	27	27.43	27	12	96	78	0	78	1	2	1	1	0	0	0	0	0	3	3
1099	SALIDA DEL SOL	1998	10	388	PVC	107	107.3	17	28	10864	89	0	89	1	1	3	1	0	0	0	0	0	6	6
1100	JAMES WY	1975	12	721	PVC	110	110.13	40	28	20188	64	0	64	1	1	3	3	0	0	0	0	0	7	7
1101	SALIDA DEL SOL	1998	10	164	PVC	0	0	17	19	3116	89	0	89	1	1	1	1	0	0	0	0	0	3	3
1102	SALIDA DEL SOL	1998	10	9	PVC	0	0	17	19	171	89	0	89	1	1	1	1	0	0	0	0	0	3	3
1103	ROSEMARY LN	2001	10	204	PVC	4	4.41	14	19	3876	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1104	SALIDA DEL SOL	1998	10	66	PVC	2	1.74	17	19	1254	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1105	ROSEMARY LN	2001	10	12	PVC	7	7.12	14	19	228	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1106	ROSEMARY LN	2001	10	12	PVC	0	0	14	19	228	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1107	ROSEMARY LN	2001	10	88	PVC	2	1.74	14	19	1672	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1108	SALIDA DEL SOL	1998	10	9	PVC	0	0	17	19	171	89	0	89	1	1	1	1	0	0	0	0	0	3	3
1109	SALIDA DEL SOL	1998	10	13	PVC	0	0	17	12	156	89	0	89	1	1	1	1	0	0	0	0	0	3	3
1110	SOMBRILLO WY	1998	10	5	PVC	4	3.54	17	19	95	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1111	SOMBRILLO WY	1998	10	6	PVC	4	3.54	17	19	114	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1112	SOMBRILLO WY	1998	10	45	PVC	1	0.51	17	19	855	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1113	SOMBRILLO WY	1998	10	82	PVC	4	3.54	17	19	1558	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1114	SALIDA DEL SOL	1998	10	151	PVC	4	3.54	17	19	2869	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1115	SOMBRILLO WY	1998	10	109	PVC	1	0.51	17	19	2071	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1116	SOMBRILLO WY	1998	10	150	PVC	4	3.93	17	19	2850	88	0	88	1	1	1	1	0	0	0	0	0	3	3
1117	SOMBRILLO WY	1998	10	217	PVC	16	16.36	17	19	4123	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1118	SOMBRILLO WY	1998	10	204	PVC	16	16.36	17	19	3876	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1119	ROSEMARY LN	2001	10	12	PVC	16	16.22	14	19	228	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1120	ROSEMARY LN	2001	10	12	PVC	16	16.22	14	19	228	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1121	ROSEMARY LN	2001	10	74	PVC	16	16.22	14	19	1406	90	0	90	1	1	1	1	0	0	0	0	0	3	3
1122	ROSEMARY LN	2001	10	206	PVC	7	7.12	14	19	3914	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1123	ROSEMARY LN	2001	10	255	PVC	7	7.12	14	19	4845	90	0	90	1	1	1	1	0	0	0	0	0	3	3
1124	ROSEMARY LN	2001	10	287	PVC	16	16.22	14	19	5453	90	0	90	1	1	2	1	0	0	0	0	0	4	4
1125	ROSEMARY LN	2001	10	318	PVC	33	33.4	14	19	6042	89	0	89	1	1	2	1	0	0	0	0	0	4	4
1126	ROSEMARY LN	2001	8	474	PVC	110	109.96	14	12	5688	90	0	90	1	4	2	1	0	0	0	0	0	4	4
1127	LA CANADA	2000	8	343	PVC	110	109.96	15	28	9604	90	0	90	1	3	2	1	0	0	0	0	0	7	7

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1128	ROSEMARY LN	0	8	416	PVC	110	109.96	2	28	11648	103	0	103	1	1	3	1	0	0	0	0	0	7	7
1129	JAMES WY	1975	12	13	PVC	110	110.13	40	28	364	66	0	66	1	3	1	3	0	0	0	0	0	5	5
1130	JAMES WY	1975	12	51	PVC	484	484.07	40	28	1428	66	0	66	1	3	1	3	0	0	0	0	0	7	7
1131	JAMES WY	1975	12	13	PVC	110	110.13	40	28	364	66	0	66	1	1	1	3	0	0	0	0	0	7	7
1132	JAMES WY	1975	12	13	PVC	110	110.13	40	28	364	66	0	66	1	1	1	3	0	0	0	0	0	5	5
1133	JAMES WY	1975	12	15	PVC	705	705.31	40	28	420	65	0	65	1	1	1	3	0	0	0	0	0	5	5
1134	JENNY PL	2001	12	941	PVC	20	19.85	14	28	26348	89	0	89	1	4	3	1	0	0	0	0	0	5	5
1135	LA CANADA	2000	12	15	PVC	705	705.31	15	28	420	90	0	90	1	3	1	1	0	0	0	0	0	6	6
1136	REFUGIO PL	1992	8	22	PVC	91	91.06	23	28	616	84	0	84	1	3	1	1	0	0	0	0	0	5	5
1137	RANCHO PKWY	1992	12	606	PVC	483	482.53	23	28	16968	82	0	82	1	3	3	2	0	0	0	0	0	8	8
1138	RANCHO PKWY	1992	12	6	PVC	483	482.53	23	28	168	84	0	84	1	1	1	2	0	0	0	0	0	6	6
1139	REFUGIO PL	1992	8	62	PVC	91	91.06	23	12	744	82	0	82	1	1	1	1	0	0	0	0	0	3	3
1140	REFUGIO PL	1992	8	315	PVC	90	89.58	23	12	3780	81	0	81	1	1	1	1	0	0	0	0	0	3	3
1141	REFUGIO PL	1992	8	286	PVC	80	80.03	23	12	3432	81	0	81	1	1	1	1	0	0	0	0	0	3	3
1142	REFUGIO PL	1992	8	64	PVC	80	80.03	23	12	768	82	0	82	1	1	1	1	0	0	0	0	0	3	3
1143	REFUGIO PL	1992	8	230	PVC	78	78.33	23	12	2760	81	0	81	1	2	1	1	0	0	0	0	0	3	3
1144	RANCHO PKWY	1992	12	9	PVC	391	391.47	23	28	252	84	0	84	1	1	1	2	0	0	0	0	0	5	5
1145	RANCHO PKWY	1992	12	9	PVC	391	391.47	23	28	252	84	0	84	1	2	1	2	0	0	0	0	0	4	4
1146	RANCHO PKWY	1992	12	11	PVC	391	391.47	23	28	308	84	0	84	1	2	1	2	0	0	0	0	0	5	5
1147	RANCHO PKWY	1992	12	109	PVC	391	391.47	23	28	3052	84	0	84	1	2	1	2	0	0	0	0	0	5	5
1148	REFUGIO PL	1992	8	269	PVC	91	91.06	23	28	7532	83	0	83	1	1	2	1	0	0	0	0	0	5	5
1149	RANCHO PKWY	1992	12	72	PVC	183	182.66	23	28	2016	84	0	84	1	1	1	2	0	0	0	0	0	4	4
1150	COLLADO CORTE	1995	6	14	PVC	0	0	20	8	112	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1151	COLLADO CORTE	1995	6	240	PVC	7	7.16	20	8	1920	84	0	84	1	1	1	1	0	0	0	0	0	3	3
1152	COLLADO CORTE	1995	6	13	PVC	7	7.16	20	12	156	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1153	AVENIDA DE DIAMANTE	1992	8	540	PVC	65	64.84	23	12	6480	81	0	81	1	1	2	1	0	0	0	0	0	4	4
1154	COLLADO CORTE	1995	8	63	PVC	50	49.7	20	12	756	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1155	VIA BANDOLERO	1995	8	506	PVC	80	79.52	20	12	6072	84	0	84	1	1	2	1	0	0	0	0	0	4	4
1156	AVENIDA DE DIAMANTE	1992	8	6	PVC	65	64.84	23	12	72	83	0	83	1	1	1	1	0	0	0	0	0	3	3
1157	VIA BANDOLERO	0	8	6	PVC	80	79.52	2	12	72	104	0	104	1	1	1	1	0	0	0	0	0	3	3
1158	VIA BANDOLERO	1995	8	150	PVC	80	79.52	20	12	1800	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1159	VIA BANDOLERO	1995	8	296	PVC	88	88.16	20	12	3552	85	0	85	1	1	1	1	0	0	0	0	0	3	3
1160	VIA POCA	1992	8	15	PVC	88	88.16	23	12	180	83	0	83	1	1	1	1	0	0	0	0	0	3	3
1161	VIA POCA	1992	8	52	PVC	112	111.63	23	12	624	82	0	82	1	2	1	1	0	0	0	0	0	3	3
1162	RANCHO PKWY	1992	12	241	PVC	209	208.81	23	28	6748	83	0	83	1	1	2	2	0	0	0	0	0	6	6
1163	VIA BANDOLERO	1995	8	466	PVC	89	88.88	20	12	5592	84	0	84	1	1	2	1	0	0	0	0	0	4	4
1164	VIA BANDOLERO	0	8	13	PVC	89	88.88	2	12	156	104	0	104	1	1	1	1	0	0	0	0	0	3	3
1165	VIA BANDOLERO	1995	8	412	PVC	89	88.88	20	12	4944	84	0	84	1	1	1	1	0	0	0	0	0	3	3
1166	N ALPINE ST	1960	4	5	ACP	3	3	55	42	210	46	0	46	1	1	1	1	0	0	0	0	0	3	3
1167	RODEO DR	1988	12	8	ACP	0	0	27	77	616	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
1168	BRISCO RD	1984	4	11	ACP	88	87.54	31	77	847	73	0	73	1	1	1	3	0	0	0	0	0	2	7	7
1169	BRISCO RD	1984	12	6	ACP	63	63.12	31	77	462	76	0	76	1	1	1	3	0	0	0	0	0	2	7	7
1170	LINDA DR	1987	6	8	ACP	0	0.35	28	55	440	74	0	74	1	3	1	1	0	0	0	0	0	2	5	5
1171	E GRAND AV	2002	10	8	ACP	519	518.99	13	69	552	90	0	90	1	1	1	4	0	0	0	0	0	8	8
1172	BRIGHTON AV	1972	6	9	ACP	165	165.49	43	55	495	59	0	59	1	1	1	1	0	0	0	0	0	5	5
1173	N ELM ST	1964	6	9	ACP	34	34.41	51	55	495	51	0	51	1	1	1	3	0	0	0	0	0	7	7
1174	STONECREST DR	2001	12	565	ACP	241	241.34	14	77	43505	90	0	90	1	2	3	1	0	0	0	0	0	7	7
1175	HILLCREST DR	1948	6	13	ACP	1	1.11	67	77	1001	37	0	37	1	1	1	1	0	0	0	0	0	6	6
1176	N HALCYON RD	1960	4	312	ACP	38	37.79	55	64	19968	49	0	49	1	1	3	3	0	0	4	0	0	11	11
1177	N HALCYON RD	1960	4	9	ACP	38	37.79	55	42	378	46	0	46	1	1	1	3	0	0	0	0	0	5	5
1178	BENNETT AV	1967	6	6	ACP	5	5.25	48	55	330	54	0	54	1	1	1	1	0	0	0	0	0	3	3
1179	N RENA ST	1979	6	6	ACP	5	5.25	36	42	252	65	0	65	1	1	1	1	0	0	0	0	0	3	3
1180	BENNETT AV	1967	6	6	ACP	5	5.25	48	55	330	54	0	54	1	1	1	1	0	0	0	0	0	3	3
1181	N RENA ST	1979	8	325	CIP	78	77.65	36	32	10400	65	0	65	1	1	3	1	0	0	0	0	0	5	5
1182	BENNETT AV	1967	6	358	ACP	25	25.42	48	55	19690	53	0	53	1	1	3	1	0	0	0	0	0	5	5
1183	BENNETT AV	1973	6	215	ACP	25	25.42	42	55	11825	59	0	59	1	1	3	1	0	0	0	0	0	5	5
1184	BENNETT AV	1973	6	201	ACP	25	25.42	42	55	11055	59	0	59	1	1	3	1	0	0	0	0	0	5	5
1185	BENNETT AV	1973	6	167	ACP	25	25.08	42	55	9185	59	0	59	1	1	2	1	0	0	0	0	0	4	4
1186	BENNETT AV	1973	6	7	ACP	0	0.01	42	55	385	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1187	BENNETT AV	1973	6	57	ACP	0	0.01	42	55	3135	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1188	LINDA DR	1981	6	75	ACP	11	10.75	34	55	4125	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1189	LINDA DR	1981	6	10	ACP	11	10.75	34	55	550	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1190	E GRAND AV	2002	12	76	PVC	71	71.34	13	28	2128	93	0	93	1	1	1	4	0	0	4	0	0	10	10
1191	LINDA DR	1981	6	7	ACP	11	10.75	34	55	385	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1192	LINDA DR	1981	6	147	ACP	11	10.75	34	55	8085	67	0	67	1	1	2	1	0	0	0	0	0	4	4
1193	E GRAND AV	1981	12	6	PVC	62	61.82	34	28	168	72	0	72	1	1	1	4	0	0	0	0	0	6	6
1194	E GRAND AV	1981	12	6	PVC	62	61.82	34	8	48	68	0	68	1	1	1	4	0	0	0	0	0	6	6
1195	E GRAND AV	1981	12	40	PVC	62	61.82	34	28	1120	72	0	72	1	1	1	4	0	0	0	0	0	6	6
1196	E GRAND AV	1981	6	279	ACP	11	10.81	34	55	15345	70	0	70	1	1	3	4	0	0	0	0	0	8	8
1197	E GRAND AV	1981	6	83	ACP	11	10.81	34	55	4565	67	0	67	1	1	1	4	0	0	0	0	0	6	6
1198	BENNETT AV	1973	6	42	ACP	0	0.01	42	55	2310	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1199	LINDA DR	1981	6	92	ACP	3	2.85	34	55	5060	67	0	67	1	1	2	1	0	0	0	0	0	4	4
1200	LINDA DR	1981	6	11	ACP	3	2.85	34	55	605	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1201	LINDA DR	1981	6	242	ACP	3	2.85	34	55	13310	67	0	67	1	1	3	1	0	0	0	0	0	5	5
1202	RODEO DR	1988	10	9	ACP	17	17.04	27	77	693	77	0	77	1	1	1	2	0	0	0	0	0	6	6
1203	BRISCO RD	1984	12	317	ACP	63	63.12	31	77	24409	72	0	72	1	1	3	3	0	0	0	0	0	9	9
1204	W BRANCH ST	1977	12	23	ACP	52	52.3	38	77	1771	66	0	66	1	1	1	4	0	0	0	0	0	8	8
1205	W BRANCH ST	1977	12	5	ACP	52	52.3	38	77	385	66	0	66	1	1	1	4	0	0	0	0	0	8	8
1206	W BRANCH ST	1977	12	258	ACP	63	63.12	38	77	19866	65	0	65	1	1	3	4	0	0	0	0	0	10	10
1207	W BRANCH ST	1977	12	5	ACP	52	52.3	38	77	385	66	0	66	1	1	1	4	0	0	0	0	0	8	8
1208	BRISCO RD	1984	12	6	ACP	63	63.12	31	77	462	73	0	73	1	1	1	3	0	0	0	0	0	7	7
1209	BRISCO RD	1984	12	277	PVC	103	103.2	31	28	7756	75	0	75	1	1	2	3	0	0	0	0	0	8	8
1210	S HWY 101	0	12	326	ACP	63	63.12	2	77	25102	101	0	101	1	1	3	5	0	0	0	0	0	11	11
1211	BRISCO RD	1984	4	6	ACP	88	87.54	31	42	252	70	0	70	1	1	1	3	0	0	0	0	0	7	7
1212	EL CAMINO REAL	1953	4	1040	ACP	88	87.54	62	42	43680	36	0	36	1	3	3	3	0	0	0	0	0	9	9
1213	EL CAMINO REAL	1953	4	22	ACP	187	186.68	62	77	1694	42	0	42	1	1	1	3	0	0	0	0	0	9	9
1214	EL CAMINO REAL	1953	4	9	ACP	187	186.68	62	42	378	39	0	39	1	2	1	3	0	0	0	0	0	7	7
1215	EL CAMINO REAL	1953	8	525	PVC	274	274.22	62	12	6300	42	0	42	1	1	2	3	0	0	0	0	0	9	9
1216	EL CAMINO REAL	1953	10	4	DIP	0	0	62	24	96	51	0	51	1	1	1	3	0	0	0	0	0	7	7
1217	W BRANCH ST	1977	12	549	PVC	103	103.2	38	28	15372	67	0	67	1	1	3	4	0	0	0	0	2	12	12
1218	BRISCO RD	1984	12	116	ACP	0	0	31	87	10092	73	0	73	1	1	3	3	0	0	0	0	0	9	9
1219	BRISCO RD	1984	8	33	PVC	274	274.22	31	5	165	70	0	70	1	2	1	3	0	0	0	0	0	7	7
1220	EL CAMINO REAL	1953	12	4	ACP	296	296.34	62	77	308	42	0	42	1	2	1	3	0	0	0	0	2	10	10
1221	EL CAMINO REAL	1953	12	316	ACP	296	296.34	62	77	24332	41	0	41	1	2	3	3	0	0	0	0	2	12	12

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1222	BRISCO RD	1982	8	176	PVC	274	273.73	33	12	2112	72	0	72	1	1	1	3	0	0	0	0	2	0	8	8
1223	EL CAMINO REAL	1953	10	537	DIP	0	0	62	40	21480	41	0	41	1	2	3	3	0	0	0	0	0	2	9	9
1224	BRISCO RD	1982	8	133	PVC	0	0	33	12	1596	72	0	72	1	2	1	3	0	0	0	0	2	0	8	8
1225	BRISCO RD	1982	8	219	PVC	264	264.1	33	12	2628	72	0	72	1	2	1	3	0	0	0	0	2	0	8	8
1226	BRISCO RD	1982	8	14	PVC	264	264.1	33	12	168	73	0	73	1	2	1	3	0	0	0	0	2	0	8	8
1227	LINDA DR	1987	8	141	PVC	259	258.52	28	12	1692	77	0	77	1	1	1	1	0	0	0	0	2	0	6	6
1228	BRISCO RD	1982	6	55	ACP	0	0.35	33	55	3025	69	0	69	1	1	1	3	0	0	0	0	2	0	7	7
1229	BRISCO RD	1982	6	13	ACP	0	0.35	33	55	715	69	0	69	1	1	1	3	0	0	0	0	2	0	7	7
1230	LINDA DR	1981	6	673	ACP	0	0.35	34	55	37015	66	0	66	1	2	3	1	0	0	0	0	2	0	7	7
1231	LINDA DR	1987	8	198	PVC	256	255.52	28	12	2376	77	0	77	1	2	1	1	0	0	0	0	2	0	6	6
1232	BRISCO RD	1982	6	35	PVC	0	0	33	12	420	72	0	72	1	1	1	3	0	0	0	0	2	0	8	8
1233	LINDA DR	1987	6	6	PVC	0	0	28	8	48	77	0	77	1	1	1	1	0	0	0	0	2	0	5	5
1234	BRISCO RD	1982	6	16	PVC	0	0	33	8	128	72	0	72	1	1	1	3	0	0	0	0	2	0	7	7
1235	BRISCO RD	1982	6	329	PVC	0	0	33	8	2632	71	0	71	1	2	1	3	0	0	0	0	2	0	7	7
1236	BRISCO RD	1982	8	66	PVC	256	255.52	33	12	792	72	0	72	1	2	1	3	0	0	0	0	2	0	8	8
1237	E GRAND AV	2002	8	281	PVC	255	255.25	13	12	3372	91	0	91	1	1	1	4	0	0	0	0	2	0	9	9
1238	E GRAND AV	1981	12	14	PVC	62	61.82	34	28	392	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1239	E GRAND AV	1981	12	178	PVC	63	62.52	34	28	4984	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1240	E GRAND AV	1981	12	33	PVC	63	62.52	34	28	924	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1241	E GRAND AV	1981	12	66	PVC	63	62.52	34	28	1848	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1242	E GRAND AV	1981	12	81	PVC	63	63.33	34	28	2268	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1243	E GRAND AV	1981	12	127	PVC	63	63.33	34	28	3556	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1244	E GRAND AV	1981	12	19	PVC	63	63.33	34	28	532	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1245	E GRAND AV	1981	12	128	PVC	64	63.7	34	28	3584	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1246	E GRAND AV	1981	12	37	PVC	64	63.7	34	28	1036	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1247	E GRAND AV	1981	12	5	PVC	64	63.7	34	28	140	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1248	E GRAND AV	1981	12	12	PVC	64	63.7	34	28	336	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1249	E GRAND AV	1981	12	38	PVC	64	63.7	34	28	1064	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1250	E GRAND AV	1981	12	95	PVC	64	63.7	34	28	2660	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1251	E GRAND AV	1981	12	170	PVC	66	66.02	34	28	4760	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1252	E GRAND AV	1981	12	52	PVC	66	66.02	34	28	1456	72	0	72	1	1	1	4	0	0	0	0	0	0	6	6
1253	E GRAND AV	2002	8	38	PVC	255	255.25	13	28	1064	93	0	93	1	1	1	4	0	0	0	0	0	0	6	6
1254	LINDA DR	1981	6	1057	ACP	0	0.35	34	87	91959	68	0	68	1	1	5	1	0	0	0	0	2	0	9	9
1255	E GRAND AV	2002	12	52	PVC	189	189.23	13	28	1456	93	0	93	1	1	1	4	0	0	0	0	0	0	6	6
1256	E GRAND AV	2002	14	55	ACP	10	10.06	13	87	4785	91	0	91	1	1	1	4	0	0	0	0	0	0	6	6
1257	E GRAND AV	2002	12	7	ACP	181	181.36	13	77	539	91	0	91	1	1	1	4	0	0	0	0	0	0	6	6
1258	E GRAND AV	2002	12	115	ACP	181	181.36	13	77	8855	93	0	93	1	1	2	4	0	0	0	0	0	0	7	7
1259	S ELM ST	1964	12	75	ACP	181	181.36	51	77	5775	55	0	55	1	2	2	3	0	0	0	0	0	0	6	6
1260	E GRAND AV	2002	10	7	ACP	342	341.87	13	69	483	90	0	90	1	4	1	4	0	0	0	0	0	0	7	7
1261	E GRAND AV	2002	10	9	ACP	342	341.87	13	77	693	93	0	93	1	2	1	4	0	0	0	0	0	0	9	9
1262	E GRAND AV	2002	10	142	ACP	342	341.87	13	69	9798	90	0	90	1	3	2	4	0	0	0	0	0	0	8	8
1263	E GRAND AV	2002	10	566	ACP	519	518.99	13	69	39054	89	0	89	1	4	3	2	0	0	0	0	2	0	10	10
1264	BRIGHTON AV	1972	6	11	ACP	165	165.49	43	69	759	61	0	61	1	3	1	1	0	0	0	0	2	0	8	8
1265	BRIGHTON AV	1972	6	295	ACP	165	165.49	43	69	20355	60	0	60	1	1	3	1	0	0	0	0	2	0	9	9
1266	N ELM ST	1964	6	185	ACP	34	34.41	51	55	10175	51	0	51	1	4	3	3	0	0	0	0	2	0	9	9
1267	N ELM ST	1964	6	39	ACP	34	34.41	51	69	2691	53	0	53	1	4	1	3	0	0	0	0	2	0	10	10
1268	N ELM ST	1964	10	443	ACP	732	731.77	51	69	30567	52	0	52	1	1	3	3	0	0	0	0	2	0	12	12
1269	MONTEGO ST	1959	6	29	ACP	0	0	56	55	1595	45	0	45	1	1	1	1	0	0	0	0	2	0	5	5
1270	MONTEGO ST	1959	6	7	ACP	0	0	56	55	385	45	0	45	1	1	1	1	0	0	0	0	2	0	5	5
1271	MONTEGO ST	1959	4	7	PVC	0	0.46	56	5	35	48	0	48	1	1	1	1	0	0	0	0	2	0	5	5
1272	MONTEGO ST	1959	4	165	PVC	0	0.46	56	5	825	47	0	47	1	1	1	1	0	0	0	0	2	0	5	5
1273	MONTEGO ST	1959	6	8	ACP	0	0	56	55	440	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1274	MONTEGO ST	1959	4	32	PVC	0	0.46	56	5	160	47	0	47	1	4	1	1	0	0	0	0	2	0	5	5
1275	MONTEGO ST	1959	10	6	ACP	732	731.77	56	69	414	48	0	48	1	4	1	1	0	0	0	0	2	0	8	8
1276	MONTEGO ST	1959	10	4	ACP	732	731.77	56	69	276	48	0	48	1	1	1	1	0	0	0	0	2	0	8	8
1277	MONTEGO ST	1959	6	6	ACP	0	0	56	55	330	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1278	MONTEGO ST	1959	10	4	ACP	732	731.77	56	55	220	47	0	47	1	1	1	1	0	0	0	0	2	0	5	5
1279	MONTEGO ST	1959	6	128	ACP	0	0	56	55	7040	45	0	45	1	1	2	1	0	0	0	0	2	0	6	6
1280	MONTEGO ST	1959	6	13	ACP	0	0	56	55	715	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1281	MONTEGO ST	1959	10	18	ACP	732	731.77	56	55	990	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1282	MONTEGO ST	1959	6	4	ACP	1	1.12	56	55	220	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1283	MONTEGO ST	1959	10	4	ACP	23	22.94	56	69	276	47	0	47	1	1	1	1	0	0	0	0	2	0	5	5
1284	MONTEGO ST	1959	6	10	ACP	1	1.12	56	55	550	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1285	MONTEGO ST	1959	10	6	ACP	23	22.94	56	77	462	50	0	50	1	1	1	1	0	0	0	0	2	0	5	5
1286	MONTEGO ST	1959	10	142	ACP	23	22.94	56	69	9798	47	0	47	1	1	2	1	0	0	0	0	2	0	6	6
1287	MONTEGO ST	1959	10	6	ACP	23	22.94	56	69	414	47	0	47	1	1	1	1	0	0	0	0	2	0	5	5
1288	MONTEGO ST	1959	12	6	ACP	49	49.34	56	77	462	49	0	49	1	1	1	1	0	0	0	0	2	0	5	5
1289	STONECREST DR	2001	12	789	ACP	49	49.34	14	77	60753	88	0	88	1	1	4	1	0	0	0	0	2	0	8	8
1290	MONTEGO ST	1959	12	153	PVC	35	34.52	56	28	4284	50	0	50	1	1	1	1	0	0	0	0	2	0	5	5
1291	MONTEGO ST	1959	8	10	ACP	0	0	56	64	640	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1292	MONTEGO ST	1959	12	217	PVC	32	32.33	56	28	6076	50	0	50	1	1	2	1	0	0	0	0	2	0	6	6
1293	ALDER ST	0	6	12	ACP	41	40.57	2	55	660	100	0	100	1	1	1	1	0	0	0	2	0	0	5	5
1294	MAPLE ST	1967	6	7	ACP	15	15.44	48	55	385	54	0	54	1	1	1	1	0	0	0	2	0	0	5	5
1295	FAIR OAKS AV	1982	4	8	ACP	22	22.05	33	42	336	68	0	68	1	1	1	3	5	0	0	2	2	0	14	14
1296	S HALCYON RD	1960	6	8	ACP	3	3.34	55	55	440	47	0	47	1	1	1	3	0	0	0	2	0	0	7	7
1297	ASH ST	1966	10	17	ACP	143	142.63	49	55	935	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
1298	S ELM ST	1964	14	5	ACP	13	12.74	51	87	435	53	0	53	1	1	1	3	0	0	0	2	0	2	9	9
1299	N RENA ST	1979	6	9	PVC	72	71.73	36	8	72	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
1300	N RENA ST	1979	8	6	CIP	78	77.65	36	50	300	51	0	51	1	1	1	1	0	0	0	4	0	0	7	7
1301	N RENA ST	1979	6	6	PVC	72	71.73	36	8	48	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
1302	N RENA ST	1979	6	5	PVC	72	71.73	36	8	40	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
1303	N RENA ST	1979	8	325	CIP	78	77.65	36	50	16250	50	0	50	1	1	3	1	0	0	0	4	0	0	9	9
1304	N RENA ST	1979	6	128	PVC	16	15.71	36	8	1024	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
1305	N RENA ST	1979	6	6	PVC	72	71.73	36	12	72	69	0	69	1	1	1	1	0	0	0	4	0	0	7	7
1306	N HALCYON RD	1960	8	12	ACP	55	55.19	55	64	768	47	0	47	1	1	1	3	0	0	0	4	0	0	9	9
1307	N RENA ST	1979	8	136	PVC	56	56.01	36	12	1632	66	0	66	1	1	1	1	0	0	0	4	0	0	7	7
1308	N RENA ST	1979	6	80	PVC	15	14.96	36	8	640	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
1309	N HALCYON RD	1960	8	53	ACP	55	55.19	55	64	3392	47	0	47	1	1	1	3	0	0	0	4	0	0	9	9
1310	E GRAND AV	2002	12	307	PVC	196	196.28	13	28	8596	93	0	93	1	1	2	4	0	0	0	4	0	0	11	11
1311	E GRAND AV	2002	8	4	ACP	178	177.91	13	64	256	89	0	89	1	1	1	4	0	0	0	4	0	0	10	10
1312	E GRAND AV	2002	8	4	ACP	178	177.91	13	77	308	93	0	93	1	1	1	4	0	0	0	4	0	0	10	10
1313	E GRAND AV	2002	12	219	PVC	70	69.93	13	28	6132	93	0	93	1	1	2	4	0	0	0	4	2	0	13	13
1314	E GRAND AV	2002	8	46	ACP	178	177.91	13	64	2944	89	0	89	1	1	1	4	0	0	0	4	0	0	10	10
1315	S HALCYON RD	1960	8	6	ACP	0	0	55	64	384	47	0	47	1	1	1	3	0	0	0	4	0	0	9	9

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1316	S HALCYON RD	1960	8	12	ACP	0	0	55	64	768	47	0	47	1	1	1	3	0	0	4	0	0	0	9	9
1317	E GRAND AV	2002	12	25	PVC	70	69.93	13	28	700	93	0	93	1	1	1	4	0	0	4	2	0	0	12	12
1318	E GRAND AV	2002	12	46	PVC	70	69.93	13	28	1288	93	0	93	1	1	1	4	0	0	4	2	0	0	12	12
1319	ALDER ST	0	6	132	ACP	109	108.58	2	77	10164	104	0	104	1	1	3	1	0	0	4	2	0	0	11	11
1320	E GRAND AV	1981	12	199	PVC	39	38.83	34	28	5572	72	0	72	1	1	2	4	0	0	4	2	0	0	13	13
1321	E GRAND AV	2002	6	8	ACP	109	108.58	13	77	616	93	0	93	1	1	1	4	0	0	4	2	0	0	12	12
1322	E GRAND AV	2002	12	68	PVC	39	38.83	13	28	1904	93	0	93	1	1	1	4	0	0	4	2	0	0	12	12
1323	E GRAND AV	1981	12	89	PVC	45	44.71	34	28	2492	72	0	72	1	1	1	4	0	0	4	2	0	0	12	12
1324	E GRAND AV	1981	12	74	PVC	45	45.35	34	28	2072	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1325	E GRAND AV	1981	12	31	PVC	45	45.35	34	28	868	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1326	E GRAND AV	1981	12	7	PVC	45	45.35	34	28	196	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1327	E GRAND AV	1981	12	131	PVC	45	45.35	34	28	3668	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1328	E GRAND AV	1981	12	53	PVC	50	50.36	34	28	1484	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1329	E GRAND AV	1981	12	93	PVC	50	50.36	34	28	2604	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1330	E GRAND AV	1981	12	130	PVC	51	51	34	28	3640	72	0	72	1	1	1	4	0	0	4	0	0	0	10	10
1331	SUNSET DR	1953	4	11	ACP	17	17.04	62	42	462	39	0	39	1	1	1	1	0	0	0	2	0	0	5	5
1332	SUNSET DR	1953	4	7	ACP	11	10.64	62	42	294	39	0	39	1	1	1	1	0	0	0	0	0	0	3	3
1333	SUNSET DR	1953	6	42	ACP	15	15.12	62	55	2310	40	0	40	1	1	1	1	0	0	0	0	0	0	3	3
1334	SUNSET DR	1953	4	1028	ACP	17	17.04	62	42	43176	36	0	36	1	1	3	1	0	0	0	2	0	0	7	7
1335	WALNUT ST	1967	6	150	ACP	15	15.12	48	55	8250	53	0	53	1	1	2	1	0	0	0	0	0	0	4	4
1336	SUNSET DR	1953	4	9	ACP	11	10.64	62	55	495	40	0	40	1	1	1	1	0	0	0	0	0	0	3	3
1337	SUNSET DR	1953	4	70	ACP	11	10.64	62	42	2940	39	0	39	1	1	1	1	0	0	0	0	0	0	3	3
1338	SUNSET DR	1953	6	12	ACP	20	19.56	62	55	660	40	0	40	1	1	1	1	0	0	0	0	0	0	3	3
1339	SUNSET DR	1953	4	512	ACP	11	10.64	62	42	21504	37	0	37	1	1	3	1	0	0	0	0	0	0	5	5
1340	SUNSET DR	1953	6	172	ACP	20	19.56	62	55	9460	39	0	39	1	1	2	1	0	0	0	0	0	0	4	4
1341	SUNSET DR	1953	6	43	ACP	20	19.56	62	55	2365	40	0	40	1	1	1	1	0	0	0	0	0	0	3	3
1342	PINE ST	1987	6	49	ACP	17	17.19	28	55	2695	73	0	73	1	1	1	1	0	0	0	0	0	0	3	3
1343	PINE ST	1987	6	548	ACP	17	17.19	28	55	30140	72	0	72	1	1	3	1	0	0	0	0	0	0	5	5
1344	MAPLE ST	1967	6	60	ACP	4	4.17	48	55	3300	53	0	53	1	1	1	1	0	0	0	0	0	0	3	3
1345	MAPLE ST	1967	6	438	ACP	4	4.17	48	55	24090	52	0	52	1	1	3	1	0	0	0	0	0	0	5	5
1346	MAPLE ST	1967	6	6	ACP	4	4.17	48	55	330	54	0	54	1	2	1	1	0	0	0	0	0	0	3	3
1347	S ELM ST	1964	4	186	ACP	34	34.32	51	69	12834	51	0	51	1	1	3	3	0	0	0	0	0	0	8	8
1348	S ELM ST	1964	4	16	ACP	34	34.32	51	42	672	50	0	50	1	2	1	3	0	0	0	0	0	0	5	5
1349	POPLAR ST	1951	10	301	ACP	245	244.92	64	69	20769	38	0	38	1	1	3	1	0	0	0	0	0	0	6	6
1350	JUNIPER ST	1980	6	18	ACP	57	56.93	35	55	990	67	0	67	1	2	1	1	0	0	0	0	0	0	3	3
1351	POPLAR ST	1951	10	8	ACP	245	244.92	64	69	552	39	0	39	1	1	1	1	0	0	0	0	0	0	4	4
1352	POPLAR ST	1951	6	306	ACP	60	60.4	64	87	26622	39	0	39	1	2	3	1	0	0	0	0	0	0	5	5
1353	S ELM ST	1964	10	279	ACP	245	244.92	51	69	19251	51	0	51	1	1	3	3	0	0	0	0	0	0	8	8
1354	S ELM ST	1964	14	534	ACP	11	10.69	51	87	46458	52	0	52	1	1	3	3	0	0	0	0	0	0	7	7
1355	S ELM ST	1964	14	33	ACP	11	10.69	51	87	2871	53	0	53	1	1	1	3	0	0	0	0	0	0	5	5
1356	MAPLE ST	1967	6	28	ACP	41	40.57	48	55	1540	54	0	54	1	1	1	1	0	0	0	2	0	0	5	5
1357	MAPLE ST	1967	6	363	ACP	41	40.57	48	55	19965	53	0	53	1	1	3	1	0	0	0	2	0	0	7	7
1358	MAPLE ST	1967	6	297	ACP	22	22.5	48	55	16335	53	0	53	1	1	3	1	0	0	0	2	0	0	7	7
1359	WALNUT ST	1967	6	304	ACP	22	22.5	48	55	16720	53	0	53	1	1	3	1	0	0	0	2	0	0	7	7
1360	MAPLE ST	1967	6	6	ACP	22	22.5	48	55	330	54	0	54	1	1	1	1	0	0	0	2	0	0	5	5
1361	MAPLE ST	1967	6	4	ACP	15	15.44	48	55	220	54	0	54	1	1	1	1	0	0	0	2	0	0	5	5
1362	MAPLE ST	1967	6	319	ACP	15	15.44	48	55	17545	53	0	53	1	1	3	1	0	0	0	2	0	0	7	7
1363	MAPLE ST	1967	6	498	ACP	14	14.33	48	55	27390	52	0	52	1	1	3	1	0	0	0	2	0	0	7	7
1364	S ELM ST	1964	6	41	ACP	29	28.96	51	55	2255	50	0	50	1	1	1	3	0	0	0	0	0	0	5	5
1365	S ELM ST	1964	10	114	ACP	228	227.96	51	69	7866	52	0	52	1	1	2	3	0	0	0	0	0	0	6	6
1366	S ELM ST	1964	10	34	ACP	228	227.96	51	55	1870	50	0	50	1	2	1	3	0	0	0	0	0	0	5	5
1367	S ELM ST	1964	10	24	ACP	228	227.96	51	69	1656	52	0	52	1	1	1	3	0	0	0	0	0	0	6	6
1368	S ELM ST	1964	14	685	ACP	11	10.69	51	87	59595	51	0	51	1	2	4	3	0	0	0	0	0	0	8	8
1369	S ELM ST	1964	10	10	ACP	233	232.87	51	69	690	52	0	52	1	2	1	3	0	0	0	0	0	0	6	6
1370	S ELM ST	1964	10	135	ACP	230	229.56	51	69	9315	51	0	51	1	1	2	3	0	0	0	0	0	0	7	7
1371	ALDER ST	1961	6	334	ACP	38	37.99	54	30	10020	3	0	3	9	1	3	1	0	0	0	2	0	0	7	63
1372	ALDER ST	1961	6	8	ACP	37	36.97	54	55	440	48	0	48	1	1	1	1	5	0	0	2	2	0	12	12
1373	ALDER ST	2001	4	9	GALV	4	4.41	14	26	234	45	0	45	1	1	1	1	5	0	0	2	2	0	12	12
1374	ALDER ST	2001	4	39	GALV	4	4.41	14	26	1014	45	0	45	1	1	1	1	5	0	0	2	2	0	12	12
1375	WOOD PL	1964	4	187	ACP	0	0.32	51	42	7854	49	0	49	1	1	2	1	0	0	0	2	0	0	6	6
1376	ALDER ST	1961	4	237	ACP	6	6.28	54	55	13035	47	0	47	1	1	3	1	5	0	0	2	2	0	14	14
1377	DODSON WY	1964	4	8	ACP	6	6.28	51	42	336	50	0	50	1	1	1	1	5	0	0	2	2	0	12	12
1378	WOOD PL	1964	4	462	ACP	6	6.28	51	42	19404	49	0	49	1	1	3	1	5	0	0	2	2	0	14	14
1379	S HALCYON RD	1960	8	316	ACP	164	163.6	55	64	20224	46	0	46	1	1	3	3	0	0	4	2	0	0	13	13
1380	PARK WY	1958	6	386	ACP	3	3.34	57	55	21230	44	0	44	1	1	3	1	0	0	0	2	0	0	7	7
1381	S HALCYON RD	1960	6	22	ACP	3	3.34	55	64	1408	47	0	47	1	1	1	3	0	0	4	2	0	0	11	11
1382	S HALCYON RD	1960	8	181	CIP	157	157.03	55	50	9050	47	0	47	1	1	2	3	5	0	4	2	0	0	17	17
1383	PARK WY	1958	6	168	ACP	3	3.34	57	64	10752	29	0	29	1	1	3	1	0	0	4	2	0	0	11	11
1384	S HALCYON RD	1960	8	386	ACP	150	150.09	55	64	24704	46	0	46	1	1	3	3	5	0	4	2	2	0	20	20
1385	S HALCYON RD	1960	8	7	ACP	150	150.09	55	55	385	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1386	S HALCYON RD	1960	8	7	ACP	150	150.09	55	64	448	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1387	S HALCYON RD	1960	6	411	ACP	39	38.79	55	55	22605	45	0	45	1	1	3	3	5	0	0	2	2	0	16	16
1388	S HALCYON RD	1960	8	10	ACP	150	150.09	55	64	640	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1389	S ELM ST	1964	10	12	ACP	171	170.82	51	69	828	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
1390	S ELM ST	1964	10	231	ACP	181	181.06	51	69	15939	51	0	51	1	1	3	3	0	0	0	0	0	0	7	7
1391	S ELM ST	1964	14	300	ACP	11	10.69	51	87	26100	52	0	52	1	1	3	3	0	0	0	0	0	0	7	7
1392	S ELM ST	1964	10	19	ACP	181	181.06	51	69	1311	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
1393	VALLEY RD	1967	12	13	ACP	132	131.81	48	77	1001	55	0	55	1	1	1	1	0	0	0	0	2	0	5	5
1394	FAIR OAKS AV	1982	10	17	ACP	184	184.35	33	69	1173	70	0	70	1	1	1	3	0	0	0	0	2	0	7	7
1395	FAIR OAKS AV	1982	10	36	ACP	53	52.54	33	69	2484	70	0	70	1	1	1	3	0	0	0	0	2	0	7	7
1396	FAIR OAKS AV	1982	12	24	ACP	132	131.81	33	69	1656	70	0	70	1	1	1	3	0	0	0	0	2	0	7	7
1397	FAIR OAKS AV	1982	10	17	ACP	184	184.35	33	64	1088	69	0	69	1	1	1	3	0	0	0	0	2	0	7	7
1398	FAIR OAKS AV	1982	10	60	ACP	184	184.35	33	64	3840	69	0	69	1	1	1	3	0	0	0	0	2	0	7	7
1399	FAIR OAKS AV	1982	8	628	ACP	184	184.35	33	64	40192	67	0	67	1	1	3	3	0	0	0	0	2	0	9	9
1400	VALLEY RD	1967	10	12	ACP	53	52.54	48	69	828	55	0	55	1	1	1	1	0	0	0	0	2	0	5	5
1401	VALLEY RD	1967	10	308	ACP	53	52.54	48	69	21252	54	0	54	1	1	3	1	0	0	0	0	2	0	7	7
1402	FAIR OAKS AV	0	12	6	ACP	131	131.35	2	77	462	101	0	101	1	1	1	3	0	0	0	0	0	0	5	5
1403	FAIR OAKS AV	0	12	5	ACP	131	131.35	2	77	385	102	0	102	1	1	1	3	0	0	0	0	0	0	5	5
1404	FAIR OAKS AV	0	12	284	ACP	131	131.35	2	77	21868	101	0	101	1	1	3	3	0	0	0	0	0	0	7	7
1405	E GRAND AV	2002	6	8	ACP	83	83.15	13	55	440	89	0	89	1	1	1	4	0	0	0	0	0	0	6	6
1406	DODSON WY	1964	6	334	ACP	18	18.5	51	64	21376	50	0	50	1	1	3	1	5	0	0	2	2	0	14	14
1407	S RENA ST	1978	8	379	ACP	43	42.65	37	64	24256	64	0	64	1	1	3	1	5	0	0	2	2	0	14	14
1408	DODSON WY	1964	6	105	ACP	5	4.78	51	55	5775	50	0	50	1	1	2	1	5	0	0	2	0	0	11	11
1409	S ALPINE ST	1964	8	65	ACP	16	16.4	51	64	4160	51	0	51	1	1	1	1	5	0	0	2	0	0	10	10

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1410	DODSON WY	1964	8	12	ACP	16	16.4	51	64	768	51	0	51	1	1	1	1	5	0	0	2	0	0	10	10
1411	DODSON WY	1964	8	11	ACP	16	16.4	51	64	704	51	0	51	1	1	1	1	5	0	0	2	0	0	10	10
1412	CERRO VISTA CR	1980	6	308	ACP	9	9	35	55	16940	66	0	66	1	1	3	1	5	0	0	0	2	0	12	12
1413	S ALPINE ST	1964	6	7	ACP	29	29.3	51	55	385	51	0	51	1	1	1	1	5	0	0	2	2	0	12	12
1414	NEWMAN DR	1980	6	330	ACP	5	4.78	35	55	18150	66	0	66	1	1	3	1	5	0	0	2	0	0	12	12
1415	S ALPINE ST	1964	6	7	ACP	5	4.78	51	55	385	51	0	51	1	1	1	1	5	0	0	2	0	0	10	10
1416	S ALPINE ST	1964	4	253	CIP	13	12.68	51	18	4554	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
1417	S ALPINE ST	1964	4	7	CIP	13	12.68	51	32	224	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
1418	TAYLOR PL	1979	6	244	ACP	58	57.63	36	55	13420	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
1419	TAYLOR PL	1979	6	90	ACP	0	0	36	55	4950	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
1420	TAYLOR PL	1979	6	7	ACP	31	31.25	36	55	385	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
1421	S ALPINE ST	0	6	10	ACP	58	57.63	2	55	550	100	0	100	1	1	1	1	0	0	0	0	0	0	3	3
1422	CORNWALL AV	1976	4	332	CIP	11	10.76	39	18	5976	61	0	61	1	1	2	1	0	0	0	0	0	0	4	4
1423	DODSON WY	1964	6	25	ACP	65	65.15	51	55	1375	51	0	51	1	1	1	1	5	0	0	2	2	0	12	12
1424	PARK WY	1958	6	8	ACP	82	82.03	57	55	440	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
1425	PARK WY	1958	6	9	ACP	82	82.03	57	55	495	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
1426	PARK WY	1958	6	44	ACP	82	82.03	57	55	2420	45	0	45	1	1	1	1	0	0	0	2	0	0	5	5
1427	S RENA ST	1978	6	242	ACP	82	82.03	37	55	13310	64	0	64	1	1	3	1	0	0	0	2	0	0	7	7
1428	NEWMAN DR	1980	6	32	ACP	0	0	35	55	1760	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
1429	NEWMAN DR	1980	6	185	ACP	5	4.78	35	55	10175	66	0	66	1	1	3	1	5	0	0	0	0	0	10	10
1430	S ALPINE ST	1964	6	205	ACP	5	4.78	51	55	11275	50	0	50	1	1	3	1	5	0	0	2	0	0	12	12
1431	NEWMAN DR	1980	6	188	ACP	0	0	35	55	10340	66	0	66	1	1	3	1	5	0	0	0	0	0	10	10
1432	EMAN CT	1960	6	40	ACP	4	3.62	55	55	2200	47	0	47	1	1	1	1	0	0	0	0	0	0	3	3
1433	EMAN CT	1960	6	443	ACP	4	3.62	55	55	24365	45	0	45	1	1	3	1	0	0	0	0	0	0	5	5
1434	S ALPINE ST	1964	6	49	ACP	11	10.52	51	55	2695	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
1435	S ALPINE ST	1964	6	10	ACP	11	10.52	51	55	550	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
1436	S ALPINE ST	1964	4	6	CIP	13	12.68	51	18	108	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
1437	TAYLOR PL	1979	6	368	ACP	28	27.95	36	55	20240	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
1438	S ALPINE ST	1964	4	75	CIP	13	12.68	51	18	1350	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
1439	S ALPINE ST	0	6	23	ACP	58	57.63	2	42	966	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
1440	S ALPINE ST	0	6	471	ACP	58	57.63	2	55	25905	98	0	98	1	1	3	1	0	0	0	0	0	0	5	5
1441	S ALPINE ST	0	4	129	CIP	13	13.38	2	18	2322	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
1442	S ALPINE ST	1964	4	15	CIP	13	13.38	51	18	270	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
1443	TAYLOR PL	1979	6	43	ACP	31	31.25	36	55	2365	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
1444	TAYLOR PL	1979	6	133	ACP	31	31.25	36	55	7315	65	0	65	1	1	2	1	0	0	0	0	0	0	4	4
1445	TAYLOR PL	1979	6	66	ACP	28	27.95	36	55	3630	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
1446	E GRAND AV	2002	6	67	ACP	61	60.87	13	55	3685	89	0	89	1	1	1	4	0	0	0	0	0	0	6	6
1447	N RENA ST	1979	6	113	PVC	14	13.95	36	8	904	68	0	68	1	2	1	1	0	0	0	0	0	0	3	3
1448	N ALPINE ST	0	4	12	ACP	11	10.76	2	77	924	104	0	104	1	2	1	1	0	0	0	4	0	0	8	8
1449	E GRAND AV	2002	6	101	ACP	61	60.87	13	77	7777	93	0	93	1	2	2	4	0	0	4	0	0	0	12	12
1450	N ALPINE ST	0	6	14	ACP	61	60.87	2	77	1078	104	0	104	1	1	1	1	0	0	0	4	0	0	8	8
1451	E GRAND AV	2002	4	34	ACP	11	10.76	13	42	1428	88	0	88	1	1	1	4	0	0	0	0	0	0	6	6
1452	E GRAND AV	2002	6	11	ACP	61	60.87	13	55	605	89	0	89	1	1	1	4	0	0	0	0	0	0	6	6
1453	E GRAND AV	2002	4	8	ACP	11	10.76	13	42	336	88	0	88	1	2	1	4	0	0	0	0	0	0	6	6
1454	E GRAND AV	2002	4	158	ACP	11	10.76	13	77	12166	93	0	93	1	2	3	4	0	0	0	4	0	0	13	13
1455	N RENA ST	1979	6	23	ACP	83	83.15	36	77	1771	70	0	70	1	2	1	1	0	0	0	4	0	0	8	8
1456	E GRAND AV	2002	6	8	PVC	14	13.95	13	28	224	93	0	93	1	2	1	4	0	0	0	4	0	0	11	11
1457	E GRAND AV	2002	12	160	PVC	269	268.78	13	28	4480	93	0	93	1	1	1	4	0	0	4	0	0	0	11	11
1458	E GRAND AV	2002	6	406	ACP	82	82.03	13	55	22330	88	0	88	1	1	3	4	0	0	0	0	0	0	8	8
1459	E GRAND AV	2002	6	8	PVC	14	13.95	13	8	64	91	0	91	1	1	1	4	0	0	0	0	0	0	6	6
1460	E GRAND AV	2002	6	26	ACP	83	83.15	13	77	2002	93	0	93	1	1	1	4	0	0	4	0	0	0	10	10
1461	N RENA ST	1979	6	44	PVC	14	13.95	36	8	352	68	0	68	1	2	1	1	0	0	0	0	0	0	3	3
1462	E GRAND AV	2002	12	160	PVC	328	328.02	13	28	4480	93	0	93	1	1	1	4	0	0	4	0	0	0	11	11
1463	E GRAND AV	2002	12	37	PVC	297	296.91	13	8	296	89	0	89	1	1	1	4	0	0	0	0	0	0	6	6
1464	TAYLOR PL	1979	6	8	ACP	1	1.25	36	55	440	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
1465	TAYLOR PL	1979	6	6	ACP	1	1.25	36	55	330	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
1466	S ALPINE ST	1971	6	354	ACP	1	1.25	44	55	19470	57	0	57	1	1	3	1	0	0	0	0	0	0	5	5
1467	TAYLOR PL	1979	6	6	ACP	1	1.25	36	55	330	66	0	66	1	2	1	1	0	0	0	0	0	0	3	3
1468	E GRAND AV	2002	12	28	PVC	297	296.91	13	28	784	93	0	93	1	2	1	4	0	0	0	4	0	0	11	11
1469	E GRAND AV	2002	12	207	PVC	297	296.91	13	28	5796	93	0	93	1	1	2	4	0	0	4	0	0	0	12	12
1470	OAK ST	1982	6	341	ACP	53	52.84	33	55	18755	68	0	68	1	2	3	1	0	0	0	0	0	0	5	5
1471	OAK ST	1982	12	26	PVC	251	251.06	33	28	728	71	0	71	1	2	1	1	0	0	4	0	0	0	8	8
1472	OAK ST	1982	12	7	PVC	251	251.06	33	28	196	74	0	74	1	2	1	1	0	0	4	0	0	0	8	8
1473	BELL ST	1964	12	82	PVC	297	296.91	51	28	2296	55	0	55	1	1	1	1	0	0	4	0	0	0	8	8
1474	CORNWALL AV	1976	6	346	ACP	32	31.88	39	55	19030	62	0	62	1	2	3	1	0	0	0	0	0	0	5	5
1475	BELL ST	1964	12	11	PVC	297	296.91	51	28	308	55	0	55	1	2	1	1	0	0	4	0	0	0	8	8
1476	E GRAND AV	2002	12	77	ACP	302	302.41	13	77	5929	93	0	93	1	2	2	4	0	0	4	0	0	0	12	12
1477	E GRAND AV	2002	8	23	ACP	251	251.18	13	77	1771	93	0	93	1	1	1	4	0	0	0	0	0	0	7	7
1478	E GRAND AV	2002	8	35	ACP	251	251.18	13	77	2695	93	0	93	1	2	1	4	0	0	0	0	0	0	6	6
1479	EL CAMINO REAL	2011	8	60	ACP	251	251.18	4	64	3840	98	0	98	1	2	1	3	0	0	0	0	0	0	6	6
1480	E GRAND AV	2002	12	132	PVC	251	251.06	13	28	3696	93	0	93	1	2	1	4	0	0	0	0	0	0	7	7
1481	E GRAND AV	2002	12	162	PVC	251	251.06	13	28	4536	93	0	93	1	1	1	4	0	0	4	0	0	0	11	11
1482	CERRO VISTA LN	1980	6	291	ACP	19	18.91	35	55	16005	66	0	66	1	1	3	1	5	0	0	0	0	0	10	10
1483	CERRO VISTA LN	1980	6	151	ACP	19	18.91	35	55	8305	66	0	66	1	1	2	1	5	0	0	0	0	0	9	9
1484	S ALPINE ST	1964	6	14	ACP	56	56.04	51	55	770	51	0	51	1	1	1	1	5	0	0	2	0	0	10	10
1485	S ALPINE ST	1964	6	174	ACP	29	29.3	51	55	9570	50	0	50	1	1	2	1	5	0	0	2	2	0	13	13
1486	CERRO VISTA LN	1980	6	322	ACP	23	23.12	35	55	17710	66	0	66	1	1	3	1	5	0	0	2	2	0	14	14
1487	CERRO VISTA LN	1980	6	7	ACP	29	29.3	35	55	385	67	0	67	1	1	1	1	5	0	0	2	2	0	12	12
1488	CERRO VISTA CR	1980	6	133	ACP	33	33.35	35	55	7315	66	0	66	1	1	2	1	5	0	0	0	2	0	11	11
1489	S ALPINE ST	1964	6	199	ACP	25	25.26	51	55	10945	50	0	50	1	1	3	1	5	0	0	0	2	0	12	12
1490	CERRO VISTA CR	1980	6	6	ACP	33	33.35	35	55	330	67	0	67	1	1	1	1	5	0	0	0	2	0	10	10
1491	CERRO VISTA CR	1980	6	6	ACP	33	33.35	35	55	330	67	0	67	1	1	1	1	5	0	0	0	2	0	10	10
1492	S ALPINE ST	1964	6	33	ACP	25	25.26	51	55	1815	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
1493	S ALPINE ST	1964	6	6	ACP	25	25.26	51	55	330	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
1494	S ALPINE ST	1964	6	6	ACP	0	0	51	55	330	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
1495	S ALPINE ST	1964	6	6	ACP	25	25.26	51	55	330	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
1496	S ALPINE ST	1964	6	216	ACP	29	29.3	51	55	11880	50	0	50	1	1	3	1	5	0	0	2	2	0	14	14
1497	FAIR OAKS AV	1991	12	125	ACP	131	131.35	24	77	9625	79	0	79	1	1	2	3	0	0	0	0	0	0	6	6
1498	FAIR OAKS AV	0	12	168	ACP	131	131.35	2	77	12936	101	0	101	1	1	3	3	0	0	0	0	0	0	7	7
1499	FAIR OAKS AV	1991	12	18	ACP	131	131.35	24	77	1386	79	0	79	1	1	1	3	0	0	0	0	0	0	5	5
1500	VALLEY RD	1967	10	288	ACP	17	16.89	48	69	19872	54	0	54	1	1	3	1	0	0	0	0	2	0	7	7
1501	VALLEY RD	1967	10	314	ACP	16	16.38	48	69	21666	54	0	54	1	1	3	1	0	0	0	0	2	0	7	7
1502	FOREST GLEN DR	1977	6	80	ACP	12	11.53	38	55	4400	63	0	63	1	1	1	1	5	0	0	0	2	0	10	10
1503	CREEKSIDE DR	1975	6	90	ACP	9	9.43	40	55	4950	61	0	61	1	1	1	1	0	0	0	0	2	0	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1504	S HALCYON RD	1960	6	9	ACP	8	8.22	55	55	495	47	0	47	1	1	1	3	5	0	0	0	2	0	12	12
1505	S HALCYON RD	1960	6	19	ACP	35	34.63	55	55	1045	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1506	FAIR OAKS AV	0	8	11	ACP	62	62.05	2	55	605	99	0	99	1	1	1	3	5	0	0	0	2	0	12	12
1507	FAIR OAKS AV	0	8	8	ACP	62	62.05	2	64	512	100	0	100	1	1	1	3	5	0	0	0	2	0	12	12
1508	WOODLAND DR	1975	6	6	ACP	6	5.88	40	55	330	61	0	61	1	1	1	1	0	0	0	0	2	0	5	5
1509	FOREST GLEN DR	1977	6	16	ACP	12	11.53	38	55	880	63	0	63	1	1	1	1	5	0	0	0	2	0	10	10
1510	CREEKSIDE DR	1975	6	6	ACP	9	9.43	40	55	330	61	0	61	1	1	1	1	0	0	0	0	2	0	5	5
1511	WOODLAND DR	1975	6	333	ACP	6	5.88	40	55	18315	60	0	60	1	1	3	1	0	0	0	0	2	0	7	7
1512	CREEKSIDE DR	1975	6	6	ACP	9	9.43	40	55	330	61	0	61	1	1	1	1	0	0	0	0	2	0	5	5
1513	WOODLAND DR	1985	6	150	ACP	25	25.36	30	55	8250	71	0	71	1	1	2	1	0	0	0	0	2	0	6	6
1514	WOODLAND DR	1975	6	6	ACP	6	5.88	40	55	330	61	0	61	1	1	1	1	0	0	0	0	2	0	5	5
1515	FOREST GLEN DR	1977	6	6	ACP	25	25.29	38	55	330	63	0	63	1	1	1	1	5	0	0	0	2	0	10	10
1516	WOODLAND DR	1975	6	7	ACP	25	25.29	40	55	385	61	0	61	1	1	1	1	5	0	0	0	2	0	10	10
1517	WOODLAND DR	1975	6	246	ACP	6	5.88	40	55	13530	61	0	61	1	1	3	1	5	0	0	0	2	0	12	12
1518	FOREST GLEN DR	1977	6	27	ACP	12	11.53	38	55	1485	63	0	63	1	1	1	1	5	0	0	0	2	0	10	10
1519	WOODLAND DR	1975	6	341	ACP	17	16.76	40	55	18755	60	0	60	1	1	3	1	5	0	0	0	2	0	12	12
1520	FOREST GLEN DR	1977	6	228	ACP	12	11.53	38	55	12540	63	0	63	1	1	3	1	5	0	0	0	2	0	12	12
1521	WOODLAND DR	1975	6	276	ACP	65	65.2	40	55	15180	61	0	61	1	1	3	1	5	0	0	0	2	0	12	12
1522	WOODLAND DR	1975	6	230	ACP	17	16.51	40	55	12650	61	0	61	1	1	3	1	5	0	0	0	2	0	12	12
1523	WOODLAND DR	1975	6	6	ACP	65	65.2	40	55	330	61	0	61	1	1	1	1	5	0	0	0	2	0	10	10
1524	WOODLAND DR	1975	6	6	ACP	65	65.2	40	55	330	61	0	61	1	1	1	1	5	0	0	0	2	0	10	10
1525	S HALCYON RD	1960	6	7	ACP	5	4.76	55	55	385	47	0	47	1	1	1	3	5	0	0	0	2	0	12	12
1526	WOODLAND DR	1975	6	526	ACP	69	68.77	40	55	28930	60	0	60	1	1	3	1	5	0	0	0	2	0	12	12
1527	WOODLAND DR	1975	6	11	ACP	69	68.77	40	55	605	61	0	61	1	1	1	1	5	0	0	0	2	0	10	10
1528	FAIR OAKS AV	1991	8	9	ACP	62	62.05	24	77	693	79	0	79	1	1	1	3	5	0	0	0	2	0	12	12
1529	WOODLAND DR	1975	8	327	PVC	30	30.38	40	12	3924	61	0	61	1	1	1	1	5	0	0	0	2	0	10	10
1530	FAIR OAKS AV	1991	12	279	ACP	131	130.82	24	77	21483	79	0	79	1	1	3	3	5	0	0	0	2	0	14	14
1531	FAIR OAKS AV	1991	12	17	ACP	131	130.82	24	77	1309	79	0	79	1	1	1	3	5	0	0	0	2	0	12	12
1532	TODD LN	1982	6	236	ACP	39	38.85	33	55	12980	68	0	68	1	1	3	1	5	0	0	0	2	0	12	12
1533	TODD LN	1982	8	7	ACP	80	79.58	33	64	448	69	0	69	1	1	1	1	5	0	0	0	2	0	10	10
1534	TODD LN	1982	8	7	ACP	80	79.58	33	64	448	69	0	69	1	1	1	1	5	0	0	0	2	0	10	10
1535	TODD LN	1982	8	7	ACP	80	79.58	33	55	385	69	0	69	1	1	1	1	5	0	0	0	2	0	10	10
1536	TODD LN	1982	8	95	ACP	80	79.58	33	64	6080	69	0	69	1	1	2	1	5	0	0	2	2	0	13	13
1537	FAIR OAKS AV	1980	8	119	PVC	31	30.76	35	12	1428	67	0	67	1	1	1	3	5	0	0	0	2	0	12	12
1538	FAIR OAKS AV	1980	8	306	ACP	76	75.59	35	64	19584	66	0	66	1	1	3	3	5	0	0	2	2	0	16	16
1539	FAIR OAKS AV	1980	8	11	PVC	31	30.76	35	12	132	70	0	70	1	1	1	3	5	0	0	0	2	0	12	12
1540	TODD LN	1982	8	61	ACP	118	118.42	33	64	3904	69	0	69	1	1	1	1	5	0	0	0	2	0	10	10
1541	FAIR OAKS AV	1991	8	414	PVC	31	30.76	24	12	4968	80	0	80	1	1	1	3	5	0	0	2	2	0	14	14
1542	FAIR OAKS AV	1991	8	12	PVC	31	30.76	24	12	144	81	0	81	1	1	1	3	5	0	0	2	2	0	14	14
1543	S HALCYON RD	1991	8	583	PVC	31	30.76	24	12	6996	79	0	79	1	1	2	3	5	0	0	2	2	0	15	15
1544	S HALCYON RD	1960	8	9	PVC	0	0	55	12	108	50	0	50	1	1	1	3	5	0	0	2	2	0	14	14
1545	S HALCYON RD	1991	8	4	PVC	0	0	24	12	48	81	0	81	1	1	1	3	5	0	0	2	2	0	14	14
1546	S HALCYON RD	1991	8	9	PVC	0	0	24	12	108	81	0	81	1	1	1	3	5	0	0	2	2	0	14	14
1547	S HALCYON RD	1991	8	4	PVC	0	0	24	12	48	81	0	81	1	1	1	3	5	0	0	2	2	0	14	14
1548	S HALCYON RD	1960	8	79	PVC	31	30.76	55	12	948	31	0	31	1	1	1	3	5	0	0	2	2	0	14	14
1549	S HALCYON RD	1960	8	12	PVC	31	30.76	55	12	144	50	0	50	1	1	1	3	5	0	0	2	2	0	14	14
1550	DODSON WY	1964	8	406	ACP	126	126.48	51	64	25984	50	0	50	1	1	3	1	5	0	0	2	2	0	14	14
1551	S HALCYON RD	1991	8	287	PVC	0	0	24	12	3444	80	0	80	1	1	1	3	5	0	0	2	2	0	14	14
1552	S HALCYON RD	1960	8	17	PVC	0	0	55	12	204	32	0	32	1	1	1	3	5	0	0	2	2	0	14	14
1553	WOODLAND DR	1985	6	42	ACP	8	7.94	30	55	2310	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1554	WOODLAND DR	1985	6	7	ACP	8	7.94	30	55	385	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1555	VIRGINIA DR	1958	6	5	ACP	5	5.08	57	55	275	44	0	44	1	1	1	1	0	0	0	0	0	0	3	3
1556	VIRGINIA DR	1958	6	248	ACP	5	5.08	57	55	13640	44	0	44	1	1	3	1	0	0	0	0	0	0	5	5
1557	VIRGINIA DR	1958	6	11	ACP	5	5.08	57	55	605	44	0	44	1	1	1	1	0	0	0	0	0	0	3	3
1558	S HALCYON RD	1960	8	13	ACP	44	44.07	55	55	715	46	0	46	1	1	1	3	0	0	0	0	0	0	5	5
1559	WILLOW LN	1977	6	147	ACP	6	6.35	38	55	8085	63	0	63	1	1	2	1	0	0	0	0	0	0	4	4
1560	WILLOW LN	1977	6	6	ACP	6	6.35	38	55	330	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
1561	S HALCYON RD	1960	8	6	ACP	8	8.4	55	64	384	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1562	WOODLAND DR	1985	6	5	CIP	7	6.59	30	32	160	56	0	56	1	1	1	1	0	0	0	0	0	0	3	3
1563	WOODLAND DR	1985	6	440	CIP	7	6.59	30	32	14080	54	0	54	1	1	3	1	0	0	0	0	0	0	5	5
1564	WOODLAND DR	1985	6	24	ACP	5	4.87	30	55	1320	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1565	WOODLAND CT	1976	6	248	ACP	1	1.41	39	55	13640	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
1566	WOODLAND DR	1985	6	6	ACP	8	7.94	30	55	330	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1567	WOODLAND CT	1976	6	164	ACP	6	5.89	39	55	9020	62	0	62	1	1	2	1	0	0	0	0	0	0	4	4
1568	VIRGINIA DR	1958	6	842	ACP	5	5.08	57	55	46310	42	0	42	1	1	3	1	0	0	0	0	0	0	5	5
1569	VIRGINIA DR	1958	6	140	ACP	5	5.08	57	55	7700	44	0	44	1	1	2	1	0	0	0	0	0	0	4	4
1570	WILLOW LN	1977	6	36	ACP	6	6.35	38	55	1980	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
1571	WILLOW LN	1977	6	227	ACP	6	6.35	38	55	12485	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
1572	LEANNA DR	1961	6	248	CIP	7	6.59	54	50	12400	47	0	47	1	1	3	0	0	0	0	0	0	0	4	4
1573	WOODLAND DR	1985	6	7	CIP	7	6.59	30	32	224	56	0	56	1	1	1	0	0	0	0	0	0	0	2	2
1574	WOODLAND DR	1985	6	24	CIP	7	6.59	30	50	1200	72	0	72	1	1	1	0	0	0	0	0	0	0	2	2
1575	LEANNA DR	1961	8	449	ACP	28	28.24	54	64	28736	47	0	47	1	1	3	1	0	0	0	0	0	0	5	5
1576	LEANNA DR	1961	8	24	ACP	28	28.24	54	55	1320	47	0	47	1	1	1	1	0	0	0	0	0	0	3	3
1577	TURQUOISE DR	1967	8	19	ACP	28	28.24	48	64	1216	54	0	54	1	1	1	1	0	0	0	0	0	0	3	3
1578	TURQUOISE DR	1967	8	52	ACP	30	29.92	48	64	3328	54	0	54	1	1	1	1	0	0	0	0	0	0	3	3
1579	DIAMOND CR	1961	6	144	ACP	3	2.7	54	55	7920	47	0	47	1	1	2	1	0	0	0	0	0	0	4	4
1580	TURQUOISE DR	1967	8	217	ACP	27	26.64	48	64	13888	53	0	53	1	1	3	1	0	0	0	0	0	0	5	5
1581	LEANNA DR	1961	6	6	ACP	0	0.36	54	55	330	47	0	47	1	1	1	1	0	0	0	0	0	0	3	3
1582	OPAL CR	1961	8	8	ACP	39	38.56	54	55	440	47	0	47	1	1	1	1	0	0	0	0	0	0	3	3
1583	LEANNA DR	1961	6	8	ACP	0	0.36	54	64	512	48	0	48	1	1	1	1	0	0	0	0	0	0	3	3
1584	PEARL DR	1961	6	27	ACP	15	15.33	54	64	1728	48	0	48	1	1	1	1	0	0	0	0	0	0	3	3
1585	PEARL DR	1961	8	227	ACP	39	38.56	54	64	14528	47	0	47	1	1	3	1	0	0	0	0	0	0	5	5
1586	LEANNA DR	1961	10	13	ACP	69	68.55	54	69	897	49	0	49	1	1	1	1	0	0	0	0	0	0	3	3
1587	VALLEY RD	1967	6	16	ACP	13	13.12	48	55	880	53	0	53	1	1	1	1	0	0	0	0	0	0	3	3
1588	VALLEY RD	1967	10	505	ACP	92	91.93	48	69	34845	53	0	53	1	1	3	1	0	0	0	0	0	0	5	5
1589	VALLEY RD	1967	8	11	ACP	75	75.48	48	69	759	55	0	55	1	1	1	1	0	0	0	0	0	0	3	3
1590	VALLEY RD	1967	10	637	ACP	168	167.9	48	69	43953	53	0	53	1	1	3	0	0	0	0	0	0	0	4	4
1591	VALLEY RD	1967	8	10	ACP	75	75.48	48	69	690	55	0	55	1	1	1	1	0	0	0	0	0	0	3	3
1592	VALLEY RD	1967	8	10	ACP	75	75.48	48	64	640	54	0	54	1	1	1	1	0	0	0	0	0	0	3	3
1593	VALLEY RD	1967	8	62	ACP	75	75.48	48	64	3968	54	0	54	1	1	1	1	0	0	0	0	0	0	3	3
1594	LEANNA DR	1961	8	16	ACP	28	28.24	54	64	1024	48	0	48	1	1	1	1	0	0	0	0	0	0	3	3
1595	TURQUOISE DR	1967	6	324	ACP	7	7.4	48	55	17820	52	0	52	1	1	3	1	0	0	0	0	0	0	5	5
1596	TURQUOISE DR	1967	8	232	ACP	27	26.64	48	64	14848	53	0	53	1	1	3	1	0	0	0	0	0	0	5	5
1597	LEANNA DR	1961	8	15	ACP	28	28.24	54	64	960	48	0	48	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1598	TURQUOISE DR	1967	6	17	ACP	7	7.4	48	55	935	53	0	53	1	1	1	1	0	0	0	0	0	3	3
1599	TURQUOISE DR	1967	6	455	ACP	7	7.4	48	55	25025	52	0	52	1	1	3	1	0	0	0	0	0	5	5
1600	TURQUOISE DR	1967	6	24	ACP	7	7.4	48	55	1320	53	0	53	1	1	1	1	0	0	0	0	0	3	3
1601	TURQUOISE DR	1967	6	329	ACP	7	7.4	48	55	18095	52	0	52	1	1	3	1	0	0	0	0	0	5	5
1602	TURQUOISE DR	1967	8	21	ACP	30	29.92	48	55	1155	53	0	53	1	1	1	1	0	0	0	0	0	3	3
1603	LEANNA DR	1961	8	22	ACP	27	26.64	54	55	1210	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1604	DIAMOND CR	1961	8	6	ACP	27	26.64	54	64	384	48	0	48	1	1	1	1	0	0	0	0	0	3	3
1605	TURQUOISE DR	1967	8	8	ACP	30	29.92	48	64	512	54	0	54	1	1	1	1	0	0	0	0	0	3	3
1606	LEANNA DR	1961	6	151	ACP	0	0.36	54	64	9664	48	0	48	1	1	2	1	0	0	0	0	0	4	4
1607	LEANNA DR	1961	6	7	ACP	0	0.36	54	55	385	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1608	LEANNA DR	1961	6	6	ACP	0	0.36	54	55	330	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1609	PEARL DR	1961	8	240	ACP	39	38.56	54	64	15360	47	0	47	1	1	3	1	0	0	0	0	0	5	5
1610	LEANNA DR	1961	6	347	ACP	7	6.71	54	55	19085	46	0	46	1	1	3	1	0	0	0	0	0	5	5
1611	PEARL DR	1961	6	12	ACP	11	10.96	54	55	660	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1612	PEARL DR	1961	6	449	ACP	11	10.96	54	55	24695	46	0	46	1	1	3	1	0	0	0	0	0	5	5
1613	PEARL DR	1961	6	28	ACP	11	10.96	54	55	1540	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1614	PEARL DR	1961	6	335	ACP	15	15.33	54	55	18425	46	0	46	1	1	3	1	0	0	0	0	0	5	5
1615	OPAL CR	1961	8	6	ACP	39	38.56	54	64	384	48	0	48	1	1	1	1	0	0	0	0	0	3	3
1616	OPAL CR	1961	6	163	ACP	2	1.84	54	55	8965	47	0	47	1	1	2	1	0	0	0	0	0	4	4
1617	LEANNA DR	1961	6	28	ACP	9	9.31	54	55	1540	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1618	LEANNA DR	1961	10	19	ACP	69	68.55	54	55	1045	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1619	LEANNA DR	1961	10	33	ACP	69	68.55	54	69	2277	49	0	49	1	1	1	1	0	0	0	0	0	3	3
1620	VALLEY RD	1967	6	242	ACP	9	9.47	48	55	13310	53	0	53	1	1	3	1	0	0	0	0	0	5	5
1621	LEANNA DR	1961	10	181	ACP	69	68.55	54	64	11584	47	0	47	1	1	3	1	0	0	0	0	0	5	5
1622	PEARL DR	1961	6	17	ACP	15	15.33	54	55	935	47	0	47	1	1	1	1	0	0	0	0	0	3	3
1623	VALLEY RD	1967	6	208	ACP	7	7.3	48	55	11440	53	0	53	1	1	3	1	0	0	0	0	0	5	5
1624	VALLEY RD	1967	6	375	ACP	6	6.26	48	55	20625	52	0	52	1	1	3	1	0	0	0	0	0	5	5
1625	VALLEY RD	1967	6	184	ACP	9	9.31	48	55	10120	53	0	53	1	1	3	1	0	0	0	0	0	5	5
1626	VIA BERROS	0	6	14	ACP	6	6.26	2	55	770	99	0	99	1	1	1	1	0	0	0	0	0	3	3
1627	VIA BERROS	2001	6	331	ACP	6	6.26	14	55	18205	86	0	86	1	1	3	1	0	0	0	0	0	5	5
1628	SUNRISE TR	1961	8	33	ACP	0	0	54	64	2112	48	0	48	1	1	1	1	0	0	0	0	0	3	3
1629	SUNRISE TR	1961	8	18	ACP	0	0	54	64	1152	48	0	48	1	1	1	1	0	0	0	0	0	3	3
1630	BAMBI CT	1982	6	129	ACP	0	0.12	33	55	7095	68	0	68	1	1	2	1	0	0	0	0	0	4	4
1631	BAMBI CT	1982	6	4	ACP	0	0.12	33	55	220	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1632	BAMBI CT	1982	6	14	ACP	0	0.12	33	55	770	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1633	TIGER TAIL DR	1974	6	15	ACP	9	9.47	41	55	825	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1634	BAMBI CT	1982	6	11	ACP	9	9.47	33	55	605	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1635	BAMBI CT	1982	6	225	ACP	3	3.03	33	55	12375	68	0	68	1	1	3	1	0	0	0	0	0	5	5
1636	BAMBI CT	1982	6	18	ACP	3	3.03	33	55	990	68	0	68	1	1	1	1	0	0	0	0	0	3	3
1637	BAMBI CT	1982	6	144	ACP	2	2.34	33	55	7920	68	0	68	1	1	2	1	0	0	0	0	0	4	4
1638	MESA DR	1975	6	10	ACP	2	2.34	40	55	550	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1639	MESA DR	1975	6	355	ACP	2	2.34	40	55	19525	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1640	TIGER TAIL DR	1974	6	15	ACP	2	2.34	41	55	825	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1641	MESA DR	1975	6	148	ACP	1	0.79	40	55	8140	61	0	61	1	1	2	1	0	0	0	0	0	4	4
1642	TIGER TAIL DR	1974	6	79	ACP	1	0.79	41	55	4345	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1643	TIGER TAIL DR	1974	6	425	ACP	7	6.71	41	55	23375	59	0	59	1	1	3	1	0	0	0	0	0	5	5
1644	TIGER TAIL DR	1974	6	67	ACP	7	6.71	41	55	3685	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1645	MESA DR	1975	6	316	ACP	1	0.79	40	55	17380	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1646	MESA DR	1975	6	32	ACP	1	1.32	40	55	1760	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1647	MESA DR	1975	6	430	ACP	3	2.98	40	55	23650	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1648	MESA DR	1975	6	54	ACP	1	1.32	40	55	2970	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1649	SUNRISE TR	1961	8	243	ACP	0	0	54	64	15552	47	0	47	1	1	3	1	0	0	0	0	0	5	5
1650	N VIA BELMONTE	2001	8	226	PVC	0	0	14	12	2712	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1651	CASTILLO DEL MAR	2001	8	6	PVC	17	16.95	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
1652	S VIA FIRENZE CT	1982	8	6	PVC	5	4.73	33	12	72	72	0	72	1	1	1	1	0	0	0	0	0	3	3
1653	N VIA FIRENZE CT	2001	8	302	PVC	7	7.34	14	12	3624	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
1654	N VIA BELMONTE	2001	8	7	PVC	0	0	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1655	CASTILLO DEL MAR	2001	8	6	PVC	0	0	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	3	3
1656	VALLEY RD	1967	10	19	PVC	152	151.52	48	28	532	55	0	55	1	1	1	1	0	0	0	0	2	0	5	5
1657	VALLEY RD	1967	10	12	PVC	152	151.52	48	19	228	57	0	57	1	1	1	1	0	0	0	0	2	0	5	5
1658	VALLEY RD	1967	10	60	PVC	152	151.52	48	19	1140	55	0	55	1	1	1	1	0	0	0	0	2	0	5	5
1659	VALLEY RD	1967	12	1047	ACP	168	167.9	48	77	80619	52	0	52	1	1	5	1	0	0	0	0	2	0	9	9
1660	S VIA BELMONTE	2001	8	109	PVC	0	0	14	12	1308	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1661	S VIA BELMONTE	2001	8	7	PVC	7	6.69	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1662	S VIA BELMONTE	2001	8	141	PVC	0	0	14	12	1692	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1663	S VIA BELMONTE	2001	8	8	PVC	7	6.69	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1664	S VIA BELMONTE	2001	8	7	PVC	7	6.69	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1665	S VIA BELMONTE	2001	8	52	PVC	7	6.69	14	12	624	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1666	CASTILLO DEL MAR	2001	8	68	PVC	8	7.67	14	12	816	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1667	CASTILLO DEL MAR	2001	8	175	PVC	7	7.34	14	12	2100	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1668	N VIA BELMONTE	2001	8	107	PVC	3	3.39	14	12	1284	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1669	N VIA BELMONTE	2001	8	12	PVC	0	0	14	12	144	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1670	N VIA BELMONTE	2001	8	84	PVC	4	4.08	14	12	1008	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1671	N VIA BELMONTE	2001	8	400	PVC	4	4.08	14	12	4800	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
1672	N VIA BELMONTE	2001	8	33	PVC	4	4.08	14	12	396	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1673	N VIA FIRENZE CT	2001	8	172	PVC	7	7.34	14	12	2064	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1674	S VIA FIRENZE CT	1982	8	290	PVC	3	2.87	33	12	3480	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1675	CASTILLO DEL MAR	2001	8	64	PVC	3	2.87	14	12	768	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1676	N VIA FIRENZE CT	2001	8	7	PVC	7	7.34	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1677	N VIA FIRENZE CT	2001	8	196	PVC	19	18.97	14	12	2352	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
1678	N VIA FIRENZE CT	2001	8	6	PVC	7	7.34	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1679	N VIA FIRENZE CT	2001	8	6	PVC	7	7.34	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
1680	N VIA FIRENZE CT	2001	8	153	PVC	4	4.08	14	12	1836	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
1681	S VIA FIRENZE CT	1982	8	220	PVC	5	4.73	33	12	2640	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1682	CASTILLO DEL MAR	2001	8	183	PVC	19	18.97	14	12	2196	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
1683	S VIA AVANTE CT	1992	8	377	PVC	11	11.41	23	12	4524	80	0	80	1	1	1	1	0	0	0	0	2	2	7	7
1684	S VIA AVANTE CT	1992	8	6	PVC	11	11.41	23	12	72	82	0	82	1	1	1	1	0	0	0	0	2	2	7	7
1685	S VIA BELMONTE	2001	8	666	PVC	5	4.73	14	12	7992	89	0	89	1	1	2	1	0	0	0	0	0	0	4	4
1686	S VIA AVANTE CT	1992	8	5	PVC	11	11.41	23	12	60	82	0	82	1	1	1	1	0	0	0	0	2	2	7	7
1687	CASTILLO DEL MAR	2001	8	7	PVC	17	16.95	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
1688	CASTILLO DEL MAR	2001	8	7	PVC	17	16.95	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
1689	CASTILLO DEL MAR	2001	8	62	PVC	17	16.95	14	12	744	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
1690	ORCHARD AV	1964	10	10	PVC	190	189.83	51	12	120	52	0	52	1	1	1	1	0	0	0	0	2	2	7	7
1691	ORCHARD AV	1964	8	11	ACP	190	189.83	51	64	704	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1692	ORCHARD AV	1964	8	232	ACP	190	189.83	51	64	14848	60	0	60	1	1	3	1	0	0	0	0	2	2	9	9
1693	ORCHARD AV	1964	10	14	PVC	190	189.83	51	12	168	52	0	52	1	1	1	1	0	0	0	0	2	2	7	7
1694	ORCHARD AV	1964	10	10	PVC	190	189.83	51	19	190	55	0	55	1	1	1	1	0	0	0	0	2	2	7	7
1695	CASTILLO DEL MAR	2001	10	6	PVC	36	35.93	14	19	114	92	0	92	1	1	1	1	0	0	0	0	2	2	7	7
1696	ORCHARD AV	1964	8	152	ACP	0	0	51	69	10488	54	0	54	1	1	3	1	0	0	0	0	2	2	9	9
1697	CASTILLO DEL MAR	2001	10	6	PVC	36	35.93	14	19	114	92	0	92	1	1	1	1	0	0	0	0	2	2	7	7
1698	CASTILLO DEL MAR	2001	10	6	PVC	36	35.93	14	19	114	92	0	92	1	1	1	1	0	0	0	0	2	2	7	7
1699	CASTILLO DEL MAR	2001	10	6	PVC	152	151.52	14	19	114	92	0	92	1	1	1	1	0	0	0	0	2	2	7	7
1700	CASTILLO DEL MAR	2001	10	26	PVC	36	35.93	14	19	494	92	0	92	1	1	1	1	0	0	0	0	2	2	7	7
1701	CASTILLO DEL MAR	2001	10	7	PVC	152	151.52	14	19	133	92	0	92	1	1	1	1	0	0	0	0	2	2	7	7
1702	ORCHARD AV	1964	8	353	ACP	190	189.83	51	64	22592	50	0	50	1	1	3	1	0	0	0	0	2	2	9	9
1703	TRAFFIC WY	1958	8	10	PVC	72	72.5	57	12	120	48	0	48	1	1	1	1	0	0	0	0	0	2	5	5
1704	E CHERRY AV	1982	8	358	PVC	78	77.69	33	12	4296	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
1705	E CHERRY AV	1982	8	8	PVC	78	77.69	33	12	96	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
1706	E CHERRY AV	1982	8	275	PVC	78	77.69	33	12	3300	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
1707	E CHERRY AV	1982	8	294	PVC	78	77.69	33	12	3528	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
1708	SHORT ST	1982	12	349	PVC	200	199.84	33	28	9772	72	0	72	1	1	2	1	0	0	0	0	0	0	4	4
1709	ALLEN ST	0	12	505	PVC	188	187.6	2	28	14140	103	0	103	1	1	3	1	0	4	0	0	0	2	11	11
1710	TRAFFIC WY	1958	12	7	PVC	188	187.6	57	33	231	50	0	50	1	1	1	1	0	4	0	0	0	2	9	9
1711	TRAFFIC WY	1958	12	10	PVC	188	187.6	57	28	280	49	0	49	1	1	1	1	0	4	0	0	0	2	9	9
1712	TRAFFIC WY	1958	12	10	PVC	94	93.52	57	28	280	49	0	49	1	1	1	1	0	4	0	0	0	2	9	9
1713	BEDLOE LN	1975	6	8	PVC	89	89.22	40	8	64	64	0	64	1	2	1	1	0	0	0	0	0	2	5	5
1714	BEDLOE LN	1975	6	127	PVC	89	89.22	40	12	1524	62	0	62	1	1	1	1	0	0	0	0	0	2	6	6
1715	FAIR OAKS AV	1982	8	132	ACP	4	4.31	33	64	8448	69	0	69	1	1	2	3	0	4	0	0	0	2	12	12
1716	TRAFFIC WY	1958	12	6	PVC	188	187.6	57	28	168	49	0	49	1	1	1	1	0	4	0	0	0	2	9	9
1717	TRAFFIC WY	1958	8	147	ACP	9	9.34	57	64	9408	48	0	48	1	1	2	1	0	4	0	0	0	2	10	10
1718	FAIR OAKS AV	1982	8	6	ACP	4	4.31	33	64	384	69	0	69	1	1	1	3	0	4	0	0	0	0	9	9
1719	FAIR OAKS AV	1982	8	5	ACP	4	4.31	33	64	320	69	0	69	1	1	1	3	0	4	0	0	0	0	9	9
1720	FAIR OAKS AV	1982	8	338	PVC	55	55.32	33	12	4056	71	0	71	1	1	1	3	0	4	0	0	0	0	9	9
1721	FAIR OAKS AV	1982	8	6	ACP	4	4.31	33	64	384	69	0	69	1	1	1	3	0	4	0	0	0	0	9	9
1722	FAIR OAKS AV	1982	8	6	ACP	4	4.31	33	64	384	72	0	72	1	1	1	3	0	4	0	0	0	0	9	9
1723	BEDLOE LN	1975	8	163	ACP	68	68.4	40	64	10432	62	0	62	1	1	3	1	0	4	0	0	0	2	11	11
1724	BEDLOE LN	1975	8	191	PVC	22	22.32	40	12	2292	62	0	62	1	1	1	1	0	4	0	0	0	2	9	9
1725	FAIR OAKS AV	1982	8	30	PVC	22	22.32	33	12	360	69	0	69	1	1	1	3	0	4	0	0	0	2	11	11
1726	FAIR OAKS AV	1982	8	9	PVC	22	22.32	33	12	108	72	0	72	1	1	1	3	0	4	0	0	0	2	11	11
1727	FAIR OAKS AV	1982	8	86	PVC	22	22.32	33	12	1032	72	0	72	1	1	1	3	0	4	0	0	0	2	11	11
1728	STATION WY	1982	8	224	PVC	22	22.32	33	12	2688	71	0	71	1	1	1	1	0	4	0	0	0	0	7	7
1729	STATION WY	1982	8	29	PVC	22	22.32	33	12	348	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
1730	STATION WY	1982	8	32	PVC	22	22.32	33	12	384	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
1731	STATION WY	1982	8	104	PVC	22	22.32	33	12	1248	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
1732	STATION WY	1982	8	9	PVC	30	29.74	33	12	108	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
1733	BEDLOE LN	1975	6	305	PVC	90	90.13	40	8	2440	63	0	63	1	1	1	1	0	0	0	0	0	2	5	5
1734	BEDLOE LN	1975	6	185	PVC	89	89.22	40	8	1480	64	0	64	1	1	1	1	0	0	0	0	0	2	5	5
1735	TRINITY AV	1982	6	199	PVC	0	0	33	8	1592	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
1736	TRINITY AV	1982	6	7	PVC	0	0	33	19	133	73	0	73	1	1	1	1	0	0	0	0	0	2	5	5
1737	TRINITY AV	1982	10	52	PVC	113	112.67	33	19	988	73	0	73	1	1	1	1	0	0	0	0	0	2	5	5
1738	S TRAFFIC WY	1987	8	19	ACP	5	5.3	28	64	1216	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
1739	N HWY 101	0	2	1993	GALV	0	0	2	11	21923	50	0	50	1	1	3	5	0	0	0	0	0	2	11	11
1740	S TRAFFIC WY	1987	2	221	GALV	0	0	28	55	12155	74	0	74	1	1	3	4	0	0	0	0	0	2	10	10
1741	S TRAFFIC WY	1987	8	16	ACP	5	5.3	28	64	1024	75	3	52	1	1	1	4	0	0	0	0	0	0	6	6
1742	S TRAFFIC WY	1987	8	98	ACP	7	6.6	28	64	6272	74	3	52	1	1	2	4	0	0	0	0	0	2	9	9
1743	S TRAFFIC WY	1987	8	8	ACP	7	6.6	28	64	512	75	3	52	1	1	1	4	0	0	0	0	0	2	8	8
1744	TRAFFIC WY OFF-RAMP	1987	2	15	GALV	0	0	28	55	825	74	0	74	1	1	1	1	0	0	0	0	0	2	5	5
1745	TRAFFIC WY OFF-RAMP	0	2	10	GALV	0	0	2	11	110	56	0	56	1	1	1	1	0	0	0	0	0	2	5	5
1746	TRINITY AV	1982	8	18	ACP	11	10.56	33	64	1152	70	0	70	1	1	1	1	0	0	0	0	0	2	5	5
1747	S TRAFFIC WY	1987	8	289	ACP	11	10.56	28	64	18496	74	3	52	1	1	3	4	0	0	0	0	0	2	10	10
1748	S TRAFFIC WY	1987	8	46	ACP	11	10.56	28	69	3174	78	0	78	1	1	1	4	0	0	0	0	0	2	8	8
1749	TRINITY AV	1982	10	246	PVC	108	107.56	33	19	4674	72	0	72	1	1	1	1	0	0	0	0	0	2	5	5
1750	TRINITY AV	1982	6	6	PVC	0	0	33	8	48	72	0	72	1	1	1	1	0	0	0	0	0	2	5	5
1751	TRINITY AV	1982	6	7	PVC	0	0	33	19	133	73	0	73	1	1	1	1	0	0	0	0	0	2	5	5
1752	E CHERRY AV	1982	8	414	ACP	87	86.64	33	87	36018	70	0	70	1	1	3	1	0	0	0	0	0	2	7	7
1753	TRAFFIC WY	1958	8	6	ACP	87	86.64	57	64	384	45	0	45	1	1	1	1	0	0	0	0	0	2	5	5
1754	S TRAFFIC WY	1987	8	22	ACP	9	8.96	28	64	1408	74	3	52	1	1	1	4	0	0	0	0	0	2	8	8
1755	UNNAMED ST	0	8	11	ACP	9	8.96	2	64	704	100	0	100	1	1	1	1	0	0	0	0	0	2	5	5
1756	UNNAMED ST	0	8	9	ACP	9	8.96	2	64	576	100	0	100	1	1	1	1	0	0	0	0	0	2	5	5
1757	UNNAMED ST	0	8	39	ACP	97	97	2	64	2496	100	0	100	1	1	1	1	0	0	0	0	0	2	5	5
1758	UNNAMED ST	0	8	129	ACP	9	8.96	2	64	8256	100	0	100	1	1	2	1	0	0	0	0	0	2	6	6
1759	TRAFFIC WY	1958	8	18	PVC	72	72.5	57	33	594	47	0	47	1	1	1	1	0	0	0	0	0	2	5	5
1760	W CHERRY AV	1982	8	9	ACP	134	133.93	33	64	576	69	0	69	1	1	1	1	0	0	0	0	2	2	7	7
1761	W CHERRY AV	1982	6	25	ACP	63	62.55	33	55	1375	69	0	69	1	3	1	1	0	0	0	0	2	2	7	7
1762	BEDLOE LN	1975	6	17	PVC	89	89.22	40	8	136	62	0	62	1	3	1	1	0	0	0	0	0	2	7	7
1763	W CHERRY AV	1982	6	14	ACP	414	414.4	33	55	770	69	0	69	1	3	1	1	0	0	0	0	0	2	7	7
1764	S HWY 101	0	6	184	ACP	414	414.4	2	69	12696	85	0	85	1	1	3	5	0	0	0	0	2	2	15	15
1765	BEDLOE LN	1975	6	8	PVC	89	89.22	40	8	64	64	0	64	1	1	1	1	0	0	0	0	0	2	5	5
1766	BEDLOE LN	1975	6	10	PVC	89	89.22	40	8	80	64	0	64	1	2	1	1	0	0	0	0	0	2	5	5
1767	TRAFFIC WY	1958	8	8	ACP	247	246.82	57	64	512	45	0	45	1	1	1	1	0	0	0	0	0	2	6	6
1768	TRAFFIC WY	1958	8	364	ACP	247	246.82	57	64	23296	44	0	44	1	1	3	1	0	4	0	0	0	2	11	11
1769	E CHERRY AV	1982	8	5	ACP	0	0.01	33	64	320	69	0	69	1	1	1	1	0	0	0	0	0	2	5	5
1770	E CHERRY AV	1982	8	7	ACP	0	0.01	33	87	609	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
1771	E CHERRY AV	1982	8	5	ACP	0	0.01	33	64	320	69	0	69	1	2	1	1	0	0	0	0	0	2	5	5
1772	TRAFFIC WY	1958	8	6	ACP	0	0.01	57	64	384	45	0	45	1	1	1	1	0	0	0	0	0	2	6	6
1773	E CHERRY AV	1982	8	6	ACP	0	0.01	33	87	522	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
1774	TRAFFIC WY	1958	14	15	ACP	162	162.42	57	87	1305	47	0	47	1	1	1	1	0	0	0	0	0	2	5	5
1775	E CHERRY AV	1982	8	308	PVC	72	72.5	33	12	3696	71	0	71	1	2	1	1	0	0	0	0	0	2	5	5
1776	TRAFFIC WY	1958	8	28	ACP	247	246.82	57	64	1792	45	0	45	1	1	1	1	0	0	0	0	0	2	6	6
1777	TRAFFIC WY	1958	14	318	PVC	91	91.03	57	33	10494	46	0	46	1	2	3	1	0	4	0	0	0	2	11	11
1778	W CHERRY AV	1982	8	68	ACP	247	246.82	33	64	4352	69	0	69	1	1	1	1	0	0	0	0	0	2	6	6
1779	W CHERRY AV	1982	6	17	ACP	190	189.58	33	55	935	69	0	69	1	1	1	1	0	0	0	0	2	2	7	7
1780	PILGRIM WY	1964	6	57	ACP	139	139.48	51	55	3135	50	0	50	1	2	1	1	0	0	0	0	2	2	7	7
1781	ORCHARD AV	1964	6	30	ACP	56	55.54	51	55	1650	51	0	51	1	1	1	1	0	0	0	0	2	2	8	8
1782	W CHERRY AV	1982	6	6	ACP	56	55.54	33	55	330	69	0	69	1	1	1	1	0	0	0	0	2	2	7	7
1783	ORCHARD AV	1964	6	197	ACP	53	53.47	51	55	10835	50	0	50	1	1	3	1	0	0	0	0	2	2	9	9
1784	ORCHARD AV	1964	10	214	PVC	0	0	51	19	4066	54	0	54	1	1	1	1	0	0	0	0	2	2	7	7
1785	W CHERRY AV	1982	6	484	ACP	56	55.54	33	55	26620	67	0	67	1	1	3	1	0	0	0	0	2	2	9	9

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1786	ORCHARD AV	1964	10	62	PVC	0	0	51	19	1178	54	0	54	1	1	1	1	0	0	0	0	2	2	7	7
1787	ORCHARD AV	1964	10	150	PVC	0	0	51	19	2850	54	0	54	1	1	1	1	0	0	0	0	2	2	7	7
1788	PILGRIM WY	1964	6	53	ACP	139	139.48	51	64	3392	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1789	ORCHARD AV	1964	8	120	ACP	190	189.83	51	64	7680	51	0	51	1	1	2	1	0	0	0	0	2	2	8	8
1790	ORCHARD AV	1964	8	30	ACP	190	189.83	51	64	1920	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1791	PILGRIM WY	1964	6	22	ACP	139	139.48	51	55	1210	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1792	ORCHARD AV	1964	10	226	PVC	0	0	51	19	4294	54	0	54	1	1	1	1	0	0	0	0	2	2	7	7
1793	ARROYO AV	1966	6	4	ACP	151	151.14	49	55	220	53	0	53	1	1	1	1	0	0	0	0	2	2	7	7
1794	ARROYO AV	1966	6	88	ACP	151	151.14	49	42	3696	52	0	52	1	1	1	1	0	0	0	0	2	2	7	7
1795	PILGRIM WY	1964	6	83	ACP	151	151.14	51	55	4565	50	0	50	1	1	1	1	0	0	0	0	2	2	7	7
1796	S HWY 101	0	4	36	ACP	0	0	2	42	1512	99	0	99	1	1	1	0	0	0	0	0	0	2	4	4
1797	PILGRIM WY	1964	6	14	ACP	38	37.59	51	55	770	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1798	ARROYO AV	1966	6	390	ACP	38	37.59	49	42	16380	51	0	51	1	1	3	1	0	0	0	0	2	2	9	9
1799	PILGRIM WY	1964	6	9	ACP	109	109.18	51	55	495	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1800	PILGRIM WY	1964	6	9	ACP	145	145.33	51	55	495	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1801	PILGRIM WY	1964	6	9	ACP	109	109.18	51	55	495	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1802	PILGRIM WY	1964	6	14	ACP	109	109.18	51	55	770	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
1803	PILGRIM WY	1964	6	328	ACP	145	145.33	51	55	18040	50	0	50	1	1	3	1	0	0	0	0	2	2	9	9
1804	ARROYO AV	1966	6	498	ACP	151	151.14	49	55	27390	51	0	51	1	2	3	1	0	0	0	0	2	2	9	9
1805	ORCHARD AV	1964	6	265	ACP	56	55.54	51	55	14575	50	0	50	1	1	3	1	0	0	0	0	2	2	10	10
1806	W CHERRY AV	1982	6	32	ACP	153	152.86	33	55	1760	69	0	69	1	2	1	1	0	0	0	0	2	2	7	7
1807	W CHERRY AV	1982	6	14	ACP	190	189.58	33	55	770	69	0	69	1	1	1	1	0	0	0	0	2	2	8	8
1808	W CHERRY AV	1982	4	18	ACP	70	69.53	33	42	756	68	0	68	1	2	1	1	0	0	0	0	2	2	7	7
1809	W CHERRY AV	1982	6	22	ACP	342	342.44	33	55	1210	69	0	69	1	1	1	1	0	0	0	0	2	2	8	8
1810	ARROYO AV	1966	4	53	ACP	72	71.68	49	42	2226	52	0	52	1	1	1	1	0	0	0	0	2	2	7	7
1811	CALIFORNIA ST	1983	6	177	ACP	63	62.55	32	55	9735	69	0	69	1	1	2	1	0	0	0	0	2	2	8	8
1812	CALIFORNIA ST	1983	6	22	ACP	63	62.55	32	55	1210	70	0	70	1	1	1	1	0	0	0	0	2	2	7	7
1813	W CHERRY AV	1982	6	156	ACP	68	68.18	33	55	8580	68	0	68	1	1	2	1	0	0	0	0	2	2	8	8
1814	W CHERRY AV	1982	8	11	ACP	134	133.93	33	55	605	69	0	69	1	1	1	1	0	0	0	0	2	2	7	7
1815	W CHERRY AV	1982	6	11	ACP	68	68.18	33	55	605	69	0	69	1	1	1	1	0	0	0	0	2	2	7	7
1816	ORCHARD AV	1964	8	487	ACP	134	133.93	51	64	31168	50	0	50	1	1	3	1	0	4	0	0	2	2	13	13
1817	ORCHARD AV	1964	8	30	ACP	127	127.12	51	64	1920	51	0	51	1	1	1	1	0	4	0	0	2	2	11	11
1818	CALIFORNIA ST	1983	6	379	ACP	127	127.12	32	64	24256	69	0	69	1	1	3	1	0	4	0	0	2	2	13	13
1819	CALIFORNIA ST	1983	6	480	ACP	57	57.25	32	55	26400	68	0	68	1	1	3	1	0	0	0	0	2	2	9	9
1820	CALIFORNIA ST	1983	6	11	ACP	57	57.25	32	55	605	70	0	70	1	1	1	1	0	0	0	0	2	0	5	5
1821	FAIR OAKS AV	1982	6	364	ACP	127	127.12	33	64	23296	68	0	68	1	1	3	3	0	4	0	0	2	0	13	13
1822	FAIR OAKS AV	1982	6	11	ACP	127	127.12	33	55	605	69	0	69	1	1	1	3	0	0	0	0	2	0	7	7
1823	CALIFORNIA ST	1983	6	9	ACP	127	127.12	32	55	495	70	0	70	1	1	1	1	0	0	0	0	2	0	5	5
1824	W CHERRY AV	1982	4	19	GALV	0	0	33	26	494	26	0	26	1	1	1	1	0	0	0	0	2	2	7	7
1825	W CHERRY AV	1982	4	140	GALV	0	0	33	26	3640	25	0	25	1	1	1	1	0	0	0	0	2	0	7	5
1826	S HALCYON RD	1960	8	9	ACP	0	0	55	64	576	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1827	S HALCYON RD	1960	8	6	ACP	8	8.4	55	64	384	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1828	S HALCYON RD	1960	8	297	ACP	8	8.4	55	64	19008	46	0	46	1	1	3	0	0	0	0	0	0	0	4	4
1829	S HALCYON RD	1960	8	38	ACP	8	8.4	55	64	2432	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1830	S HALCYON RD	1960	8	7	ACP	11	11.33	55	64	448	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1831	S HALCYON RD	1960	8	961	ACP	11	11.33	55	64	61504	44	0	44	1	1	4	0	0	0	0	0	0	0	5	5
1832	S HALCYON RD	1960	8	8	ACP	11	11.33	55	64	512	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1833	S HALCYON RD	1960	8	297	ACP	1	1.3	55	64	19008	46	0	46	1	1	3	3	0	0	0	0	0	0	7	7
1834	GAYNFAIR TR	1963	6	243	ACP	4	3.88	52	69	16767	50	0	50	1	1	3	1	0	0	0	0	0	0	5	5
1835	GAYNFAIR TR	1963	6	9	ACP	5	4.72	52	55	495	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1836	THE PIKE	1973	10	436	ACP	14	14.28	42	69	30084	60	0	60	1	1	3	1	0	0	0	0	0	0	5	5
1837	THE PIKE	1973	10	420	ACP	7	6.54	42	69	28980	60	0	60	1	1	3	1	0	0	0	0	0	0	5	5
1838	S HALCYON RD	1960	8	8	ACP	1	1.3	55	69	552	48	0	48	1	1	1	3	0	0	0	0	0	0	5	5
1839	THE PIKE	1973	8	7	ACP	1	1.3	42	64	448	60	0	60	1	1	1	1	0	0	0	0	0	0	3	3
1840	S HALCYON RD	1960	8	24	ACP	0	0.35	55	64	1536	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1841	S HALCYON RD	1960	8	9	ACP	0	0.35	55	64	576	47	0	47	1	1	1	0	0	0	0	0	0	0	2	2
1842	THE PIKE	1973	8	51	ACP	1	1.3	42	64	3264	60	0	60	1	1	1	1	0	0	0	0	0	0	3	3
1843	MAGNOLIA DR	1963	6	34	ACP	4	4.06	52	55	1870	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1844	MAGNOLIA DR	1963	6	34	ACP	6	5.63	52	55	1870	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1845	GAYNFAIR TR	1963	6	239	ACP	5	4.72	52	55	13145	49	0	49	1	1	3	1	0	0	0	0	0	0	5	5
1846	GAYNFAIR TR	1963	6	9	ACP	5	4.72	52	55	495	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1847	FAIR OAKS AV	1982	4	16	ACP	14	13.85	33	42	672	68	0	68	1	1	1	3	5	0	0	2	2	0	14	14
1848	GAYNFAIR TR	1963	6	359	ACP	6	5.65	52	55	19745	48	0	48	1	1	3	1	0	0	0	0	0	0	5	5
1849	DIANA PL	1977	6	261	ACP	3	3.15	38	55	14355	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
1850	STARLIGHT LN	1991	8	7	PVC	13	12.57	24	12	84	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
1851	VICTORIAN CT	1991	8	6	PVC	7	7.2	24	12	72	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
1852	THE PIKE	1973	6	20	ACP	18	18	42	55	1100	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
1853	GARFIELD PL	1974	6	154	ACP	3	2.64	41	55	8470	60	0	60	1	1	2	1	0	0	0	2	0	2	8	8
1854	THE PIKE	1973	10	7	ACP	20	20.01	42	69	483	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
1855	S ELM ST	1964	10	8	ACP	20	20.01	51	69	552	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
1856	THE PIKE	1973	10	7	ACP	20	20.01	42	69	483	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
1857	S ELM ST	1964	10	8	ACP	30	30.47	51	55	440	51	0	51	1	1	1	3	0	0	0	2	0	2	9	9
1858	VERDE PL	1964	6	70	ACP	5	4.65	51	69	4830	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
1859	S ELM ST	1964	10	7	ACP	30	30.47	51	69	483	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
1860	S ELM ST	1964	6	107	ACP	15	14.82	51	69	7383	52	0	52	1	1	2	3	0	0	0	2	0	2	10	10
1861	GARFIELD PL	1974	6	7	ACP	6	5.68	41	55	385	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
1862	SYCAMORE CT	0	4	101	ACP	2	1.91	2	42	4242	99	0	99	1	1	1	1	0	0	0	0	0	0	3	3
1863	SYCAMORE DR	1987	6	15	ACP	9	8.66	28	42	630	73	0	73	1	1	1	1	0	0	0	0	0	0	3	3
1864	SYCAMORE CT	0	6	14	ACP	9	8.66	2	55	770	99	0	99	1	1	1	1	0	0	0	0	0	0	3	3
1865	SYCAMORE DR	1987	6	9	ACP	1	1.32	28	55	495	74	0	74	1	1	1	1	0	0	0	0	0	0	3	3
1866	MAGNOLIA DR	1963	6	15	ACP	5	4.64	52	55	825	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1867	MAGNOLIA DR	1963	6	14	ACP	5	4.64	52	55	770	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1868	MULBERRY LN	1963	6	15	ACP	5	4.64	52	55	825	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
1869	MAGNOLIA DR	1963	6	128	ACP	4	4.12	52	55	7040	49	0	49	1	1	2	1	0	0	0	0	0	0	4	4
1870	MAGNOLIA DR	1963	6	109	ACP	4	4.12	52	55	5995	49	0	49	1	1	2	1	0	0	0	0	0	0	4	4
1871	MAGNOLIA DR	1963	6	336	ACP	8	7.82	52	55	18480	49	0	49	1	1	3	1	0	0	0	0	0	0	5	5
1872	S HALCYON RD	1960	8	194	ACP	27	26.76	55	64	12416	47	0	47	1	1	3	3	0	0	0	0	0	0	7	7
1873	S HALCYON RD	1960	6	11	ACP	8	7.82	55	55	605	47	0	47	1	1	1	3	0	0	0	0	0	0	5	5
1874	SYCAMORE DR	1987	6	169	ACP	1	0.66	28	64	10816	74	0	74	1	1	3	1	0	0	0	0	0	0	5	5
1875	S HALCYON RD	1960	6	9	ACP	1	0.66	55	64	576	47	0	47	1	1	1	3	0	0	0	0	0	0	5	5
1876	S HALCYON RD	1960	6	6	ACP	1	0.66	55	55	330	47	0	47	1	1	1	3	0	0	0	0	0	0	5	5
1877	S HALCYON RD	1960	6	47	ACP	1	0.66	55	55	2585	46	0	46	1	1	1	3	0	0	0	0	0	0	5	5
1878	MULBERRY LN	1963	6	325	ACP	5	4.64	52	55	17875	49	0	49	1	1	3	1	0	0	0	0	0	0	5	5
1879	SYCAMORE DR	1987	6	338	ACP	1	1.32	28	55	18590	73	0	73	1	1	3	1	0	0	0	0	0	0	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1880	MULBERRY LN	1963	6	35	ACP	9	9	52	55	1925	49	0	49	1	1	1	1	0	0	0	0	0	3	3
1881	SYCAMORE DR	1987	6	8	ACP	1	1.32	28	55	440	74	0	74	1	1	1	1	0	0	0	0	0	3	3
1882	GAYNFAIR TR	1963	6	33	ACP	10	9.73	52	55	1815	49	0	49	1	1	1	1	0	0	0	0	0	3	3
1883	GAYNFAIR TR	1963	6	6	ACP	6	5.87	52	55	330	50	0	50	1	1	1	1	0	0	0	0	0	3	3
1884	SYCAMORE DR	1987	6	6	ACP	6	5.87	28	55	330	74	0	74	1	1	1	1	0	0	0	0	0	3	3
1885	SYCAMORE DR	1987	6	10	ACP	6	5.87	28	55	550	74	0	74	1	1	1	1	0	0	0	0	0	3	3
1886	MULBERRY LN	1963	6	327	ACP	6	5.87	52	55	17985	49	0	49	1	1	3	1	0	0	0	0	0	5	5
1887	GAYNFAIR TR	1963	6	401	ACP	5	4.72	52	55	22055	48	0	48	1	1	3	1	0	0	0	0	0	5	5
1888	SYCAMORE DR	1987	6	58	ACP	9	8.66	28	55	3190	73	0	73	1	1	1	1	0	0	0	0	0	3	3
1889	SYCAMORE DR	1987	8	141	ACP	44	44.07	28	64	9024	74	0	74	1	1	2	1	0	0	0	0	0	4	4
1890	SYCAMORE DR	1987	6	12	ACP	15	14.87	28	55	660	73	0	73	1	1	1	1	0	0	0	0	0	3	3
1891	SYCAMORE DR	1987	6	175	ACP	15	14.87	28	55	9625	73	0	73	1	1	2	1	0	0	0	0	0	4	4
1892	SYCAMORE DR	2001	6	52	ACP	2	2.5	14	55	2860	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1893	SYCAMORE DR	2001	6	333	ACP	6	5.87	14	55	18315	87	0	87	1	1	3	1	0	0	0	0	0	5	5
1894	SYCAMORE DR	2001	6	61	ACP	2	1.58	14	55	3355	87	0	87	1	1	1	1	0	0	0	0	0	3	3
1895	SYCAMORE DR	2001	6	295	ACP	2	2.5	14	55	16225	87	0	87	1	1	3	1	0	0	0	0	0	5	5
1896	MAGNOLIA DR	1963	6	8	ACP	5	4.72	52	55	440	50	0	50	1	1	1	1	0	0	0	0	0	3	3
1897	MAGNOLIA DR	1963	6	241	ACP	2	1.58	52	55	13255	49	0	49	1	1	3	1	0	0	0	0	0	5	5
1898	MAGNOLIA DR	1963	6	49	ACP	4	4.06	52	55	2695	49	0	49	1	1	1	1	0	0	0	0	0	3	3
1899	GAYNFAIR TR	1963	6	8	ACP	4	3.88	52	55	440	49	0	49	1	1	1	1	0	0	0	0	0	3	3
1900	GAYNFAIR TR	1963	6	9	ACP	4	3.88	52	69	621	51	0	51	1	1	1	1	0	0	0	0	0	3	3
1901	THE PIKE	1973	10	166	ACP	1	0.8	42	69	11454	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1902	THE PIKE	1973	10	118	ACP	2	1.67	42	69	8142	60	0	60	1	1	2	1	0	0	0	0	0	4	4
1903	THE PIKE	1973	10	174	ACP	2	1.67	42	69	12006	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1904	GARFIELD PL	1974	6	294	ACP	18	18	41	69	20286	61	0	61	1	1	3	1	0	0	0	0	0	5	5
1905	ROGERS CT	1976	6	232	ACP	5	5.06	39	55	12760	62	0	62	1	1	3	1	0	0	0	0	0	5	5
1906	GARFIELD PL	1974	6	20	ACP	18	18	41	55	1100	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1907	THE PIKE	1973	10	108	ACP	23	23.42	42	69	7452	60	0	60	1	1	2	1	0	0	0	0	0	4	4
1908	THE PIKE	1973	6	320	ACP	18	18	42	69	22080	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1909	THE PIKE	1973	6	6	ACP	5	4.65	42	55	330	59	0	59	1	1	1	1	0	0	0	0	0	3	3
1910	THE PIKE	1973	6	6	ACP	5	4.65	42	69	414	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1911	VERDE PL	1964	6	50	ACP	6	6.32	51	55	2750	50	0	50	1	1	1	1	0	0	0	0	0	3	3
1912	THE PIKE	1973	6	227	ACP	5	4.65	42	55	12485	59	0	59	1	1	3	1	0	0	0	0	0	5	5
1913	ROGERS CT	1976	6	184	ACP	5	5.09	39	55	10120	62	0	62	1	1	3	1	0	0	0	0	0	5	5
1914	ROGERS CT	1976	6	28	ACP	5	5.09	39	55	1540	62	0	62	1	1	1	1	0	0	0	0	0	3	3
1915	GARFIELD PL	1974	6	252	ACP	1	0.56	41	55	13860	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1916	GARFIELD PL	1974	6	5	ACP	5	5.06	41	55	275	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1917	ROGERS CT	1976	6	5	ACP	5	5.06	39	55	275	63	0	63	1	1	1	1	0	0	0	0	0	3	3
1918	ROGERS CT	1976	6	5	ACP	5	5.06	39	55	275	63	0	63	1	1	1	1	0	0	0	0	0	3	3
1919	VICTORIA WY	1974	6	43	ACP	4	3.69	41	55	2365	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1920	VICTORIA WY	1974	6	325	ACP	4	3.69	41	55	17875	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1921	GARFIELD PL	1974	6	288	ACP	5	5.06	41	55	15840	60	0	60	1	1	3	1	0	0	0	0	0	5	5
1922	GARFIELD PL	1974	6	7	ACP	6	5.68	41	55	385	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1923	GARFIELD PL	1974	6	7	ACP	6	5.68	41	55	385	61	0	61	1	1	1	1	0	0	0	0	0	3	3
1924	VICTORIA WY	1974	6	393	ACP	6	5.68	41	55	21615	59	0	59	1	1	3	1	0	0	0	2	0	7	7
1925	GARFIELD PL	1974	6	115	ACP	7	6.92	41	55	6325	60	0	60	1	1	2	1	0	0	0	2	0	2	8	8
1926	GARFIELD PL	1974	6	40	ACP	0	0.4	41	55	2200	60	0	60	1	1	1	1	0	0	0	0	0	3	3
1927	GARFIELD PL	1974	6	62	ACP	3	2.64	41	55	3410	60	0	60	1	1	1	1	0	0	0	2	0	2	7	7
1928	GARFIELD PL	1974	6	126	ACP	3	2.64	41	55	6930	60	0	60	1	1	2	1	0	0	0	2	0	2	8	8
1929	GARFIELD PL	1974	6	7	ACP	3	2.64	41	55	385	61	0	61	1	1	1	1	0	0	0	2	0	2	7	7
1930	GARFIELD PL	1974	6	216	ACP	15	14.82	41	55	11880	60	0	60	1	1	3	1	0	0	0	2	0	2	9	9
1931	S ELM ST	1964	6	247	ACP	15	14.82	51	55	13585	50	0	50	1	1	3	3	0	0	0	2	0	2	11	11
1932	S ELM ST	1964	10	255	ACP	30	30.47	51	69	17595	51	0	51	1	1	3	3	0	0	0	2	0	2	11	11
1933	THE PIKE	1973	10	47	ACP	20	20.01	42	69	3243	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
1934	THE PIKE	1973	10	267	ACP	20	20.01	42	69	18423	60	0	60	1	1	3	1	0	0	0	0	0	0	5	5
1935	S ELM ST	1964	6	264	ACP	6	6.32	51	55	14520	50	0	50	1	1	3	3	0	0	0	2	0	2	11	11
1936	S ELM ST	1964	10	267	ACP	30	30.47	51	69	18423	51	0	51	1	1	3	3	0	0	0	2	0	2	11	11
1937	S ELM ST	1964	6	138	ACP	15	14.82	51	69	9522	52	0	52	1	1	2	3	0	0	0	2	0	2	10	10
1938	S ELM ST	1964	6	8	ACP	15	14.82	51	55	440	51	0	51	1	1	1	3	0	0	0	2	0	2	9	9
1939	S ELM ST	1964	8	87	ACP	3	3.15	51	69	6003	52	0	52	1	1	2	3	0	0	0	2	0	2	10	10
1940	S ELM ST	1964	8	27	ACP	3	3.15	51	69	1863	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
1941	S ELM ST	1964	10	8	ACP	46	46.03	51	69	552	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
1942	S ELM ST	1964	8	262	ACP	3	3.15	51	64	16768	50	0	50	1	1	3	3	0	0	0	2	0	2	11	11
1943	PACIFIC POINTE WY	1971	8	246	ACP	8	7.73	44	64	15744	57	0	57	1	1	3	1	0	0	0	2	0	2	9	9
1944	PACIFIC POINTE WY	1971	8	53	ACP	8	7.73	44	64	3392	58	0	58	1	1	1	1	0	0	0	2	0	2	7	7
1945	S ELM ST	1964	8	258	ACP	13	12.83	51	64	16512	50	0	50	1	1	3	3	0	0	0	2	0	2	11	11
1946	PACIFIC POINTE WY	1971	8	18	ACP	8	7.73	44	64	1152	58	0	58	1	1	1	1	0	0	0	2	0	2	7	7
1947	S ELM ST	1964	10	126	ACP	44	43.66	51	69	8694	52	0	52	1	1	2	3	0	0	0	2	0	2	10	10
1948	S ELM ST	1964	10	9	ACP	44	43.66	51	55	495	51	0	51	1	1	1	3	0	0	0	2	0	2	9	9
1949	S ELM ST	1964	10	6	ACP	44	43.66	51	69	414	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
1950	S ELM ST	1964	10	15	ACP	44	43.66	51	69	1035	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
1951	S ELM ST	1964	10	15	ACP	46	46.03	51	64	960	51	0	51	1	1	1	3	0	0	0	2	0	2	9	9
1952	S ELM ST	1964	10	188	ACP	46	46.03	51	69	12972	51	0	51	1	1	3	3	0	0	0	2	0	2	11	11
1953	MORNING RISE LN	1991	8	6	PVC	1	1.14	24	12	72	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
1954	STARLIGHT LN	1991	8	8	PVC	1	1.14	24	12	96	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
1955	STARLIGHT LN	1991	8	304	PVC	1	1.38	24	12	3648	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
1956	VICTORIAN CT	1991	8	13	PVC	0	0	24	12	156	81	0	81	1	1	1	1	0	0	0	0	0	3	3
1957	DIANA PL	1977	6	14	ACP	6	5.65	38	55	770	63	0	63	1	1	1	1	0	0	0	0	0	3	3
1958	DIANA PL	1977	6	275	ACP	6	5.65	38	55	15125	63	0	63	1	1	3	1	0	0	0	0	0	5	5
1959	DIANA PL	1977	6	10	ACP	6	5.65	38	55	550	64	0	64	1	1	1	1	0	0	0	0	0	3	3
1960	DIANA PL	1977	6	73	ACP	6	5.65	38	55	4015	63	0	63	1	1	1	1	0	0	0	0	0	3	3
1961	DIANA PL	1977	6	4	ACP	6	5.65	38	55	220	64	0	64	1	1	1	1	0	0	0	0	0	3	3
1962	GAYNFAIR TR	1963	6	149	ACP	19	18.82	52	55	8195	49	0	49	1	1	2	1	0	0	0	0	0	4	4
1963	EL CAMINO REAL	1953	12	6	ACP	487	487	62	77	462	42	0	42	1	2	1	3	0	0	0	0	0	2	7	7
1964	EL CAMINO REAL	1953	4	28	ACP	187	186.68	62	77	2156	42	0	42	1	3	1	3	0	0	0	0	0	2	8	8
1965	EL CAMINO REAL	1953	12	14	ACP	487	487	62	77	1078	42	0	42	1	3	1	3	0	0	0	0	0	2	9	9
1966	EL CAMINO REAL	1953	12	3	ACP	487	487	62	77	231	42	0	42	1	2	1	3	0	0	0	0	0	2	9	9
1967	BRISCO RD	1982	6	220	PVC	0	0	33	12	2640	72	0	72	1	2	1	3	0	0	0	0	2	0	8	8
1968	E GRAND AV	2002	8	14	PVC	255	255.25	13	12	168	92	0	92	1	1	1	4	0	0	0	0	0	0	7	7
1969	E GRAND AV	2002	8	37	PVC	255	255.25	13	28	1036	93	0	93	1	2	1	4	0	0	0	0	0	0	6	6
1970	E GRAND AV	2002	10	35	ACP	342	341.87	13	77	2695	93	0	93	1	2	1	4	0	0	0	0	0	0	7	7
1971	E GRAND AV	2002	12	9	PVC	334	334.41	13	28	252	93	0	93	1	1	1	4	0	0	0	0	0	0	7	7
1972	BRIGHTON AV	1972	6	274	ACP	165	165.49	43	55	15070	58	0	58	1	4	3	1	0	0	0	0	2	0	7	7
1973	BRIGHTON AV	1972	10	154	ACP	694	694.4	43	69	10626	60	0	60	1	4	3	1	0	0	0	0	2	0	10	10

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
1974	MONTEGO ST	1959	10	3	ACP	732	731.77	56	69	207	48	0	48	1	1	1	1	0	0	0	0	2	0	8	8
1975	MONTEGO ST	1959	10	4	ACP	732	731.77	56	55	220	47	0	47	1	4	1	1	0	0	0	0	2	0	5	5
1976	MONTEGO ST	1959	10	135	ACP	732	731.77	56	69	9315	48	0	48	1	1	2	1	0	0	0	0	2	0	9	9
1977	MONTEGO ST	1959	10	20	ACP	732	731.77	56	55	1100	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
1978	GAYNFAIR TR	1963	6	179	ACP	12	11.55	52	55	9845	49	0	49	1	1	2	1	0	0	0	0	0	0	4	4
1979	GAYNFAIR TR	1963	6	50	ACP	12	11.55	52	55	2750	49	0	49	1	1	1	1	0	0	0	0	0	0	3	3
1980	GAYNFAIR TR	1963	6	15	ACP	12	11.55	52	55	825	49	0	49	1	1	1	1	0	0	0	0	0	0	3	3
1981	CAMERON CT	1976	8	116	ACP	44	44.07	39	64	7424	63	0	63	1	1	2	1	0	0	0	0	2	0	6	6
1982	WILLOW LN	1977	6	681	ACP	6	6.35	38	55	37455	61	0	61	1	1	3	1	0	0	0	0	0	0	5	5
1983	S HALCYON RD	1960	6	57	ACP	5	4.98	55	55	3135	46	0	46	1	1	1	3	0	0	0	0	0	0	5	5
1984	S HALCYON RD	1960	8	8	ACP	44	44.07	55	64	512	47	0	47	1	1	1	3	0	0	0	0	0	0	5	5
1985	SANDALWOOD AV	1952	6	427	ACP	5	4.95	63	64	27328	38	0	38	1	1	3	1	5	0	0	0	2	0	12	12
1986	CAMERON CT	1976	6	14	ACP	5	4.95	39	55	770	62	0	62	1	1	1	1	0	0	0	0	2	0	5	5
1987	CAMERON CT	1976	6	375	ACP	5	4.95	39	55	20625	61	0	61	1	1	3	1	0	0	0	0	2	0	7	7
1988	CAMERON CT	1976	6	28	ACP	5	4.95	39	55	1540	62	0	62	1	1	1	1	0	0	0	0	2	0	5	5
1989	MORNING RISE LN	1991	8	312	PVC	1	1.14	24	12	3744	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
1990	S ELM ST	1929	10	72	ACP	114	114.18	86	64	4608	0	0	0	10	1	1	3	0	0	0	0	0	0	5	50
1991	FAIR OAKS AV	1980	8	242	ACP	2	2.44	35	64	15488	51	0	51	1	1	3	3	5	0	0	2	2	0	16	16
1992	S HALCYON RD	1960	8	13	ACP	76	75.59	55	64	832	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1993	FAIR OAKS AV	1982	8	14	ACP	2	2.44	33	64	896	69	0	69	1	1	1	3	5	0	0	2	2	0	14	14
1994	S HALCYON RD	1960	8	13	ACP	76	75.59	55	64	832	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1995	S HALCYON RD	1960	8	61	ACP	76	75.59	55	64	3904	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
1996	S HALCYON RD	1960	8	234	ACP	76	75.59	55	64	14976	47	0	47	1	1	3	3	5	0	0	2	2	0	16	16
1997	TODD LN	1982	6	455	ACP	35	34.63	33	55	25025	67	0	67	1	1	3	1	5	0	0	2	2	0	14	14
1998	S HALCYON RD	1960	6	257	ACP	8	8.22	55	64	16448	47	0	47	1	1	3	3	5	0	0	2	2	0	16	16
1999	S HALCYON RD	1960	6	98	ACP	8	8.22	55	55	5390	46	0	46	1	1	2	3	5	0	0	0	2	0	13	13
2000	OLIVE ST	1991	6	411	ACP	8	8.22	24	55	22605	76	0	76	1	1	3	1	5	0	0	0	2	0	12	12
2001	S HALCYON RD	1960	8	28	PVC	31	30.76	55	12	336	32	0	32	1	1	1	3	5	0	0	2	2	0	14	14
2002	S HALCYON RD	1960	8	180	CIP	84	83.97	55	50	9000	31	0	31	1	1	2	3	5	0	0	2	2	0	15	15
2003	S HALCYON RD	1960	8	129	CIP	84	83.97	55	50	6450	31	0	31	1	1	2	3	5	0	0	2	2	0	15	15
2004	FAIR OAKS AV	1982	8	319	CIP	58	57.59	33	50	15950	53	0	53	1	1	3	3	5	0	0	2	2	0	16	16
2005	FAIR OAKS AV	1982	8	115	CIP	58	57.59	33	50	5750	53	0	53	1	1	2	3	5	0	0	2	2	0	15	15
2006	FAIR OAKS AV	1982	8	66	ACP	2	2.44	33	64	4224	53	0	53	1	1	1	3	5	0	0	2	2	0	14	14
2007	FAIR OAKS AV	1982	4	116	ACP	22	22.05	33	64	7424	53	0	53	1	1	2	3	5	0	0	2	2	0	15	15
2008	ALDER ST	1961	4	23	ACP	22	22.05	54	64	1472	48	0	48	1	1	1	1	5	0	0	2	2	0	12	12
2009	ALDER ST	1961	4	300	ACP	14	13.85	54	42	12600	46	0	46	1	1	3	1	5	0	0	2	2	0	14	14
2010	FARROLL AV	1982	6	272	ACP	0	0	33	55	14960	68	0	68	1	1	3	1	5	0	0	0	2	0	12	12
2011	S HALCYON RD	1960	8	37	PVC	51	50.6	55	12	444	47	0	47	1	1	1	3	5	0	0	0	2	0	12	12
2012	S HALCYON RD	1960	6	51	ACP	5	4.76	55	55	2805	46	0	46	1	1	1	3	5	0	0	0	2	0	12	12
2013	S HALCYON RD	1960	8	7	PVC	51	50.6	55	12	84	47	0	47	1	1	1	3	5	0	0	0	2	0	12	12
2014	SANDALWOOD AV	1952	4	21	ACP	7	7.2	63	42	882	38	0	38	1	1	1	1	0	0	0	0	2	0	5	5
2015	S HALCYON RD	1960	8	7	PVC	51	50.6	55	12	84	50	0	50	1	1	1	3	5	0	0	0	2	0	12	12
2016	FARROLL AV	1982	8	221	ACP	116	115.67	33	64	14144	69	0	69	1	1	3	1	5	0	0	0	2	0	12	12
2017	FARROLL AV	1982	8	6	PVC	42	42	33	12	72	72	0	72	1	1	1	1	5	0	0	0	2	0	10	10
2018	S HALCYON RD	1960	8	6	PVC	42	42	55	12	72	50	0	50	1	1	1	3	5	0	0	0	2	0	12	12
2019	S HALCYON RD	1960	6	152	ACP	5	4.76	55	64	9728	47	0	47	1	1	2	3	5	0	0	0	2	0	13	13
2020	SANDALWOOD AV	1952	8	249	PVC	42	42	63	5	1245	37	0	37	1	1	1	1	5	0	0	0	2	0	10	10
2021	SANDALWOOD AV	1952	4	135	ACP	7	7.2	63	55	7425	38	0	38	1	1	2	1	0	0	0	0	2	0	6	6
2022	ALDER ST	0	6	40	ACP	10	9.66	2	55	2200	99	0	99	1	1	1	1	0	0	0	0	2	0	5	5
2023	CAMERON CT	1976	6	452	ACP	10	9.66	39	55	24860	61	0	61	1	1	3	1	0	0	0	0	2	0	7	7
2024	ALDER ST	1961	4	5	ACP	0	0	54	42	210	47	0	47	1	1	1	1	5	0	0	0	2	0	10	10
2025	ALDER ST	1961	4	37	ACP	0	0	54	42	1554	47	0	47	1	1	1	1	5	0	0	0	2	0	10	10
2026	SANDALWOOD AV	1952	4	192	ACP	0	0	63	42	8064	37	0	37	1	1	2	1	5	0	0	0	2	0	11	11
2027	SANDALWOOD AV	1952	4	550	ACP	7	7.2	63	42	23100	36	0	36	1	1	3	1	5	0	0	0	2	0	12	12
2028	ALDER ST	1961	8	9	PVC	39	38.87	54	12	108	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
2029	FARROLL AV	1982	8	578	PVC	42	42	33	12	6936	70	0	70	1	1	2	1	5	0	0	0	2	0	11	11
2030	ALDER ST	1961	8	32	PVC	39	38.87	54	12	384	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
2031	ALDER ST	1961	8	11	PVC	41	40.96	54	12	132	51	0	51	1	1	1	1	5	0	0	0	2	0	10	10
2032	FARROLL AV	1982	8	32	PVC	41	40.96	33	5	160	68	0	68	1	1	1	1	5	0	0	0	2	0	10	10
2033	ALDER ST	1961	4	390	ACP	11	11.11	54	42	16380	46	0	46	1	1	3	1	5	0	0	2	2	0	14	14
2034	GAYNFAIR TR	1963	6	56	ACP	23	22.58	52	55	3080	49	0	49	1	1	1	1	0	0	0	0	2	0	5	5
2035	GAYNFAIR TR	1963	8	240	PVC	41	40.96	52	12	2880	52	0	52	1	1	1	1	5	0	0	0	2	0	10	10
2036	GAYNFAIR TR	1963	6	13	ACP	23	22.58	52	55	715	50	0	50	1	1	1	1	0	0	0	0	2	0	5	5
2037	FARROLL AV	1982	4	46	ACP	10	10.18	33	42	1932	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
2038	GAYNFAIR TR	1963	6	78	ACP	23	22.58	52	64	4992	53	0	53	1	1	1	1	0	0	0	0	2	0	5	5
2039	BEECH ST	1959	4	327	ACP	10	10.18	56	42	13734	44	0	44	1	1	3	1	0	0	0	0	2	0	7	7
2040	FAIR OAKS AV	1982	4	274	ACP	13	12.7	33	64	17536	68	0	68	1	1	3	3	5	0	0	2	2	0	16	16
2041	FAIR OAKS AV	1982	4	18	ACP	13	12.7	33	42	756	68	0	68	1	1	1	3	5	0	0	2	2	0	14	14
2042	DIANA PL	1977	6	61	ACP	20	19.93	38	64	3904	67	0	67	1	1	1	1	0	0	0	0	2	0	5	5
2043	DIANA PL	1977	6	9	ACP	8	7.88	38	55	495	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
2044	DIANA PL	1977	6	187	ACP	8	7.88	38	55	10285	63	0	63	1	1	3	1	0	0	0	0	2	0	7	7
2045	DIANA PL	1977	6	245	ACP	8	7.88	38	55	13475	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
2046	DIANA PL	1977	6	6	ACP	8	7.88	38	55	330	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
2047	DIANA PL	1977	6	96	ACP	8	7.88	38	48	4608	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
2048	FARROLL AV	1982	6	17	ACP	20	19.93	33	55	935	69	0	69	1	1	1	1	0	0	0	0	2	0	5	5
2049	FARROLL AV	1982	4	160	ACP	10	10.18	33	64	10240	71	0	71	1	1	3	1	0	0	0	0	2	0	7	7
2050	FAIR OAKS AV	1982	4	7	ACP	14	13.61	33	42	294	68	0	68	1	1	1	3	0	0	0	2	2	0	9	9
2051	FARROLL AV	1982	4	119	ACP	7	7.15	33	64	7616	72	0	72	1	1	2	1	0	0	0	0	2	0	6	6
2052	FARROLL AV	1970	4	17	ACP	7	7.15	45	55	935	56	0	56	1	1	1	1	0	0	0	0	0	0	3	3
2053	FARROLL AV	1991	8	116	PVC	10	9.68	24	12	1392	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2054	FAIR OAKS AV	1968	6	465	ACP	4	3.53	47	55	25575	53	0	53	1	1	3	3	0	0	0	2	0	2	11	11
2055	WALNUT ST	1958	6	18	ACP	51	51.07	57	64	1152	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
2056	FAIR OAKS AV	1982	4	16	ACP	14	13.61	33	64	1024	69	0	69	1	1	1	3	0	0	0	2	2	0	9	9
2057	STARLIGHT LN	1991	6	284	ACP	25	24.75	24	64	18176	80	0	80	1	1	3	1	0	0	0	2	0	2	9	9
2058	CARRINGTON PL	1991	8	17	PVC	4	3.93	24	12	204	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2059	HAMPTON PL	1991	8	95	PVC	2	1.65	24	12	1140	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2060	CARRINGTON PL	1991	8	183	PVC	4	3.93	24	12	2196	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2061	BRITTANY AV	1991	8	22	PVC	2	1.65	24	12	264	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2062	BRITTANY AV	1991	8	14	PVC	2	1.65	24	12	168	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2063	HAMPTON PL	1991	8	14	PVC	2	1.65	24	12	168	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2064	BRITTANY AV	1991	8	195	PVC	2	1.65	24	12	2340	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2065	S ELM ST	1964	8	118	PVC	13	13.01	51	12	1416	53	0	53	1	1	1	3	0	0	0	2	0	2	9	9
2066	S ELM ST	1964	8	27	PVC	13	13.01	51	12	324	54	0	54	1	1	1	3	0	0	0	2	0	2	9	9
2067	BRITTANY AV	1991	8	63	PVC	4	3.93	24	12	756	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2068	CARRINGTON PL	1991	8	29	PVC	4	3.93	24	12	348	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2069	S ELM ST	1964	8	195	ACP	12	12.15	51	64	12480	53	0	53	1	1	3	3	0	0	0	2	0	2	11	11
2070	S ELM ST	1964	8	10	ACP	12	12.15	51	64	640	51	0	51	1	1	1	3	0	0	0	2	0	2	9	9
2071	FARROLL AV	1991	8	255	PVC	9	9.3	24	12	3060	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2072	FARROLL AV	1991	8	8	PVC	9	9.3	24	12	96	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2073	FARROLL AV	1991	8	12	PVC	9	9.3	24	12	144	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2074	FARROLL AV	1991	8	23	PVC	9	9.3	24	12	276	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2075	MORNING RISE LN	1991	8	10	PVC	10	9.68	24	12	120	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2076	MORNING RISE LN	1991	8	156	PVC	5	4.96	24	12	1872	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2077	FARROLL AV	1991	8	6	PVC	10	9.68	24	12	72	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2078	STARLIGHT LN	1991	8	146	PVC	10	10.04	24	12	1752	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2079	STARLIGHT LN	1991	8	177	PVC	13	12.57	24	12	2124	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2080	FARROLL AV	1991	8	6	PVC	5	4.96	24	12	72	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2081	STARLIGHT LN	1991	8	137	PVC	5	4.96	24	12	1644	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2082	MORNING RISE LN	1991	8	245	PVC	9	9.3	24	12	2940	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2083	FARROLL AV	1970	6	9	ACP	25	24.75	45	55	495	57	0	57	1	1	1	1	0	0	0	2	0	2	7	7
2084	FARROLL AV	1970	6	10	ACP	25	24.75	45	55	550	57	0	57	1	1	1	1	0	0	0	2	0	2	7	7
2085	FARROLL AV	1991	8	6	PVC	10	10.04	24	12	72	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2086	VICTORIAN CT	1991	8	55	PVC	10	10.04	24	12	660	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2087	VICTORIAN CT	1991	8	94	PVC	1	1.33	24	12	1128	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2088	FARROLL AV	1991	8	7	PVC	1	1.33	24	12	84	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2089	FARROLL AV	1970	6	7	ACP	14	14.09	45	55	385	57	0	57	1	1	1	1	0	0	0	0	0	0	3	3
2090	FARROLL AV	1970	6	7	ACP	14	14.09	45	64	448	60	0	60	1	1	1	1	0	0	0	0	0	0	3	3
2091	VICTORIAN CT	1991	6	154	ACP	14	14.09	24	64	9856	80	0	80	1	1	2	1	0	0	0	2	0	2	8	8
2092	VICTORIAN CT	1991	8	7	PVC	7	7.2	24	12	84	81	0	81	1	1	1	1	0	0	0	2	0	2	7	7
2093	VICTORIAN CT	1991	8	153	PVC	7	7.2	24	12	1836	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2094	FARROLL AV	1970	6	171	ACP	14	14.09	45	64	10944	59	0	59	1	1	3	1	0	0	0	0	0	0	5	5
2095	FARROLL AV	1982	4	17	ACP	7	7.15	33	42	714	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
2096	PALM CT	1992	6	16	ACP	4	3.53	23	55	880	78	0	78	1	1	1	1	0	0	0	2	0	2	7	7
2097	PALM CT	1992	6	229	ACP	4	3.53	23	55	12595	78	0	78	1	1	3	1	0	0	0	2	0	2	9	9
2098	PALM CT	1992	6	216	ACP	4	3.53	23	55	11880	78	0	78	1	1	3	1	0	0	0	2	0	2	9	9
2099	PALM CT	1992	6	6	ACP	1	1.33	23	55	330	78	0	78	1	1	1	1	0	0	0	2	0	2	7	7
2100	PALM CT	1992	6	161	ACP	1	1.33	23	55	8855	78	0	78	1	1	2	1	0	0	0	2	0	2	8	8
2101	FARROLL AV	1970	6	31	ACP	25	24.75	45	55	1705	56	0	56	1	1	1	1	0	0	0	2	0	2	7	7
2102	PECAN ST	1982	4	343	ACP	7	7.15	33	42	14406	67	0	67	1	1	3	1	0	0	0	0	2	0	7	7
2103	VICTORIAN CT	1991	8	497	PVC	0	0	24	12	5964	79	0	79	1	1	2	1	0	0	0	2	0	2	8	8
2104	STARLIGHT LN	1991	8	276	PVC	13	12.57	24	12	3312	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2105	MORNING RISE LN	1991	8	189	PVC	10	9.68	24	12	2268	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2106	MORNING RISE LN	1991	8	270	PVC	10	9.68	24	12	3240	80	0	80	1	1	1	1	0	0	0	2	0	2	7	7
2107	PALM CT	1992	6	58	ACP	1	1.33	23	55	3190	78	0	78	1	1	1	1	0	0	0	2	0	2	7	7
2108	FAIR OAKS AV	1982	4	49	ACP	14	13.85	33	64	3136	69	0	69	1	1	1	3	5	0	0	2	2	0	14	14
2109	BEECH ST	1959	8	264	ACP	36	35.81	56	64	16896	45	0	45	1	1	3	1	5	0	0	2	2	0	14	14
2110	PECAN ST	1982	4	215	ACP	14	13.61	33	64	13760	69	0	69	1	1	3	1	0	0	0	2	2	0	9	9
2111	FAIR OAKS AV	1982	2	11	GALV	1	0.65	33	11	121	25	0	25	1	1	1	3	0	0	0	2	2	0	9	9
2112	FAIR OAKS AV	1982	2	18	GALV	1	0.65	33	55	990	69	0	69	1	1	1	3	0	0	0	2	2	0	9	9
2113	FAIR OAKS AV	1982	2	303	GALV	1	0.65	33	11	3333	24	0	24	1	1	1	1	0	0	0	2	2	0	7	3
2114	FAIR OAKS AV	1982	2	43	GALV	1	0.65	33	55	2365	69	0	69	1	1	1	3	0	0	0	2	2	0	9	9
2115	PALM CT	1992	6	10	ACP	1	0.52	23	55	550	78	0	78	1	1	1	1	0	0	0	2	0	2	7	7
2116	FAIR OAKS AV	1929	8	8	CIP	18	18.13	86	50	400	1	0	1	10	1	1	3	0	0	0	2	0	2	9	90
2117	FAIR OAKS AV	1968	8	13	CIP	18	18.13	47	32	416	54	0	54	1	1	1	3	0	0	0	2	0	2	9	9
2118	FAIR OAKS AV	1968	8	291	CIP	22	22	47	50	14550	39	0	39	1	1	3	3	0	0	0	2	0	2	11	11
2119	FAIR OAKS AV	1968	8	9	CIP	18	18.13	47	50	450	40	0	40	1	1	1	3	0	0	0	2	0	2	9	9
2120	FAIR OAKS AV	1968	6	249	ACP	1	0.52	47	55	13695	54	0	54	1	1	3	3	0	0	0	2	0	2	11	11
2121	WALNUT ST	1967	6	8	ACP	43	42.7	48	55	440	54	0	54	1	1	1	1	0	0	0	2	0	0	5	5
2122	WALNUT ST	1967	6	9	ACP	43	42.7	48	55	495	54	0	54	1	1	1	1	0	0	0	2	0	0	5	5
2123	WALNUT ST	1967	6	37	ACP	15	15.44	48	55	2035	53	0	53	1	1	1	1	0	0	0	2	0	0	5	5
2124	WALNUT ST	1967	6	687	ACP	43	42.7	48	55	37785	52	0	52	1	1	3	1	0	0	0	2	0	0	7	7
2125	WALNUT ST	1958	6	21	ACP	51	51.07	57	55	1155	45	0	45	1	1	1	1	0	0	0	2	0	0	5	5
2126	WALNUT ST	1958	6	18	ACP	51	51.07	57	55	990	45	0	45	1	1	1	1	0	0	0	2	0	0	5	5
2127	FAIR OAKS AV	1968	6	11	ACP	51	51.07	47	55	605	55	0	55	1	1	1	3	0	0	0	0	0	0	5	5
2128	FAIR OAKS AV	1968	8	120	ACP	12	11.61	47	64	7680	55	0	55	1	1	2	3	0	0	0	0	0	0	6	6
2129	WALNUT ST	1958	6	12	ACP	51	51.07	57	64	768	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
2130	ASH ST	1966	6	22	ACP	51	51.07	49	55	1210	52	0	52	1	1	1	3	0	0	0	2	0	0	7	7
2131	ASH ST	1966	6	454	ACP	13	12.62	49	55	24970	51	0	51	1	1	3	3	0	0	0	2	0	0	9	9
2132	WALNUT ST	1958	6	680	ACP	51	51.07	57	55	37400	43	0	43	1	1	3	1	0	0	0	2	0	0	7	7
2133	WALNUT ST	1958	6	21	ACP	51	51.07	57	55	1155	45	0	45	1	1	1	1	0	0	0	2	0	0	5	5
2134	ASH ST	1966	6	32	ACP	2	1.98	49	55	1760	52	0	52	1	1	1	3	0	0	0	2	0	0	7	7
2135	SUNSET DR	1953	4	417	ACP	17	17.04	62	55	22935	38	0	38	1	1	3	1	0	0	0	2	0	0	7	7
2136	SUNSET DR	1953	4	39	ACP	17	17.04	62	55	2145	40	0	40	1	1	1	1	0	0	0	2	0	0	5	5
2137	MAPLE ST	1967	6	243	ACP	41	40.57	48	55	13365	53	0	53	1	1	3	1	0	0	0	2	0	0	7	7
2138	ALDER ST	1961	6	258	ACP	41	40.57	54	55	14190	47	0	47	1	1	3	1	5	0	0	2	0	0	12	12
2139	ALDER ST	1961	6	121	ACP	37	36.97	54	55	6655	47	0	47	1	1	2	1	5	0	0	2	2	0	13	13
2140	ALDER ST	1961	6	8	ACP	37	36.97	54	55	440	48	0	48	1	1	1	1	5	0	0	2	2	0	12	12
2141	ALDER ST	1961	6	184	ACP	66	65.83	54	55	10120	47	0	47	1	1	3	1	5	0	0	2	2	0	14	14
2142	ASH ST	2001	4	126	GALV	4	4.41	14	40	5040	87	0	87	1	1	2	3	5	0	0	2	2	0	15	15
2143	E GRAND AV	2002	6	6	ACP	109	108.58	13	55	330	89	0	89	1	1	1	4	0	0	0	2	0	0	8	8
2144	E GRAND AV	2002	6	56	ACP	109	108.58	13	55	3080	89	0	89	1	1	1	4	0	0	0	2	0	0	8	8
2145	ALDER ST	1961	6	16	ACP	37	36.97	54	55	880	48	0	48	1	1	1	1	5	0	0	2	2	0	12	12
2146	ALDER ST	1961	6	10	ACP	37	36.97	54	55	550	48	0	48	1	1	1	1	5	0	0	2	2	0	12	12
2147	ASH ST	1966	6	23	ACP	26	26.39	49	55	1265	53	0	53	1	1	1	3	5	0	0	2	2	0	14	14
2148	ALDER ST	2001	6	10	ACP	33	32.95	14	55	550	88	0	88	1	1	1	1	5	0	0	2	2	0	12	12
2149	ALDER ST	2001	6	12	ACP	33	32.95	14	55	660	88	0	88	1	1	1	1	5	0	0	2	2	0	12	12
2150	ASH ST	1966	6	500	ACP	26	26.39	49	55	27500	51	0	51	1	1	3	3	5	0	0	2	2	0	16	16
2151	ASH ST	1966	6	390	ACP	28	28.2	49	55	21450	51	0	51	1	1	3	3	0	0	0	0	0	0	7	7
2152	ASH ST	1966	10	25	ACP	143	142.63	49	69	1725	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2153	ASH ST	1966	10	134	ACP	140	140.03	49	69	9246	53	0	53	1	1	2	3	0	0	0	2	0	2	10	10
2154	FAIR OAKS AV	1929	8	104	ACP	122	122.31	86	64	6656	0	0	0	10	1	2	3	0	0	0	2	0	2	10	100
2155	S ELM ST	1929	10	12	ACP	114	114.18	86	69	828	17	0	17	2	1	1	3	0	0	0	2	0	2	9	18
2156	FARROLL AV	1970	6	32	ACP	71	70.63	45	69	2208	58	0	58	1	1	1	1	0	0	0	2	0	2	7	7
2157	ASH ST	1966	6	10	ACP	3	2.55	49	55	550	53	0	53	1	1	1	3	0	0	0	0	0	0	5	5
2158	ASH ST	1966	6	10	ACP	2	2.24	49	55	550	53	0	53	1	1	1	3	0	0	0	0	0	0	5	5
2159	ASH ST	1966	6	11	ACP	2	2.24	49	55	605	53	0	53	1	1	1	3	0	0	0	0	0	0	5	5
2160	ASH ST	1966	6	305	ACP	9	8.58	49	55	16775	52	0	52	1	1	3	3	0	0	0	2	0	0	9	9
2161	ASH ST	1966	6	28	ACP	2	2.24	49	55	1540	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2162	ASH ST	1966	6	10	ACP	3	2.55	49	55	550	53	0	53	1	1	1	3	0	0	0	0	0	0	5	5
2163	ASH ST	1966	6	28	ACP	9	8.58	49	55	1540	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2164	ASH ST	1966	6	32	ACP	8	8	49	55	1760	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2165	ASH ST	1966	6	351	ACP	3	2.55	49	55	19305	51	0	51	1	1	3	3	0	0	0	2	0	2	11	11
2166	ASH ST	1966	6	12	ACP	3	2.55	49	55	660	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2167	ASH ST	1966	6	299	ACP	2	2.24	49	55	16445	52	0	52	1	1	3	3	0	0	0	0	0	0	7	7
2168	ASH ST	1966	6	113	ACP	3	2.55	49	55	6215	52	0	52	1	1	2	3	0	0	0	0	0	0	6	6
2169	AVENIDA DE DIAMANTE	1992	8	8	PVC	10	9.69	23	12	96	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2170	AVENIDA DE DIAMANTE	1992	8	8	PVC	10	9.69	23	12	96	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2171	AVENIDA DE DIAMANTE	1992	8	55	PVC	23	22.54	23	12	660	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2172	VIA VAQUERO	1992	8	11	PVC	10	9.69	23	12	132	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2173	AVENIDA DE DIAMANTE	1992	8	334	PVC	10	9.69	23	12	4008	81	0	81	1	1	1	1	0	0	0	0	0	2	5	5
2174	VIA BANDOLERO	1995	8	11	PVC	89	88.88	20	12	132	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2175	VIA BANDOLERO	1995	8	10	PVC	89	88.88	20	12	120	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2176	VIA BANDOLERO	1995	8	10	PVC	89	88.88	20	12	120	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2177	VIA BANDOLERO	1995	8	11	PVC	22	22.45	20	12	132	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2178	VIA BANDOLERO	1995	8	13	PVC	22	22.45	20	12	156	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2179	VIA BANDOLERO	1995	8	11	PVC	22	22.45	20	8	88	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2180	CALLE CARMAN	1995	8	54	PVC	22	22.45	20	12	648	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2181	VIA BANDOLERO	1995	6	215	PVC	0	0	20	8	1720	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2182	CALLE CARMAN	1995	6	9	PVC	0	0	20	8	72	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2183	VIA BANDOLERO	1995	8	227	PVC	22	22.45	20	12	2724	84	0	84	1	1	1	1	0	0	0	0	0	2	5	5
2184	VIA BANDOLERO	1995	8	11	PVC	20	19.8	20	12	132	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
2185	VIA BANDOLERO	1995	8	13	PVC	20	19.8	20	12	156	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
2186	CAMINO MERCADO	1985	12	20	PVC	168	167.6	30	28	560	76	0	76	1	1	1	3	0	0	0	0	0	2	7	7
2187	CAMINO MERCADO	1985	8	224	PVC	34	34.01	30	12	2688	71	0	71	1	1	1	3	0	0	0	0	0	0	5	5
2188	CAMINO MERCADO	1985	12	10	PVC	7	6.79	30	12	120	74	0	74	1	1	1	3	0	0	0	0	0	0	5	5
2189	DOS CERROS	1994	8	10	PVC	3	2.81	21	12	120	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2190	CALLE CUERVO	1992	8	236	PVC	0	0	23	12	2832	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2191	CALLE CUERVO	1992	8	85	PVC	39	38.71	23	12	1020	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2192	CALLE CUERVO	1992	8	10	PVC	39	38.71	23	12	120	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2193	CALLE CUERVO	1992	8	9	PVC	39	38.71	23	12	108	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2194	CALLE CUERVO	1992	8	10	PVC	39	38.71	23	12	120	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2195	VIA LAS AGUILAS	1992	8	172	PVC	39	38.71	23	12	2064	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2196	VIA LAS AGUILAS	1992	8	44	PVC	39	38.71	23	12	528	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2197	VIA LAS AGUILAS	1992	8	254	PVC	43	43.34	23	12	3048	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2198	DOS CERROS	1994	8	49	PVC	33	33.24	21	12	588	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2199	DOS CERROS	1994	8	206	PVC	3	2.81	21	12	2472	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2200	VIA LAS AGUILAS	1992	8	327	PVC	39	38.71	23	12	3924	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2201	VIA LAS AGUILAS	1992	8	270	PVC	27	27.22	23	12	3240	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2202	VIA LAS AGUILAS	1992	8	49	PVC	27	27.22	23	12	588	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2203	CAMINO MERCADO	1985	12	8	PVC	7	6.79	30	28	224	76	0	76	1	1	1	3	0	0	0	0	0	0	5	5
2204	CAMINO MERCADO	1985	12	240	PVC	7	6.79	30	12	2880	74	0	74	1	1	1	3	0	0	0	0	0	0	5	5
2205	DOS CERROS	1994	8	92	PVC	0	0	21	12	1104	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2206	CAMINO MERCADO	1985	12	24	PVC	7	6.79	30	28	672	76	0	76	1	1	1	3	0	0	0	0	0	0	5	5
2207	CAMINO MERCADO	1985	12	418	PVC	7	6.79	30	28	11704	74	0	74	1	1	3	3	0	0	0	0	0	0	7	7
2208	CAMINO MERCADO	1985	12	11	PVC	7	6.79	30	28	308	76	0	76	1	1	1	3	0	0	0	0	0	0	5	5
2209	CAMINO MERCADO	1985	12	33	PVC	0	0	30	28	924	77	0	77	1	1	1	3	0	0	0	0	0	0	5	5
2210	CAMINO MERCADO	1985	12	34	PVC	0	0	30	12	408	76	0	76	1	1	1	3	0	0	0	0	0	0	5	5
2211	CAMINO MERCADO	1985	12	6	PVC	7	6.79	30	28	168	76	0	76	1	1	1	3	0	0	0	0	0	0	5	5
2212	CAMINO MERCADO	1985	12	26	PVC	7	6.79	30	28	728	76	0	76	1	1	1	3	0	0	0	0	0	0	5	5
2213	CAMINO MERCADO	1985	8	106	PVC	12	11.92	30	12	1272	75	0	75	1	1	1	3	0	0	0	0	0	0	5	5
2214	CAMINO MERCADO	1985	8	12	PVC	34	34.01	30	12	144	74	0	74	1	1	1	3	0	0	0	0	0	0	5	5
2215	RANCHO PKWY	1992	8	11	PVC	22	22.09	23	19	209	84	0	84	1	1	1	2	0	0	0	0	0	2	6	6
2216	RANCHO PKWY	1992	8	7	PVC	12	11.92	23	12	84	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2217	W BRANCH ST	1995	8	7	PVC	12	11.92	20	28	196	87	0	87	1	1	1	4	0	0	0	0	0	0	6	6
2218	W BRANCH ST	1995	8	5	PVC	12	11.92	20	12	60	86	0	86	1	1	1	4	0	0	0	0	0	0	6	6
2219	W BRANCH ST	1995	12	261	PVC	32	31.78	20	28	7308	86	0	86	1	1	2	4	0	0	0	0	0	0	7	7
2220	W BRANCH ST	1995	8	184	PVC	20	19.86	20	12	2208	85	0	85	1	1	1	4	0	0	0	0	0	0	6	6
2221	W BRANCH ST	1995	8	5	PVC	12	11.92	20	12	60	86	0	86	1	1	1	4	0	0	0	0	0	0	6	6
2222	W BRANCH ST	1977	12	250	PVC	52	51.61	38	28	7000	65	0	65	1	1	2	4	0	0	0	0	2	0	9	9
2223	W BRANCH ST	1995	8	155	PVC	20	19.83	20	28	4340	86	0	86	1	1	1	4	0	0	0	0	2	0	8	8
2224	W BRANCH ST	1995	8	10	PVC	20	19.83	20	12	120	86	0	86	1	1	1	4	0	0	0	0	0	2	8	8
2225	CAMINO MERCADO	1995	8	6	PVC	18	17.6	20	12	72	86	0	86	1	1	1	3	0	0	0	0	0	2	7	7
2226	RANCHO PKWY	1992	8	112	PVC	22	22.09	23	19	2128	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2227	CAMINO MERCADO	1985	12	14	PVC	168	167.6	30	28	392	76	0	76	1	1	1	3	0	0	0	0	0	2	7	7
2228	W BRANCH ST	1995	8	10	PVC	20	19.83	20	12	120	86	0	86	1	1	1	4	0	0	0	0	0	2	8	8
2229	RANCHO PKWY	1992	8	10	PVC	22	22.09	23	12	120	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2230	RANCHO PKWY	1992	8	283	PVC	0	0	23	12	3396	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2231	CAMINO MERCADO	1995	8	298	PVC	12	11.92	20	12	3576	85	0	85	1	1	1	3	0	0	0	0	0	0	5	5
2232	CAMINO MERCADO	1995	8	270	PVC	12	11.92	20	12	3240	85	0	85	1	1	1	3	0	0	0	0	0	0	5	5
2233	CAMINO MERCADO	1995	8	72	PVC	12	11.92	20	12	864	85	0	85	1	1	1	3	0	0	0	0	0	0	5	5
2234	CAMINO MERCADO	1995	8	199	PVC	12	11.92	20	12	2388	85	0	85	1	1	1	3	0	0	0	0	0	2	7	7
2235	W BRANCH ST	1995	8	324	PVC	5	5.46	20	28	9072	86	0	86	1	1	2	4	0	0	0	0	2	2	11	11
2236	RANCHO PKWY	1992	10	14	PVC	52	51.61	23	19	266	84	0	84	1	1	1	2	0	0	0	0	0	2	6	6
2237	RANCHO PKWY	1992	8	340	PVC	7	7.23	23	28	9520	84	0	84	1	1	2	2	0	0	0	0	0	2	7	7
2238	RANCHO PKWY	1992	12	310	PVC	106	106.26	23	28	8680	82	0	82	1	1	2	3	0	0	0	0	2	2	10	10
2239	RANCHO PKWY	1992	12	6	PVC	106	106.26	23	28	168	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2240	RANCHO PKWY	1992	12	6	PVC	106	106.26	23	28	168	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2241	RANCHO PKWY	1992	12	3	PVC	106	106.26	23	28	84	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2242	RANCHO PKWY	1992	8	7	PVC	5	5.46	23	12	84	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2243	RANCHO PKWY	1992	8	207	PVC	5	5.46	23	12	2484	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2244	W BRANCH ST	1995	8	272	PVC	5	5.08	20	12	3264	85	0	85	1	1	1	4	0	0	0	0	0	2	8	8
2245	RANCHO PKWY	1992	12	5	PVC	106	106.26	23	28	140	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2246	RANCHO PKWY	1992	12	114	PVC	106	106.26	23	28	3192	83	0	83	1	1	1	3	0	0	0	0	0	2	7	7
2247	RANCHO PKWY	1992	8	10	PVC	7	7.23	23	28	280	84	0	84	1	1	1	2	0	0	0	0	0	2	6	6
2248	RANCHO PKWY	1992	8	5	PVC	7	7.23	23	12	60	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2249	RANCHO PKWY	1992	8	8	PVC	7	7.23	23	12	96	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2250	RANCHO PKWY	1992	8	89	PVC	7	7.23	23	12	1068	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2251	VIA VAQUERO	1992	8	120	PVC	5	5.08	23	12	1440	83	0	83	1	1	1	1	0	0	0	0	0	2	5	5
2252	VIA VAQUERO	1992	8	182	PVC	5	5.08	23	12	2184	82	0	82	1	1	1	1	0	0	0	0	0	2	5	5
2253	VIA VAQUERO	1992	8	334	PVC	5	5.08	23	12	4008	82	0	82	1	1	1	1	0	0	0	0	0	2	5	5
2254	VIA VAQUERO	1992	8	16	PVC	5	5.08	23	12	192	83	0	83	1	1	1	1	0	0	0	0	0	2	5	5
2255	RANCHO PKWY	1992	10	260	PVC	52	51.61	23	19	4940	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2256	RANCHO PKWY	1995	12	15	PVC	101	100.66	20	28	420	86	0	86	1	1	1	3	0	0	0	0	2	2	9	9
2257	W BRANCH ST	1977	12	283	PVC	65	64.94	38	28	7924	68	0	68	1	1	2	4	0	0	0	0	2	2	11	11
2258	RANCHO PKWY	1992	8	158	PVC	5	5.46	23	12	1896	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2259	RANCHO PKWY	1992	8	30	PVC	5	5.46	23	28	840	84	0	84	1	1	1	2	0	0	0	0	0	2	6	6
2260	RANCHO PKWY	1992	12	141	PVC	106	106.26	23	28	3948	83	0	83	1	1	1	3	0	0	0	0	0	2	7	7
2261	RANCHO PKWY	1992	8	10	PVC	22	22.09	23	12	120	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2262	RANCHO PKWY	1992	10	327	PVC	30	29.52	23	19	6213	83	0	83	1	1	2	2	0	0	0	0	0	2	7	7
2263	RANCHO PKWY	1992	8	175	PVC	22	22.09	23	12	2100	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2264	RANCHO PKWY	1992	8	6	PVC	12	11.92	23	12	72	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2265	RANCHO PKWY	1992	8	6	PVC	12	11.92	23	19	114	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2266	RANCHO PKWY	1992	8	146	PVC	18	17.6	23	12	1752	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2267	RANCHO PKWY	1992	8	152	PVC	12	11.92	23	12	1824	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2268	W BRANCH ST	1995	8	258	PVC	20	19.83	20	12	3096	85	0	85	1	1	1	4	0	0	0	0	0	2	8	8
2269	W BRANCH ST	1995	8	338	PVC	20	19.83	20	12	4056	85	0	85	1	1	1	4	0	0	0	0	0	2	8	8
2270	W BRANCH ST	1995	8	23	PVC	2	2.26	20	12	276	86	0	86	1	1	1	4	0	0	0	0	0	2	8	8
2271	W BRANCH ST	1995	8	262	PVC	18	17.6	20	12	3144	85	0	85	1	1	1	4	0	0	0	0	0	2	8	8
2272	CAMINO MERCADO	1995	8	8	PVC	18	17.6	20	12	96	86	0	86	1	1	1	3	0	0	0	0	0	2	7	7
2273	CAMINO MERCADO	1995	8	219	PVC	18	17.6	20	12	2628	85	0	85	1	1	1	3	0	0	0	0	0	2	7	7
2274	CAMINO MERCADO	1995	8	132	PVC	20	19.86	20	12	1584	85	0	85	1	1	1	3	0	0	0	0	0	2	7	7
2275	CAMINO MERCADO	1995	8	253	PVC	20	19.86	20	12	3036	85	0	85	1	1	1	3	0	0	0	0	0	0	5	5
2276	W BRANCH ST	1995	8	8	PVC	20	19.83	20	28	224	87	0	87	1	1	1	4	0	0	0	0	0	0	6	6
2277	W BRANCH ST	1995	8	8	PVC	20	19.83	20	12	96	86	0	86	1	1	1	4	0	0	0	0	0	0	6	6
2278	W BRANCH ST	1995	8	225	PVC	20	19.83	20	12	2700	85	0	85	1	1	1	4	0	0	0	0	0	0	6	6
2279	W BRANCH ST	1995	8	100	PVC	20	19.83	20	12	1200	85	0	85	1	1	1	4	0	0	0	0	0	0	6	6
2280	W BRANCH ST	1977	12	9	PVC	52	51.61	38	28	252	69	0	69	1	1	1	4	0	0	0	0	2	0	8	8
2281	VIA BANDOLERO	1995	8	12	PVC	20	19.8	20	12	144	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
2282	VIA VAQUERO	1992	8	14	PVC	23	23.11	23	28	392	83	0	83	1	1	1	1	0	0	0	0	0	2	5	5
2283	RANCHO PKWY	1992	12	17	PVC	49	49.26	23	28	476	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2284	RANCHO PKWY	1992	12	13	PVC	49	49.26	23	28	364	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2285	RANCHO PKWY	1992	12	196	PVC	106	106.26	23	28	5488	83	0	83	1	1	2	3	0	0	0	0	0	2	8	8
2286	RANCHO PKWY	1992	12	15	PVC	49	49.26	23	28	420	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2287	RANCHO PKWY	1992	12	27	PVC	168	167.6	23	28	756	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2288	RANCHO PKWY	1992	12	79	PVC	49	49.26	23	28	2212	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2289	RANCHO PKWY	1992	8	324	PVC	12	11.92	23	12	3888	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2290	RANCHO PKWY	1992	12	319	PVC	168	167.6	23	28	8932	82	0	82	1	1	2	3	0	0	0	0	0	2	8	8
2291	RANCHO PKWY	1992	12	20	PVC	168	167.6	23	28	560	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2292	VIA BANDOLERO	1995	8	227	PVC	23	23.11	20	12	2724	84	0	84	1	1	1	1	0	0	0	0	0	2	5	5
2293	VIA VAQUERO	1992	12	193	PVC	49	49.26	23	28	5404	83	0	83	1	1	2	1	0	0	0	0	0	2	6	6
2294	VIA BANDOLERO	1995	8	16	PVC	23	23.11	20	12	192	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
2295	VIA VAQUERO	1992	8	13	PVC	23	23.11	23	12	156	82	0	82	1	1	1	1	0	0	0	0	0	2	5	5
2296	VIA BANDOLERO	1995	8	41	PVC	26	26.15	20	12	492	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
2297	VIA VAQUERO	1992	8	498	PVC	1	1.32	23	12	5976	81	0	81	1	1	2	1	0	0	0	0	0	2	6	6
2298	VIA VAQUERO	1992	8	18	PVC	23	22.8	23	12	216	82	0	82	1	1	1	1	0	0	0	0	0	2	5	5
2299	VIA BANDOLERO	1995	8	51	PVC	20	19.8	20	12	612	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
2300	VIA BANDOLERO	1995	8	618	PVC	33	33.17	20	12	7416	83	0	83	1	1	2	1	0	0	0	0	0	0	4	4
2301	VIA BANDOLERO	1995	8	42	PVC	50	49.76	20	12	504	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2302	VIA VAQUERO	1992	8	61	PVC	50	49.76	23	12	732	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2303	RANCHO PKWY	1992	12	10	PVC	192	191.69	23	28	280	83	0	83	1	1	1	2	0	0	0	0	0	0	4	4
2304	RANCHO PKWY	1992	12	537	PVC	192	191.69	23	28	15036	81	0	81	1	1	3	2	0	0	0	0	0	2	8	8
2305	CAMINO MERCADO	1995	12	406	PVC	168	167.6	20	28	11368	85	0	85	1	1	3	3	0	0	0	0	0	2	9	9
2306	CAMINO MERCADO	1985	12	519	PVC	7	6.79	30	28	14532	74	0	74	1	1	3	3	0	0	0	0	0	2	9	9
2307	RANCHO PKWY	1992	12	29	PVC	168	167.6	23	28	812	83	0	83	1	1	1	2	0	0	0	0	0	2	6	6
2308	RANCHO PKWY	1992	8	292	PVC	12	11.92	23	12	3504	82	0	82	1	1	1	2	0	0	0	0	0	2	6	6
2309	CAMINO MERCADO	1995	8	169	PVC	12	11.92	20	12	2028	85	0	85	1	1	1	3	0	0	0	0	0	2	7	7
2310	CAMINO MERCADO	1995	8	135	PVC	12	11.92	20	12	1620	85	0	85	1	1	1	3	0	0	0	0	0	0	5	5
2311	VIA LAS AGUILAS	1992	8	247	PVC	12	11.92	23	12	2964	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2312	CAMINO MERCADO	1995	8	108	PVC	12	11.92	20	12	1296	85	0	85	1	1	1	3	0	0	0	0	0	0	5	5
2313	DOS CERROS	1994	8	10	PVC	3	2.81	21	12	120	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2314	DOS CERROS	1994	8	11	PVC	3	2.81	21	12	132	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2315	CAMINO MERCADO	1985	8	76	ACP	0	0	30	64	4864	72	0	72	1	1	1	3	0	0	0	0	0	0	5	5
2316	CAMINO MERCADO	1985	8	16	ACP	0	0	30	64	1024	73	0	73	1	1	1	3	0	0	0	0	0	0	5	5
2317	CAMINO MERCADO	1985	8	243	ACP	0	0	30	64	15552	72	0	72	1	1	3	3	0	0	0	0	0	0	7	7
2318	CAMINO MERCADO	1985	8	21	ACP	0	0	30	64	1344	73	0	73	1	1	1	3	0	0	0	0	0	0	5	5
2319	CAMINO MERCADO	1985	8	7	ACP	0	0	30	64	448	72	0	72	1	1	1	3	0	0	0	0	0	0	5	5
2320	W BRANCH ST	1995	12	254	PVC	101	100.66	20	28	7112	85	0	85	1	1	2	4	0	0	0	0	2	2	11	11
2321	N HWY 101	2001	12	357	PVC	86	86.2	14	28	9996	91	0	91	1	1	2	5	0	0	0	0	2	2	12	12
2322	W BRANCH ST	1977	12	9	PVC	65	64.94	38	28	252	69	0	69	1	1	1	4	0	0	0	0	2	2	10	10
2323	W BRANCH ST	1977	12	9	PVC	65	64.94	38	28	252	69	0	69	1	1	1	4	0	0	0	0	2	2	10	10
2324	W BRANCH ST	1977	12	184	PVC	65	64.94	38	28	5152	68	0	68	1	1	2	4	0	0	0	0	2	2	11	11
2325	W BRANCH ST	1977	12	9	PVC	65	64.94	38	28	252	69	0	69	1	1	1	4	0	0	0	0	2	2	10	10
2326	W BRANCH ST	1995	12	59	PVC	86	86.2	20	28	1652	86	0	86	1	1	1	4	0	0	0	0	2	2	10	10
2327	W BRANCH ST	1995	12	160	PVC	0	0	20	28	4480	86	0	86	1	1	1	4	0	0	0	0	2	2	10	10
2328	W BRANCH ST	0	12	8	PVC	86	86.2	2	28	224	104	0	104	1	1	1	4	0	0	0	0	2	2	10	10
2329	W BRANCH ST	1977	12	65	PVC	88	87.7	38	28	1820	69	0	69	1	1	1	4	0	0	0	0	2	2	10	10
2330	W BRANCH ST	1977	12	12	PVC	88	87.7	38	28	336	69	0	69	1	1	1	4	0	0	0	0	2	2	10	10
2331	W BRANCH ST	1977	12	259	PVC	88	87.7	38	28	7252	68	0	68	1	1	2	4	0	0	0	0	2	0	9	9
2332	W BRANCH ST	1977	12	84	PVC	88	88.24	38	28	2352	69	0	69	1	1	1	4	0	0	0	0	2	0	8	8
2333	W BRANCH ST	1977	12	186	PVC	88	88.24	38	28	5208	68	0	68	1	1	2	4	0	0	0	0	2	0	9	9
2334	W BRANCH ST	1977	12	149	PVC	52	51.61	38	28	4172	68	0	68	1	1	1	4	0	0	0	0	2	0	8	8
2335	W BRANCH ST	1977	12	12	PVC	88	88.24	38	28	336	69	0	69	1	1	1	4	0	0	0	0	2	0	8	8
2336	RODEO DR	1988	10	9	PVC	0	0	27	19	171	78	0	78	1	1	1	2	0	0	0	0	0	2	6	6
2337	RODEO DR	1988	12	191	ACP	17	17.04	27	77	14707	77	0	77	1	1	3	2	0	0	0	0	0	2	8	8
2338	RODEO DR	1988	10	152	ACP	17	17.04	27	69	10488	76	0	76	1	1	3	2	0	0	0	0	0	2	8	8
2339	RODEO DR	1988	12	22	ACP	0	0	27	77	1694	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
2340	RODEO DR	1988	10	48	PVC	0	0	27	12	576	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
2341	RODEO DR	1988	10	729	PVC	0	0	27	19	13851	76	0	76	1	1	3	2	0	0	0	0	0	2	8	8
2342	RODEO DR	1988	8	8	PVC	0	0	27	12	96	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
2343	RODEO DR	1988	8	11	PVC	0	0	27	12	132	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
2344	RODEO DR	1988	8	141	PVC	0	0	27	12	1692	77	0	77	1	1	1	2	0	0	0	0	0	2	6	6
2345	RODEO DR	1988	10	22	PVC	0	0	27	19	418	78	0	78	1	1	1	2	0	0	0	0	0	2	6	6
2346	W BRANCH ST	1977	12	274	ACP	140	139.85	38	77	21098	65	0	65	1	1	3	4	0	0	0	0	0	0	8	8
2347	W BRANCH ST	1977	12	122	ACP	140	139.85	38	77	9394	65	0	65	1	1	2	4	0	0	0	0	0	0	7	7
2348	W BRANCH ST OFF-RAMP	1971	8	131	ACP	21	20.68	44	77	10087	59	0	59	1	1	3	5	0	0	0	0	0	0	9	9
2349	HILLCREST DR	1948	8	100	PVC	18	18.37	67	8	800	34	0	34	1	2	1	1	0	0	0	0	2	0	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2350	EL CAMINO REAL	1953	12	308	ACP	291	290.68	62	77	23716	41	0	41	1	2	3	3	0	0	0	0	2	0	10	10
2351	STONECREST DR	0	12	16	ACP	241	241.34	2	77	1232	102	0	102	1	1	1	1	0	0	0	0	2	0	6	6
2352	HILLCREST DR	1948	6	15	ACP	18	17.78	67	42	630	33	0	33	1	1	1	1	0	0	0	0	2	0	5	5
2353	STONECREST DR	2001	4	10	ACP	0	0	14	42	420	86	0	86	1	1	1	1	0	0	0	0	2	0	5	5
2354	STONECREST DR	2001	10	531	ACP	23	22.94	14	77	40887	91	0	91	1	1	3	1	0	0	0	0	2	0	7	7
2355	STONECREST DR	2001	8	126	PVC	15	15.13	14	28	3528	91	0	91	1	2	1	1	0	0	0	0	2	0	5	5
2356	STONECREST DR	2001	12	12	ACP	241	241.34	14	77	924	90	0	90	1	1	1	1	0	0	0	0	2	0	6	6
2357	HILLCREST DR	1948	6	12	ACP	1	1.11	67	55	660	35	0	35	1	2	1	1	0	0	0	0	2	0	5	5
2358	HILLCREST DR	1948	12	638	ACP	241	241.34	67	77	49126	35	0	35	1	1	3	1	0	0	0	0	2	0	8	8
2359	HILLCREST DR	1948	6	17	ACP	1	1.11	67	55	935	35	0	35	1	1	1	1	0	0	0	0	2	0	5	5
2360	HILLCREST DR	1948	6	13	ACP	18	17.78	67	55	715	34	0	34	1	1	1	1	0	0	0	0	2	0	5	5
2361	STONECREST DR	2001	8	384	PVC	15	15.13	14	5	1920	85	0	85	1	1	1	1	0	0	0	0	2	0	5	5
2362	HILLCREST DR	1948	6	12	ACP	14	13.8	67	55	660	34	0	34	1	1	1	1	0	0	0	0	2	0	5	5
2363	PALOS SECOS	1994	8	12	PVC	12	11.66	21	12	144	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2364	PALOS SECOS	1994	12	78	PVC	182	182.03	21	28	2184	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2365	PALOS SECOS	1994	12	9	PVC	182	182.03	21	28	252	85	0	85	1	1	1	1	0	0	0	0	0	0	3	3
2366	PALOS SECOS	1994	8	6	PVC	12	11.66	21	12	72	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2367	PALOS SECOS	1994	8	11	PVC	12	11.66	21	12	132	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2368	VIA LAS AGUILAS	1992	8	151	PVC	12	11.66	23	12	1812	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2369	VIA LAS AGUILAS	1992	8	283	PVC	49	48.88	23	12	3396	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2370	VIA LAS AGUILAS	1992	8	11	PVC	7	6.83	23	12	132	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2371	PALOS SECOS	1994	8	13	PVC	7	6.83	21	12	156	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2372	VIA LAS AGUILAS	1992	8	118	PVC	49	48.88	23	12	1416	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2373	VIA LAS AGUILAS	1992	8	12	PVC	7	6.83	23	12	144	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2374	VIA LAS AGUILAS	1992	8	10	PVC	7	6.83	23	12	120	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2375	PALOS SECOS	1994	8	21	PVC	4	4.37	21	12	252	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2376	PALOS SECOS	1994	8	306	PVC	4	4.37	21	12	3672	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2377	PALOS SECOS	1994	8	4	PVC	4	4.37	21	12	48	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2378	PALOS SECOS	1994	8	119	PVC	7	6.83	21	12	1428	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
2379	PALOS SECOS	1994	8	231	PVC	71	70.86	21	12	2772	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
2380	VIA LAS AGUILAS	1992	8	226	PVC	77	77.47	23	12	2712	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2381	RANCHO PKWY	1992	12	17	PVC	183	182.66	23	28	476	83	0	83	1	1	1	2	0	0	0	0	0	0	4	4
2382	PALOS SECOS	1994	12	431	PVC	182	182.03	21	28	12068	84	0	84	1	1	3	1	0	0	0	0	0	0	5	5
2383	VIA LAS AGUILAS	1992	8	115	PVC	77	77.47	23	12	1380	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2384	VIA LAS AGUILAS	1992	8	5	PVC	78	78.33	23	12	60	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2385	VIA LAS AGUILAS	1992	8	150	PVC	78	78.33	23	12	1800	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2386	JENNY PL	2001	12	10	PVC	20	19.85	14	12	120	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2387	JENNY PL	2001	8	153	PVC	30	29.54	14	12	1836	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2388	JENNY PL	2001	8	9	PVC	25	25.27	14	12	108	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2389	JENNY PL	2001	12	20	PVC	20	19.85	14	28	560	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2390	JENNY PL	2001	8	294	PVC	22	22.06	14	12	3528	89	0	89	1	1	1	1	0	0	0	0	0	0	3	3
2391	JAMES WY	1975	12	29	PVC	2	2.21	40	28	812	65	0	65	1	1	1	3	0	0	0	0	0	0	5	5
2392	JAMES WY	1975	12	160	PVC	2	2.21	40	28	4480	65	0	65	1	1	1	3	0	0	0	0	0	0	5	5
2393	JENNY PL	2001	8	15	PVC	25	25.27	14	12	180	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2394	JENNY PL	2001	8	9	PVC	25	25.27	14	12	108	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2395	JENNY PL	2001	8	259	PVC	1	1.46	14	12	3108	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2396	JENNY PL	2001	8	9	PVC	25	25.27	14	12	108	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2397	ANDRE DR	2001	8	300	PVC	30	29.54	14	12	3600	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2398	ANDRE DR	2001	8	226	PVC	38	37.73	14	12	2712	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2399	JAMES WY	1975	12	9	PVC	0	0	40	12	108	65	0	65	1	1	1	3	0	0	0	0	0	0	5	5
2400	JAMES WY	1975	12	9	PVC	0	0	40	28	252	66	0	66	1	1	1	3	0	0	0	0	0	0	5	5
2401	CLINTON CT	2001	8	153	PVC	2	2.14	14	12	1836	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2402	JAMES WY	1975	12	481	PVC	6	6.27	40	28	13468	65	0	65	1	1	3	3	0	0	0	0	0	0	7	7
2403	CLINTON CT	2001	8	90	PVC	0	0	14	12	1080	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2404	CLINTON CT	2001	8	8	PVC	0	0	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2405	CLINTON CT	2001	12	220	PVC	0	0	14	28	6160	92	0	92	1	1	2	1	0	0	0	0	0	0	4	4
2406	JAMES WY	1975	12	8	PVC	0	0	40	28	224	66	0	66	1	1	1	3	0	0	0	0	0	0	5	5
2407	JAMES WY	1975	12	86	PVC	0	0	40	28	2408	66	0	66	1	1	1	3	0	0	0	0	0	0	5	5
2408	JAMES WY	1975	12	11	PVC	0	0	40	28	308	65	0	65	1	1	1	3	0	0	0	0	0	0	5	5
2409	JAMES WY	1975	12	5	PVC	0	0	40	28	140	66	0	66	1	1	1	3	0	0	0	0	0	0	5	5
2410	JAMES WY	1975	12	187	PVC	0	0	40	28	5236	65	0	65	1	1	2	3	0	0	0	0	0	0	6	6
2411	HODGES RD	1980	8	9	ACP	3	3	35	64	576	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
2412	HODGES RD	1980	8	45	ACP	6	5.52	35	64	2880	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
2413	EQUESTRIAN WY	1980	12	221	ACP	11	10.83	35	77	17017	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
2414	EQUESTRIAN WY	1980	8	21	ACP	6	5.52	35	64	1344	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
2415	EQUESTRIAN WY	1980	6	6	ACP	0	0.07	35	55	330	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
2416	EQUESTRIAN WY	1980	12	13	PVC	19	19.26	35	8	104	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
2417	JAMES WY	1975	12	738	ACP	11	10.83	40	77	56826	61	0	61	1	1	4	3	0	0	0	0	0	0	8	8
2418	STEVENSON DR	1978	12	22	PVC	6	6.27	37	28	616	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
2419	JAMES WY	1975	12	568	PVC	6	6.27	40	28	15904	65	0	65	1	1	3	3	0	0	0	0	0	0	7	7
2420	STEVENSON DR	1978	8	8	PVC	4	4.44	37	12	96	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
2421	STEVENSON DR	1978	8	22	PVC	4	4.44	37	12	264	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
2422	HODGES RD	1980	8	34	ACP	3	3	35	55	1870	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
2423	HODGES RD	1980	6	297	ACP	3	3.02	35	55	16335	66	0	66	1	1	3	1	0	0	0	0	0	0	5	5
2424	HODGES RD	1980	8	7	ACP	3	3	35	64	448	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
2425	STEVENSON DR	1978	8	401	PVC	4	4.44	37	12	4812	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
2426	HODGES RD	1980	8	621	ACP	3	3	35	64	39744	66	0	66	1	1	3	1	0	0	0	0	0	0	5	5
2427	EQUESTRIAN WY	1980	12	24	ACP	11	10.83	35	77	1848	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
2428	JAMES WY	1975	12	10	ACP	11	10.83	40	77	770	64	0	64	1	1	1	3	0	0	0	0	0	0	5	5
2429	EQUESTRIAN WY	1980	6	103	ACP	0	0.07	35	77	7931	68	0	68	1	1	2	1	0	0	0	0	0	0	4	4
2430	EQUESTRIAN WY	1980	6	37	ACP	0	0.07	35	55	2035	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
2431	ACORN DR	1971	6	468	ACP	0	0.07	44	55	25740	56	0	56	1	1	3	1	0	0	0	0	0	0	5	5
2432	EQUESTRIAN WY	1980	6	17	ACP	0	0.07	35	77	1309	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
2433	ACORN DR	1971	8	55	ACP	12	12.21	44	55	3025	57	0	57	1	1	1	1	0	0	0	0	0	0	3	3
2434	ACORN DR	1971	8	6	ACP	12	12.21	44	64	384	58	0	58	1	1	1	1	0	0	0	0	0	0	3	3
2435	ACORN DR	1971	8	15	ACP	12	12.21	44	55	825	58	0	58	1	1	1	1	0	0	0	0	0	0	3	3
2436	JAMES WY	1975	8	208	ACP	12	12.21	40	64	13312	61	0	61	1	1	3	3	0	0	0	0	0	0	7	7
2437	ACORN DR	1971	6	339	ACP	4	4.35	44	55	18645	57	0	57	1	1	3	1	0	0	0	0	0	0	5	5
2438	ACORN DR	1971	6	79	ACP	4	4.35	44	55	4345	58	0	58	1	1	1	1	0	0	0	0	0	0	3	3
2439	ACORN DR	1971	6	484	ACP	3	3.36	44	55	26620	57	0	57	1	1	3	1	0	0	0	0	0	0	5	5
2440	ACORN DR	1971	6	9	ACP	3	3.36	44	55	495	58	0	58	1	1	1	1	0	0	0	0	0	0	3	3
2441	EQUESTRIAN WY	1980	6	331	ACP	3	3.36	35	77	25487	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
2442	ACORN DR	1971	6	37	ACP	3	3.36	44	55	2035	58	0	58	1	1	1	1	0	0	0	0	0	0	3	3
2443	ACORN DR	1971	6	20	ACP	3	3.36	44	77	1540	60	0	60	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2444	EQUESTRIAN WY	1980	12	84	ACP	0	0	35	77	6468	69	0	69	1	1	2	1	0	0	0	0	0	4	4
2445	EQUESTRIAN WY	1980	12	181	PVC	14	14.43	35	28	5068	70	0	70	1	1	2	1	0	0	0	0	0	4	4
2446	OAK LEAF CR	0	12	11	PVC	19	19.26	2	28	308	104	0	104	1	1	1	1	0	0	0	0	0	3	3
2447	OAK LEAF CR	0	12	55	PVC	19	19.26	2	28	1540	104	0	104	1	1	1	1	0	0	0	0	0	3	3
2448	OAK LEAF CR	1971	6	113	PVC	1	1	44	8	904	60	0	60	1	1	1	1	0	0	0	0	0	3	3
2449	EQUESTRIAN WY	1980	12	14	PVC	19	19.26	35	28	392	71	0	71	1	1	1	1	0	0	0	0	0	3	3
2450	EQUESTRIAN WY	1980	12	36	PVC	18	18.25	35	28	1008	71	0	71	1	1	1	1	0	0	0	0	0	3	3
2451	EQUESTRIAN WY	1980	12	385	PVC	18	18.25	35	28	10780	70	0	70	1	1	3	1	0	0	0	0	0	5	5
2452	OAK LEAF CR	1971	6	44	PVC	4	3.61	44	8	352	60	0	60	1	1	1	1	0	0	0	0	0	3	3
2453	EQUESTRIAN WY	1980	12	237	PVC	19	19.26	35	28	6636	70	0	70	1	1	2	1	0	0	0	0	0	4	4
2454	OAK LEAF CR	1971	6	458	PVC	4	3.61	44	8	3664	59	0	59	1	1	1	1	0	0	0	0	0	3	3
2455	SCENIC CR	1980	6	73	PVC	4	3.61	35	8	584	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2456	SCENIC CR	1980	6	11	PVC	4	3.61	35	8	88	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2457	EQUESTRIAN WY	1980	12	341	PVC	27	26.59	35	28	9548	70	0	70	1	1	2	1	0	0	0	0	0	4	4
2458	SCENIC CR	1980	6	10	PVC	4	3.82	35	8	80	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2459	SCENIC CR	1980	12	64	PVC	38	37.93	35	28	1792	71	0	71	1	1	1	1	0	0	0	0	0	3	3
2460	EQUESTRIAN WY	1980	6	236	PVC	4	4.25	35	8	1888	68	0	68	1	1	1	1	0	0	0	0	0	3	3
2461	SCENIC CR	1980	6	10	PVC	4	3.82	35	28	280	71	0	71	1	1	1	1	0	0	0	0	0	3	3
2462	SCENIC CR	1980	6	494	PVC	4	4.22	35	8	3952	68	0	68	1	1	1	1	0	0	0	0	0	3	3
2463	SCENIC CR	1980	6	9	PVC	4	3.61	35	8	72	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2464	SCENIC CR	1980	6	12	PVC	4	3.82	35	28	336	71	0	71	1	1	1	1	0	0	0	0	0	3	3
2465	EQUESTRIAN WY	1980	6	10	PVC	4	3.82	35	8	80	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2466	VISTA CR	1980	12	8	PVC	5	4.76	35	8	64	70	0	70	1	1	1	1	0	0	0	0	0	3	3
2467	VISTA CR	1980	12	249	PVC	5	4.76	35	28	6972	71	0	71	1	1	2	1	0	0	0	0	0	4	4
2468	EQUESTRIAN WY	1980	12	87	PVC	62	62.01	35	28	2436	71	0	71	1	1	1	1	0	0	0	0	0	3	3
2469	VISTA CR	1980	12	9	PVC	5	4.76	35	28	252	72	0	72	1	1	1	1	0	0	0	0	0	3	3
2470	VISTA CR	1980	12	8	PVC	5	4.76	35	28	224	72	0	72	1	1	1	1	0	0	0	0	0	3	3
2471	EQUESTRIAN WY	1980	12	9	PVC	5	4.76	35	28	252	72	0	72	1	1	1	1	0	0	0	0	0	3	3
2472	SCENIC CR	1980	6	244	PVC	4	3.82	35	8	1952	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2473	VISTA CR	1980	6	278	PVC	8	7.7	35	8	2224	69	1	62	1	1	1	1	0	0	0	0	0	3	3
2474	EQUESTRIAN WY	1980	12	413	PVC	42	42.02	35	28	11564	70	0	70	1	1	3	1	0	0	0	0	0	5	5
2475	VISTA DR	1998	12	361	PVC	64	64.19	17	28	10108	89	0	89	1	1	3	1	0	0	0	0	0	5	5
2476	EQUESTRIAN WY	1980	12	262	PVC	5	4.76	35	28	7336	71	0	71	1	1	2	1	0	0	0	0	0	4	4
2477	MUSTANG CR	1980	6	106	PVC	2	1.9	35	8	848	69	0	69	1	1	1	1	0	0	0	0	0	3	3
2478	ANDRE DR	2001	8	8	PVC	7	6.69	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2479	ANDRE DR	2001	8	118	PVC	7	6.69	14	12	1416	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2480	ANDRE DR	2001	8	247	PVC	49	49.37	14	12	2964	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2481	ANDRE DR	2001	8	8	PVC	7	6.69	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2482	ANDRE DR	2001	8	78	PVC	38	37.73	14	12	936	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2483	ANDRE DR	2001	8	165	PVC	39	38.82	14	12	1980	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2484	ANDRE DR	2001	8	6	PVC	7	6.69	14	12	72	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2485	MATTHEW WY	2001	8	305	PVC	49	49.37	14	12	3660	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2486	ANDRE DR	2001	8	255	PVC	0	0	14	12	3060	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2487	ANDRE DR	2001	8	101	PVC	0	0	14	12	1212	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2488	ANDRE DR	2001	8	14	PVC	0	0	14	12	168	91	0	91	1	4	1	1	0	0	0	0	0	3	3
2489	MATTHEW WY	2001	8	7	PVC	57	57.41	14	43	301	93	0	93	1	1	1	1	0	0	0	0	0	6	6
2490	MATTHEW WY	2001	8	27	PVC	57	57.41	14	12	324	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2491	MATTHEW WY	2001	8	10	PVC	57	57.41	14	12	120	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2492	MATTHEW WY	2001	8	273	PVC	57	57.41	14	12	3276	89	0	89	1	1	1	1	0	0	0	0	0	3	3
2493	VISTA DR	1998	12	12	PVC	64	64.19	17	8	96	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2494	VISTA DR	1998	12	14	PVC	64	64.19	17	28	392	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2495	ARABIAN CR	1997	6	164	PVC	0	0	18	8	1312	86	0	86	1	1	1	1	0	0	0	0	0	3	3
2496	VISTA DR	1998	6	498	PVC	11	11.13	17	8	3984	86	0	86	1	1	1	1	0	0	0	0	0	3	3
2497	VISTA DR	1998	12	12	PVC	64	64.19	17	28	336	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2498	PUESTA DEL SOL	1998	8	10	PVC	22	21.68	17	19	190	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2499	LOS CIERVOS	1998	10	12	PVC	19	19.16	17	12	144	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2500	VISTA DR	1998	12	423	PVC	78	77.97	17	28	11844	89	0	89	1	1	3	1	0	0	0	0	0	5	5
2501	VISTA DR	1998	12	19	PVC	89	89.48	17	28	532	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2502	VISTA DR	1998	12	107	PVC	89	89.48	17	28	2996	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2503	VISTA DR	1998	12	99	PVC	91	90.6	17	28	2772	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2504	LOS CIERVOS	1998	12	7	PVC	91	90.6	17	28	196	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2505	LOS CIERVOS	1998	12	9	PVC	91	90.6	17	12	108	89	0	89	1	1	1	1	0	0	0	0	0	3	3
2506	LOS CIERVOS	1998	12	378	PVC	95	95.08	17	28	10584	89	0	89	1	1	3	1	0	0	0	0	0	5	5
2507	VISTA DR	1998	12	21	PVC	91	90.6	17	12	252	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2508	LOS CIERVOS	1998	12	8	PVC	91	90.6	17	28	224	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2509	LOS CIERVOS	1998	8	138	PVC	3	3.49	17	12	1656	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2510	LOS CIERVOS	1998	8	163	PVC	3	3.49	17	12	1956	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2511	PUESTA DEL SOL	1998	10	191	PVC	32	31.76	17	19	3629	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2512	LOS CIERVOS	1998	8	160	PVC	9	8.53	17	12	1920	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2513	PUESTA DEL SOL	1998	8	8	PVC	22	21.68	17	12	96	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2514	LOS CIERVOS	1998	8	10	PVC	22	21.68	17	12	120	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2515	PUESTA DEL SOL	1998	8	127	PVC	22	21.68	17	12	1524	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2516	LOS CIERVOS	1998	8	220	PVC	0	0	17	12	2640	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2517	LOS CIERVOS	1998	8	142	PVC	0	0	17	12	1704	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2518	PUESTA DEL SOL	1998	10	312	PVC	32	31.76	17	19	5928	88	0	88	1	1	2	1	0	0	0	0	0	4	4
2519	LOS CIERVOS	1998	10	12	PVC	19	19.16	17	19	228	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2520	ASILO	1998	4	8	PVC	4	3.82	17	19	152	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2521	ASILO	1998	4	8	PVC	4	3.82	17	5	40	86	0	86	1	1	1	1	0	0	0	0	0	3	3
2522	ASILO	1998	4	8	PVC	4	3.82	17	19	152	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2523	ASILO	1998	12	8	PVC	200	200.16	17	28	224	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2524	ASILO	1998	12	8	PVC	200	200.16	17	12	96	89	0	89	1	2	1	1	0	0	0	0	0	3	3
2525	ASILO	1998	12	8	PVC	200	200.16	17	28	224	90	0	90	1	1	1	1	0	0	0	0	0	4	4
2526	EQUESTRIAN WY	1980	12	33	PVC	0	0	35	28	924	72	0	72	1	1	1	1	0	0	0	0	0	3	3
2527	EQUESTRIAN WY	1980	12	78	PVC	0	0	35	28	2184	72	0	72	1	1	1	1	0	0	0	0	0	3	3
2528	DEER TRAIL CR	1970	12	13	ACP	5	4.88	45	77	1001	59	0	59	1	1	1	1	0	0	0	0	0	3	3
2529	DEER TRAIL CR	1970	12	253	ACP	5	4.88	45	64	16192	57	0	57	1	1	3	1	0	0	0	0	0	5	5
2530	DEER TRAIL CR	1970	12	23	ACP	5	4.88	45	77	1771	59	0	59	1	1	1	1	0	0	0	0	0	3	3
2531	DEER TRAIL CR	1970	4	505	PVC	60	60	45	28	14140	57	0	57	1	1	3	1	0	0	0	0	0	5	5
2532	DEER TRAIL CR	1970	12	732	ACP	41	41.47	45	77	56364	56	0	56	1	1	4	1	0	0	0	0	0	6	6
2533	DEER TRAIL CR	1970	12	126	ACP	41	41.47	45	77	9702	59	0	59	1	1	2	1	0	0	0	0	0	4	4
2534	ROBIN CR	1985	12	395	ACP	41	41.47	30	77	30415	72	0	72	1	1	3	1	0	0	0	0	0	5	5
2535	VISTA DR	1998	10	8	PVC	77	76.57	17	19	152	88	0	88	1	4	1	1	0	0	0	0	0	3	3
2536	VISTA DR	1998	16	11	PVC	893	893.39	17	43	473	92	0	92	1	1	1	1	0	0	0	0	0	6	6
2537	VISTA DR	1998	10	11	PVC	2	2.3	17	19	209	88	0	88	1	1	1	1	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2538	VISTA DR	1998	10	12	PVC	2	2.3	17	19	228	88	0	88	1	4	1	1	0	0	0	0	0	3	3
2539	VISTA DR	1998	16	219	DIP	690	690.14	17	50	10950	91	0	91	1	1	3	1	0	0	0	0	0	8	8
2540	VISTA DR	1998	16	8	DIP	690	690.14	17	22	176	88	0	88	1	4	1	1	0	0	0	0	0	3	3
2541	VISTA DR	1998	16	10	DIP	690	690.14	17	50	500	98	0	98	1	1	1	1	0	0	0	0	0	6	6
2542	VISTA DR	1998	8	76	PVC	80	80.41	17	12	912	88	0	88	1	4	1	1	0	0	0	0	0	3	3
2543	VISTA DR	1998	16	7	DIP	690	690.14	17	50	350	98	0	98	1	4	1	1	0	0	0	0	0	6	6
2544	LA CANADA	2000	16	21	DIP	610	609.73	15	50	1050	100	0	100	1	4	1	1	0	0	0	0	0	6	6
2545	LA CANADA	2000	16	232	PVC	609	609.25	15	43	9976	92	0	92	1	1	2	1	0	0	0	0	0	7	7
2546	ASILO	1998	8	17	PVC	80	79.76	17	12	204	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2547	ASILO	1998	8	284	PVC	80	79.76	17	12	3408	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2548	ASILO	1998	8	619	PVC	60	59.95	17	12	7428	86	0	86	1	1	2	1	0	0	0	0	0	4	4
2549	ASILO	1998	4	50	PVC	2	1.6	17	5	250	86	0	86	1	1	1	1	0	0	0	0	0	3	3
2550	ASILO	1998	12	182	PVC	200	200.16	17	5	910	86	0	86	1	1	1	1	0	0	0	0	0	3	3
2551	ASILO	1998	8	424	PVC	104	104.05	17	12	5088	88	0	88	1	1	2	1	0	0	0	0	0	4	4
2552	ASILO	1998	8	202	PVC	103	102.86	17	12	2424	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2553	PARAISO	1998	8	9	PVC	5	5.11	17	12	108	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2554	PARAISO	1998	8	111	PVC	5	5.11	17	12	1332	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2555	PARAISO	1998	8	27	PVC	5	5.11	17	12	324	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2556	ASILO	1998	8	9	PVC	5	5.11	17	12	108	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2557	ASILO	1998	8	9	PVC	5	5.11	17	12	108	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2558	PARAISO	1998	8	335	PVC	96	96.1	17	12	4020	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2559	ASILO	1998	8	9	PVC	92	92.45	17	12	108	88	0	88	1	4	1	1	0	0	0	0	0	3	3
2560	ASILO	1998	8	10	PVC	92	92.45	17	43	430	91	0	91	1	1	1	1	0	0	0	0	0	6	6
2561	ASILO	1998	8	11	PVC	92	92.45	17	12	132	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2562	ROSEMARY CT	2001	16	8	PVC	743	742.87	14	12	96	90	0	90	1	4	1	1	0	0	0	0	0	3	3
2563	ROSEMARY CT	2001	16	8	PVC	743	742.87	14	43	344	93	0	93	1	1	1	1	0	0	0	0	0	6	6
2564	LA CANADA	2000	8	27	PVC	0	0	15	12	324	88	0	88	1	4	1	1	0	0	0	0	0	3	3
2565	ROSEMARY CT	2001	16	8	PVC	743	742.87	14	43	344	93	0	93	1	1	1	1	0	0	0	0	0	6	6
2566	ROSEMARY CT	2001	8	16	PVC	0	0.03	14	12	192	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2567	ROSEMARY CT	2001	8	15	PVC	0	0.03	14	12	180	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2568	ROSEMARY CT	2001	8	260	PVC	0	0.03	14	12	3120	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2569	ROSEMARY CT	2001	16	52	PVC	743	742.87	14	12	624	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2570	MATTHEW WY	2001	8	6	PVC	57	57.41	14	12	72	90	0	90	1	4	1	1	0	0	0	0	0	3	3
2571	MATTHEW WY	2001	8	8	PVC	57	57.41	14	43	344	93	0	93	1	1	1	1	0	0	0	0	0	6	6
2572	ASILO	1998	8	168	PVC	92	92.45	17	12	2016	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2573	ASILO	1998	8	117	PVC	94	94.02	17	12	1404	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2574	ASILO	1998	8	225	PVC	56	55.56	17	12	2700	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2575	LA CANADA	2000	8	164	PVC	56	55.56	15	12	1968	89	0	89	1	1	1	1	0	0	0	0	0	3	3
2576	EQUESTRIAN WY	1980	8	99	ACP	0	0.05	35	64	6336	67	0	67	1	1	2	1	0	0	0	0	0	4	4
2577	PUESTA DEL SOL	1998	10	270	PVC	36	35.76	17	19	5130	88	0	88	1	1	2	1	0	0	0	0	0	4	4
2578	PUESTA DEL SOL	1998	10	12	PVC	36	35.76	17	19	228	89	0	89	1	1	1	1	0	0	0	0	0	3	3
2579	PUESTA DEL SOL	1998	10	325	PVC	36	35.76	17	19	6175	88	0	88	1	1	2	1	0	0	0	0	0	4	4
2580	PUESTA DEL SOL	1998	10	79	PVC	43	42.64	17	19	1501	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2581	PUESTA DEL SOL	1998	10	16	PVC	77	76.57	17	19	304	89	0	89	1	5	1	1	0	0	0	0	0	3	3
2582	VISTA DR	1998	16	7	PVC	893	893.39	17	43	301	91	0	91	1	1	1	1	0	0	0	0	0	7	7
2583	PUESTA DEL SOL	1998	10	45	PVC	0	0	17	19	855	90	0	90	1	5	1	0	0	0	0	0	0	2	2
2584	PUESTA DEL SOL	1998	16	40	PVC	896	896.24	17	43	1720	92	0	92	1	1	1	0	0	0	0	0	0	6	6
2585	PUESTA DEL SOL	1998	10	78	PVC	0	0	17	19	1482	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2586	PUESTA DEL SOL	1998	10	12	PVC	0	0	17	19	228	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2587	PUESTA DEL SOL	1998	10	15	PVC	124	124.06	17	19	285	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2588	PUESTA DEL SOL	1998	10	21	PVC	73	72.96	17	19	399	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2589	PUESTA DEL SOL	1998	10	8	PVC	0	0	17	19	152	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2590	PUESTA DEL SOL	1998	10	11	PVC	0	0	17	19	209	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2591	PUESTA DEL SOL	1998	10	11	PVC	0	0	17	19	209	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2592	PUESTA DEL SOL	1998	10	6	PVC	73	72.96	17	19	114	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2593	PUESTA DEL SOL	1998	10	7	PVC	73	72.96	17	19	133	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2594	PUESTA DEL SOL	1998	10	13	PVC	73	72.96	17	19	247	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2595	PUESTA DEL SOL	1998	10	6	PVC	73	72.96	17	19	114	89	0	89	1	1	1	0	0	0	0	0	0	2	2
2596	PUESTA DEL SOL	1998	10	6	PVC	62	62.15	17	19	114	90	0	90	1	1	1	0	0	0	0	0	0	2	2
2597	PUESTA DEL SOL	1998	10	3	PVC	62	62.15	17	19	57	90	0	90	1	1	1	0	0	0	0	0	0	2	2
2598	PUESTA DEL SOL	1998	10	3	PVC	62	62.15	17	19	57	90	0	90	1	1	1	0	0	0	0	0	0	2	2
2599	PUESTA DEL SOL	1998	10	15	PVC	62	62.15	17	19	285	90	0	90	1	1	1	0	0	0	0	0	0	2	2
2600	PUESTA DEL SOL	1998	10	41	PVC	124	124.06	17	19	779	90	0	90	1	1	1	0	0	0	0	0	0	2	2
2601	PUESTA DEL SOL	1998	10	7	PVC	77	76.57	17	19	133	89	0	89	1	1	1	1	0	0	0	0	0	3	3
2602	PUESTA DEL SOL	1998	10	234	PVC	0	0	17	19	4446	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2603	PUESTA DEL SOL	1998	10	21	PVC	43	42.64	17	19	399	89	0	89	1	1	1	1	0	0	0	0	0	3	3
2604	PUESTA DEL SOL	1998	10	7	PVC	77	76.57	17	19	133	89	0	89	1	5	1	1	0	0	0	0	0	3	3
2605	PUESTA DEL SOL	1998	16	483	PVC	896	896.24	17	43	20769	91	0	91	1	1	3	1	0	0	0	0	0	9	9
2606	CASTILLO	1998	10	4	PVC	1	0.88	17	19	76	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2607	CASTILLO	1998	10	94	PVC	1	0.88	17	19	1786	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2608	VISTA DR	1998	10	187	PVC	2	2.3	17	19	3553	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2609	AVENIDA DE DIAMANTE	1992	8	487	PVC	7	7.09	23	12	5844	81	0	81	1	1	2	1	0	0	0	0	0	2	6	6
2610	VISTA DR	1998	10	88	PVC	40	40.14	17	19	1672	88	0	88	1	1	1	1	0	0	0	0	0	3	3
2611	CAROL PL	1963	6	12	ACP	10	10.27	52	55	660	49	0	49	1	1	1	1	0	0	0	2	0	2	7	7
2612	CARMELLA DR	1963	6	11	ACP	6	5.58	52	55	605	49	0	49	1	1	1	1	0	0	0	2	0	2	7	7
2613	FARROLL AV	1970	8	16	ACP	12	12.15	45	64	1024	57	0	57	1	1	1	1	0	0	0	2	0	2	7	7
2614	FARROLL AV	1970	6	10	ACP	71	70.63	45	55	550	56	0	56	1	1	1	1	0	0	0	2	0	2	7	7
2615	FARROLL AV	1970	6	24	ACP	71	70.63	45	55	1320	56	0	56	1	1	1	1	0	0	0	2	0	2	7	7
2616	FARROLL AV	1970	6	11	ACP	71	70.63	45	69	759	58	0	58	1	1	1	1	0	0	0	2	0	2	7	7
2617	FARROLL AV	1970	6	188	ACP	10	10.27	45	55	10340	56	0	56	1	1	3	1	0	0	0	2	0	2	9	9
2618	CARMELLA DR	1963	6	204	ACP	12	11.55	52	55	11220	49	0	49	1	1	3	1	0	0	0	2	2	2	11	11
2619	CARMELLA DR	1963	6	10	ACP	8	8.18	52	55	550	50	0	50	1	1	1	1	0	0	0	2	2	2	9	9
2620	CARMELLA DR	1963	6	16	ACP	8	8.18	52	55	880	49	0	49	1	1	1	1	0	0	0	2	2	2	9	9
2621	CARMELLA DR	1963	6	30	ACP	5	4.91	52	55	1650	49	0	49	1	1	1	1	0	0	0	2	2	2	9	9
2622	CARMELLA DR	1963	6	364	ACP	5	4.91	52	55	20020	48	1	44	1	1	3	1	0	0	0	2	2	2	11	11
2623	CAROL PL	1963	6	213	ACP	6	5.58	52	55	11715	49	0	49	1	1	3	1	0	0	0	2	0	2	9	9
2624	FARROLL AV	1970	6	10	ACP	10	10.34	45	55	550	56	0	56	1	1	1	1	0	0	0	2	2	2	9	9
2625	FARROLL AV	1970	6	191	ACP	10	10.34	45	55	10505	61	0	61	1	1	3	1	0	0	0	2	2	2	11	11
2626	UNNAMED ST	0	6	10	ACP	21	20.65	2	55	550	99	0	99	1	1	1	1	0	0	0	2	2	2	9	9
2627	BAKEMAN LN	1987	8	11	ACP	22	21.57	28	64	704	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2628	FARROLL AV	1970	8	12	ACP	22	21.57	45	64	768	57	0	57	1	1	1	1	0	0	0	2	2	2	9	9
2629	FARROLL AV	1970	8	153	ACP	14	13.88	45	55	8415	59	0	59	1	1	2	1	0	0	0	0	2	0	6	6
2630	FARROLL AV	1970	6	13	PVC	8	8.49	45	8	104	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
2631	BAKEMAN LN	1987	8	22	ACP	14	13.88	28	64	1408	74	0	74	1	1	1	1	0	0	0	0	2	0	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2632	FARROLL AV	1970	8	12	ACP	14	13.88	45	64	768	57	0	57	1	1	1	1	0	0	0	0	2	0	5	5
2633	BAKEMAN LN	1987	8	314	PVC	17	17.28	28	12	3768	73	0	73	1	1	1	1	0	0	0	2	2	2	9	9
2634	BAKEMAN LN	1987	8	26	ACP	33	33.29	28	64	1664	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2635	FARROLL AV	1970	6	12	ACP	21	20.65	45	55	660	56	0	56	1	1	1	1	0	0	0	2	2	2	9	9
2636	UNNAMED ST	0	6	107	ACP	21	20.65	2	55	5885	99	0	99	1	1	2	1	0	0	0	2	2	2	10	10
2637	FARROLL AV	1970	6	22	ACP	30	30.05	45	55	1210	56	0	56	1	1	1	1	0	0	0	2	2	2	9	9
2638	GOLDEN WEST PL	1970	6	14	ACP	30	30.05	45	55	770	56	0	56	1	1	1	1	0	0	0	2	2	2	9	9
2639	GOLDEN WEST PL	1970	6	606	ACP	39	39.02	45	55	33330	55	0	55	1	1	3	1	0	0	0	2	2	2	11	11
2640	UNNAMED ST	1981	6	15	ACP	10	10.34	34	55	825	67	0	67	1	1	1	1	0	0	0	2	0	2	7	7
2641	CARMELLA DR	1963	6	84	ACP	6	5.58	52	55	4620	49	0	49	1	1	1	1	0	0	0	2	0	2	7	7
2642	CARMELLA DR	1963	6	10	ACP	6	5.58	52	55	550	49	0	49	1	1	1	1	0	0	0	2	0	2	7	7
2643	CARMELLA DR	1963	6	21	ACP	12	11.92	52	55	1155	49	0	49	1	1	1	1	0	0	0	2	0	2	7	7
2644	CAROL PL	1963	6	210	ACP	10	10.27	52	55	11550	49	0	49	1	1	3	1	0	0	0	2	0	2	9	9
2645	UNNAMED ST	1981	6	134	ACP	21	20.93	34	55	7370	67	0	67	1	1	2	1	0	0	0	2	2	2	10	10
2646	UNNAMED ST	1981	6	9	ACP	10	10.34	34	55	495	67	0	67	1	1	1	1	0	0	0	2	0	2	7	7
2647	UNNAMED ST	1981	6	11	ACP	10	10.34	34	55	605	67	0	67	1	1	1	1	0	0	0	2	2	2	9	9
2648	UNNAMED ST	1981	6	569	ACP	10	10.34	34	55	31295	66	0	66	1	1	3	1	0	0	0	2	2	2	11	11
2649	RICE CT	1987	8	10	ACP	6	6.4	28	64	640	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2650	WILSON CT	1987	8	11	ACP	6	6.4	28	64	704	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2651	CARMELLA DR	1963	6	392	ACP	12	11.92	52	55	21560	48	1	44	1	1	3	1	0	0	0	2	2	2	11	11
2652	CARMELLA DR	1963	6	374	ACP	8	8.18	52	55	20570	48	0	48	1	1	3	1	0	0	0	2	2	2	11	11
2653	S ELM ST	1964	8	168	PVC	13	13.01	51	19	3192	51	0	51	1	1	1	3	0	0	0	2	0	2	9	9
2654	FARROLL AV	1970	10	45	ACP	62	61.55	45	69	3105	58	0	58	1	1	1	1	0	0	0	2	0	2	7	7
2655	FARROLL AV	1970	2	32	COMP	3	2.66	45	30	960	60	0	60	1	1	1	1	0	0	0	2	0	2	7	7
2656	UNNAMED ST	1981	6	84	ACP	10	10.34	34	55	4620	67	0	67	1	1	1	1	0	0	0	2	0	2	7	7
2657	FARROLL AV	1970	2	12	COMP	3	2.66	45	30	360	60	0	60	1	1	1	1	0	0	0	2	0	2	7	7
2658	GOLDEN WEST PL	1970	6	47	ACP	21	20.65	45	55	2585	62	0	62	1	1	1	1	0	0	0	2	2	2	9	9
2659	GOLDEN WEST PL	1970	6	14	ACP	30	30.05	45	55	770	56	0	56	1	1	1	1	0	0	0	2	2	2	9	9
2660	FARROLL AV	1970	8	72	PVC	21	21.1	45	8	576	56	0	56	1	1	1	1	0	0	0	2	2	2	9	9
2661	GOLDEN WEST PL	1970	6	3	ACP	39	39.02	45	55	165	56	0	56	1	1	1	1	0	0	0	2	0	2	7	7
2662	GOLDEN WEST PL	1970	6	11	ACP	39	39.02	45	55	605	56	0	56	1	1	1	1	0	0	0	2	0	2	7	7
2663	GOLDEN WEST PL	1970	6	155	ACP	39	39.02	45	55	8525	56	0	56	1	1	2	0	0	0	0	2	0	2	7	7
2664	GOLDEN WEST PL	1970	6	420	ACP	39	39.02	45	55	23100	55	0	55	1	1	3	0	0	0	0	2	0	2	8	8
2665	RICE CT	1987	8	11	ACP	6	6.4	28	64	704	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2666	RICE CT	1987	8	11	ACP	6	6.4	28	55	605	73	0	73	1	1	1	1	0	0	0	2	2	2	9	9
2667	RICE CT	1987	8	238	ACP	6	6.4	28	64	15232	73	0	73	1	1	3	1	0	0	0	2	2	2	11	11
2668	WILSON CT	1987	8	10	ACP	6	6.4	28	64	640	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2669	WILSON CT	1987	8	13	ACP	6	6.4	28	55	715	73	0	73	1	1	1	1	0	0	0	2	2	2	9	9
2670	WILSON CT	1987	8	56	ACP	1	0.82	28	64	3584	74	0	74	1	1	1	1	0	0	0	2	2	2	9	9
2671	BAKEMAN LN	1987	8	90	ACP	12	12.19	28	64	5760	74	0	74	1	1	2	1	0	0	0	2	2	2	10	10
2672	WILSON CT	1987	6	136	ACP	3	3.21	28	55	7480	73	0	73	1	1	2	1	0	0	0	2	2	2	10	10
2673	RICE CT	1987	6	133	ACP	3	3.47	28	55	7315	73	0	73	1	1	2	1	0	0	0	2	2	2	10	10
2674	BAKEMAN LN	1987	8	309	ACP	3	2.69	28	64	19776	73	0	73	1	1	3	1	0	0	0	2	2	2	11	11
2675	BAKEMAN LN	1987	8	362	ACP	8	7.78	28	64	23168	73	0	73	1	1	3	1	0	0	0	0	2	0	7	7
2676	BAKEMAN LN	1987	8	21	ACP	3	2.69	28	64	1344	74	0	74	1	1	1	1	0	0	0	0	2	0	5	5
2677	BAKEMAN LN	1987	8	19	ACP	8	7.78	28	64	1216	74	0	74	1	1	1	1	0	0	0	0	2	0	5	5
2678	BAKEMAN LN	1987	8	387	ACP	8	7.78	28	64	24768	73	0	73	1	1	3	1	0	0	0	0	2	0	7	7
2679	FARROLL AV	1970	8	39	ACP	14	13.88	45	64	2496	57	0	57	1	1	1	1	0	0	0	0	2	0	5	5
2680	FARROLL AV	1970	6	13	PVC	8	8.49	45	8	104	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
2681	DIXSON ST	1993	6	137	PVC	8	8.49	22	8	1096	82	0	82	1	1	1	1	0	0	0	0	2	0	5	5
2682	DIXSON ST	1993	6	260	PVC	8	8.49	22	8	2080	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2683	DIXSON ST	1993	8	256	PVC	20	19.56	22	8	2048	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2684	OAK PARK BLVD	1997	6	120	PVC	14	14	18	8	960	86	0	86	1	1	1	1	0	0	0	0	0	0	3	3
2685	NOEL ST	1993	6	20	PVC	14	14	22	8	160	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2686	NOEL ST	1993	6	393	PVC	0	0.22	22	8	3144	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
2687	NOEL ST	1993	6	712	PVC	0	0.22	22	8	5696	80	0	80	1	1	2	1	0	0	0	0	2	0	6	6
2688	NOEL ST	1993	6	6	PVC	0	0.22	22	8	48	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
2689	S ELM ST	1964	10	147	ACP	83	82.78	51	69	10143	51	0	51	1	1	3	3	0	0	0	2	0	2	11	11
2690	S ELM ST	1964	10	22	ACP	83	82.78	51	69	1518	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2691	S ELM ST	1964	10	6	ACP	83	82.78	51	69	414	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2692	S ELM ST	1964	10	8	ACP	83	82.78	51	69	552	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2693	S ELM ST	1964	10	11	ACP	83	82.78	51	69	759	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2694	FAIR OAKS AV	1929	10	22	ACP	114	114.18	86	64	1408	0	0	0	10	1	1	3	0	0	0	2	0	2	9	90
2695	FAIR OAKS AV	1929	8	411	CIP	16	15.85	86	50	20550	-1	0	-1	10	1	3	3	0	0	0	2	0	2	11	110
2696	UNNAMED ST	0	10	503	ACP	83	82.78	2	69	34707	99	0	99	1	1	3	1	0	0	0	2	0	2	9	9
2697	FAIR OAKS AV	1929	8	20	ACP	122	122.31	86	64	1280	16	0	16	2	1	1	3	0	0	0	2	0	2	9	18
2698	FAIR OAKS AV	1968	8	26	ACP	122	122.31	47	64	1664	55	0	55	1	1	1	3	0	0	0	2	0	2	9	9
2699	S ELM ST	1964	10	9	ACP	143	142.63	51	69	621	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2700	S ELM ST	1964	10	14	ACP	140	140.03	51	69	966	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2701	S ELM ST	1964	10	211	ACP	140	140.03	51	64	13504	51	0	51	1	1	3	3	0	0	0	2	0	2	11	11
2702	S ELM ST	1964	10	33	ACP	143	142.63	51	64	2112	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2703	ASH ST	1966	10	8	ACP	63	63.45	49	69	552	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2704	ASH ST	1966	10	58	ACP	63	63.45	49	64	3712	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2705	S ELM ST	1964	10	2	ACP	143	142.63	51	69	138	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2706	ASH ST	1966	10	10	ACP	143	142.63	49	69	690	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2707	ASH ST	1966	10	95	ACP	63	63.45	49	69	6555	54	0	54	1	1	2	3	0	0	0	0	0	0	6	6
2708	ASPEN ST	1976	10	200	ACP	63	63.45	39	64	12800	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
2709	ASH ST	1966	10	133	ACP	143	142.63	49	69	9177	53	0	53	1	1	2	3	0	0	0	0	0	0	6	6
2710	S ELM ST	1964	10	12	ACP	158	157.8	51	69	828	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2711	S ELM ST	1964	10	113	ACP	140	140.03	51	69	7797	52	0	52	1	1	2	3	0	0	0	2	0	2	10	10
2712	S ELM ST	1964	10	16	ACP	158	157.8	51	69	1104	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2713	ASH ST	1966	14	751	ACP	13	12.74	49	87	65337	53	0	53	1	1	4	3	0	0	0	2	0	2	12	12
2714	S ELM ST	1964	10	7	ACP	158	157.8	51	69	483	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2715	S ELM ST	1964	10	41	ACP	158	157.8	51	69	2829	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2716	S ELM ST	1964	14	47	ACP	13	12.74	51	69	3243	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2717	ASH ST	1966	10	10	ACP	0	0	49	69	690	54	0	54	1	1	1	3	0	0	0	2	0	2	9	9
2718	S ELM ST	1964	10	8	ACP	0	0	51	77	616	53	0	53	1	1	1	0	0	0	0	2	0	2	6	6
2719	S ELM ST	1964	12	9	ACP	0	0	51	77	693	53	0	53	1	1	1	0	0	0	0	2	0	2	6	6
2720	ASH ST	1966	10	20	ACP	0	0	49	69	1380	54	0	54	1	1	1	3	0	0	0	2	0	2	9	9
2721	S ELM ST	1964	10	8	ACP	0	0	51	69	552	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2722	S ELM ST	1964	10	66	ACP	0	0	51	69	4554	52	0	52	1	1	1	3	0	0	0	2	0	2	9	9
2723	S ELM ST	1964	12	219	ACP	5	5.04	51	77	16863	52	0	52	1	1	3	0	0	0	0	2	0	2	8	8
2724	ASH ST	1966	10	72	ACP	0	0	49	69	4968	54	0	54	1	1	1	3	0	0	0	2	0	2	9	9
2725	ASH ST	1966	10	46	ACP	0	0	49	69	3174	54	0	54	1	1	1	3	0	0	0	2	0	2	9	9

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2726	S ELM ST	1964	12	10	ACP	0	0	51	69	690	52	0	52	1	1	1	0	0	0	0	2	0	2	6	6
2727	S ELM ST	1964	12	178	ACP	0	0	51	77	13706	52	0	52	1	1	3	0	0	0	0	2	0	2	8	8
2728	S ELM ST	1964	10	319	ACP	5	5.03	51	69	22011	51	0	51	1	1	3	0	0	0	0	2	0	2	8	8
2729	ASH ST	1966	12	1916	ACP	0	0	49	69	132204	48	0	48	1	1	5	0	0	0	0	2	0	2	10	10
2730	S ELM ST	1964	12	25	ACP	0	0	51	77	1925	53	0	53	1	1	1	0	0	0	0	2	0	2	6	6
2731	S ELM ST	1964	8	322	ACP	122	122.31	51	64	20608	50	0	50	1	1	3	3	0	0	0	2	0	2	11	11
2732	S ELM ST	1964	10	7	ACP	0	0	51	69	483	52	0	52	1	1	1	0	0	0	0	2	0	2	6	6
2733	S ELM ST	1964	10	49	ACP	0	0	51	69	3381	52	0	52	1	1	1	0	0	0	0	2	0	2	6	6
2734	S ELM ST	1964	10	7	ACP	0	0	51	69	483	52	0	52	1	1	1	0	0	0	0	2	0	2	6	6
2735	S ELM ST	1964	10	176	ACP	0	0	51	55	9680	50	0	50	1	1	2	0	0	0	0	2	0	2	7	7
2736	ASH ST	1966	6	473	ACP	39	39.02	49	55	26015	51	0	51	1	1	3	0	0	0	0	0	0	0	4	4
2737	ASH ST	1966	10	30	ACP	0	0	49	69	2070	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2738	ASH ST	1966	12	29	ACP	0	0	49	69	2001	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2739	ASH ST	1966	12	15	ACP	0	0	49	77	1155	54	0	54	1	1	1	3	0	0	0	0	0	0	5	5
2740	ASH ST	1966	6	23	ACP	39	39.02	49	64	1472	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2741	ASH ST	1966	6	19	ACP	39	39.02	49	64	1216	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2742	LAVENDER LN	2001	8	21	PVC	9	8.66	14	12	252	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2743	ASH ST	1966	6	8	ACP	39	39.02	49	55	440	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
2744	ASH ST	1966	8	152	PVC	0	0	49	12	1824	55	0	55	1	1	1	3	0	0	0	0	0	0	5	5
2745	ASPEN ST	1976	6	13	ACP	20	20.31	39	55	715	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
2746	SPRUCE ST	1976	6	9	ACP	27	27.39	39	55	495	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
2747	ASPEN ST	1976	6	10	ACP	58	57.81	39	55	550	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
2748	S COURTLAND ST	2001	12	11	PVC	149	149.08	14	28	308	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2749	S COURTLAND ST	2001	12	155	PVC	149	149.08	14	12	1860	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2750	BOYSENBERRY ST	2001	8	9	PVC	26	26	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2751	CRANBERRY ST	2001	8	7	PVC	39	39.39	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2752	CRANBERRY ST	2001	8	10	PVC	33	32.96	14	12	120	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2753	CEDAR ST	2001	8	8	PVC	32	32.29	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2754	BLUEBERRY AV	2001	8	11	PVC	73	73.18	14	12	132	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2755	BOYSENBERRY ST	2001	8	9	PVC	32	32.29	14	8	72	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2756	CEDAR ST	1971	6	12	ACP	0	0.5	44	55	660	57	0	57	1	1	1	1	0	0	0	0	0	0	3	3
2757	SPRUCE ST	1976	6	17	ACP	51	51.48	39	42	714	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
2758	SPRUCE ST	1976	6	9	ACP	54	54.22	39	55	495	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
2759	CRANBERRY ST	2001	8	9	PVC	40	40.38	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2760	SEABRIGHT AV	2001	8	10	PVC	8	8.03	14	12	120	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2761	POPLAR ST	1951	6	9	ACP	1	0.64	64	55	495	38	0	38	1	1	1	1	0	0	0	0	0	0	3	3
2762	SAGE ST	1956	6	245	ACP	53	53.43	59	55	13475	42	0	42	1	1	3	1	0	0	0	0	0	0	5	5
2763	ASPEN ST	1976	6	183	ACP	20	20.31	39	64	11712	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
2764	SPRUCE ST	1976	6	383	ACP	27	27.39	39	64	24512	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
2765	SAGE ST	1956	6	297	ACP	0	0.5	59	55	16335	42	0	42	1	1	3	1	0	0	0	0	0	0	5	5
2766	CEDAR ST	1971	6	33	ACP	60	59.91	44	55	1815	57	0	57	1	1	1	1	0	0	0	0	0	0	3	3
2767	SPRUCE ST	1976	6	18	ACP	51	51.48	39	55	990	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
2768	BLACKBERRY AV	2001	8	236	PVC	32	32.29	14	12	2832	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2769	CEDAR ST	2001	8	224	PVC	32	32.29	14	12	2688	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2770	STRAWBERRY AV	2001	8	242	PVC	26	26	14	12	2904	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2771	S COURTLAND ST	2001	8	8	PVC	34	34.26	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2772	S COURTLAND ST	2001	8	8	PVC	34	34.26	14	28	224	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2773	S COURTLAND ST	2001	8	10	PVC	0	0	14	28	280	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2774	S COURTLAND ST	2001	12	4	PVC	100	100.16	14	28	112	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2775	S COURTLAND ST	2001	12	73	PVC	2	1.54	14	28	2044	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2776	CRANBERRY ST	2001	8	9	PVC	60	59.87	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2777	CRANBERRY ST	2001	8	9	PVC	39	39.39	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2778	SEABRIGHT AV	2001	8	12	PVC	8	8.03	14	12	144	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2779	CRANBERRY ST	2001	8	9	PVC	33	32.96	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2780	CRANBERRY ST	2001	8	8	PVC	40	40.38	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2781	SEABRIGHT AV	2001	8	12	PVC	8	8.03	14	12	144	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2782	S COURTLAND ST	2001	12	9	PVC	152	152.03	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2783	S COURTLAND ST	2001	12	8	PVC	152	152.03	14	28	224	92	0	92	1	2	1	1	0	0	0	0	0	0	3	3
2784	STRAWBERRY AV	2001	12	8	PVC	173	173.04	14	28	224	92	0	92	1	1	1	1	0	0	0	0	0	0	4	4
2785	STRAWBERRY AV	2001	12	9	PVC	173	173.04	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2786	ASPEN ST	1976	6	34	ACP	20	20.31	39	55	1870	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
2787	ASH ST	1966	10	388	ACP	5	5.13	49	64	24832	55	0	55	1	1	3	3	0	0	0	0	0	0	7	7
2788	SPRUCE ST	1976	6	14	ACP	27	27.39	39	69	966	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
2789	SPRUCE ST	1976	6	16	ACP	27	27.39	39	55	880	62	0	62	1	1	1	1	0	0	0	0	0	0	3	3
2790	SPRUCE ST	1976	6	202	ACP	27	27.39	39	55	11110	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5
2791	ASH ST	1966	8	50	PVC	32	31.86	49	12	600	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2792	ASH ST	1966	8	72	PVC	0	0	49	12	864	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2793	ASH ST	1966	8	17	PVC	0	0	49	12	204	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2794	JASMINE PL	2001	12	128	PVC	149	149.08	14	28	3584	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2795	ASH ST	1966	8	12	PVC	18	18.42	49	12	144	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2796	ASH ST	1966	8	187	PVC	0	0	49	12	2244	55	0	55	1	1	1	3	0	0	0	0	0	0	5	5
2797	ASH ST	1966	8	15	PVC	18	18.42	49	12	180	56	0	56	1	1	1	3	0	0	0	0	0	0	5	5
2798	RASPBERRY AV	2001	12	126	PVC	152	152.03	14	28	3528	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2799	RASPBERRY AV	2001	8	197	PVC	87	86.85	14	12	2364	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2800	RASPBERRY AV	2001	8	522	PVC	65	65.18	14	12	6264	89	0	89	1	1	2	1	0	0	0	0	0	0	4	4
2801	S COURTLAND ST	2001	12	8	PVC	2	1.54	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2802	S COURTLAND ST	2001	12	8	PVC	2	1.54	14	28	224	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2803	LOGANBERRY AV	2001	8	228	PVC	44	43.8	14	12	2736	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2804	CRANBERRY ST	2001	8	285	PVC	39	39.39	14	12	3420	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2805	CRANBERRY ST	2001	8	129	PVC	60	59.87	14	12	1548	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2806	CRANBERRY ST	2001	8	8	PVC	60	59.87	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2807	CRANBERRY ST	2001	8	15	PVC	92	91.64	14	12	180	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2808	CRANBERRY ST	2001	8	8	PVC	60	59.87	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2809	CRANBERRY ST	2001	8	287	PVC	92	91.64	14	12	3444	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
2810	S COURTLAND ST	2001	12	43	PVC	47	47.07	14	28	1204	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2811	S COURTLAND ST	2001	12	9	PVC	152	152.03	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2812	S COURTLAND ST	2001	8	56	PVC	65	65.18	14	12	672	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2813	RASPBERRY AV	2001	12	6	PVC	152	152.03	14	28	168	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2814	S COURTLAND ST	2001	12	7	PVC	47	47.07	14	28	196	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2815	S COURTLAND ST	2001	12	7	PVC	47	47.07	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2816	S COURTLAND ST	2001	12	8	PVC	100	100.16	14	28	224	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2817	S COURTLAND ST	2001	12	11	PVC	100	100.16	14	12	132	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
2818	S COURTLAND ST	2001	12	30	PVC	100	100.16	14	28	840	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
2819	S COURTLAND ST	2001	8	9	PVC	0	0	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj_RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2820	HUCKLEBERRY AV	2001	8	193	PVC	1	1.34	14	12	2316	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2821	CRANBERRY ST	2001	8	287	PVC	3	2.75	14	12	3444	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2822	SEABRIGHT AV	2001	8	141	PVC	33	32.96	14	12	1692	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2823	SEABRIGHT AV	2001	8	10	PVC	8	8.03	14	12	120	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2824	SEABRIGHT AV	2001	8	52	PVC	24	23.86	14	12	624	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2825	UNNAMED ST	2001	8	109	PVC	8	8.03	14	12	1308	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2826	SEABRIGHT AV	2001	8	11	PVC	8	8.03	14	12	132	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2827	UNNAMED ST	2001	8	95	PVC	8	8.03	14	12	1140	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2828	SEABRIGHT AV	2001	8	119	PVC	34	34.48	14	12	1428	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2829	UNNAMED ST	2001	8	317	PVC	33	33.4	14	12	3804	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2830	SEABRIGHT AV	2001	8	144	PVC	27	26.74	14	12	1728	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2831	CRANBERRY ST	2001	8	33	PVC	39	39.39	14	12	396	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2832	S COURTLAND ST	2001	8	230	PVC	51	51	14	12	2760	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2833	CEDAR ST	2001	8	266	PVC	8	7.78	14	12	3192	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2834	BLUEBERRY AV	2001	8	254	PVC	73	73.18	14	12	3048	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2835	CRANBERRY ST	2001	8	33	PVC	33	32.96	14	12	396	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2836	UNNAMED ST	2001	8	95	PVC	30	30.16	14	12	1140	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2837	CRANBERRY ST	2001	8	9	PVC	40	40.38	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2838	CRANBERRY ST	2001	8	157	PVC	40	40.38	14	12	1884	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2839	UNNAMED ST	2001	8	318	PVC	30	30.16	14	12	3816	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2840	S COURTLAND ST	2001	12	23	PVC	171	171.15	14	28	644	92	0	92	1	1	1	1	0	0	0	0	0	3	3
2841	S COURTLAND ST	2001	8	7	PVC	34	34.26	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2842	BLACKBERRY AV	2001	8	8	PVC	34	34.26	14	28	224	92	0	92	1	1	1	1	0	0	0	0	0	3	3
2843	BLACKBERRY AV	2001	8	45	PVC	41	40.65	14	12	540	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2844	CRANBERRY ST	2001	8	83	PVC	71	70.54	14	12	996	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2845	S COURTLAND ST	2001	12	196	PVC	173	173.04	14	28	5488	92	0	92	1	2	2	1	0	0	0	0	0	4	4
2846	S COURTLAND ST	2001	12	734	PVC	268	267.8	14	28	20552	90	0	90	1	1	3	1	0	0	0	0	2	8	8
2847	S COURTLAND ST	2001	8	280	PVC	34	34.26	14	12	3360	90	0	90	1	2	1	1	0	0	0	0	0	3	3
2848	S COURTLAND ST	2001	12	38	PVC	265	265.04	14	28	1064	92	0	92	1	1	1	1	0	0	0	0	0	4	4
2849	S COURTLAND ST	2001	12	8	PVC	173	173.04	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2850	STRAWBERRY AV	2001	12	7	PVC	173	173.04	14	28	196	92	0	92	1	1	1	1	0	0	0	0	0	3	3
2851	STRAWBERRY AV	2001	8	208	PVC	46	46.03	14	12	2496	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
2852	STRAWBERRY AV	2001	8	241	PVC	45	44.57	14	12	2892	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2853	BLUEBERRY AV	2001	8	8	PVC	73	73.18	14	12	96	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2854	BLUEBERRY AV	2001	8	16	PVC	44	44.22	14	12	192	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2855	BLUEBERRY AV	2001	8	242	PVC	44	44.22	14	12	2904	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2856	BOYSENBERRY ST	2001	6	99	PVC	20	20.35	14	12	1188	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2857	CEDAR ST	2001	8	7	PVC	32	32.29	14	12	84	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2858	CEDAR ST	2001	8	37	PVC	8	7.78	14	12	444	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2859	CEDAR ST	2001	8	195	PVC	8	7.78	14	12	2340	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2860	S ELM ST	1964	10	147	ACP	181	181.06	51	69	10143	51	0	51	1	1	3	3	0	0	0	0	0	7	7
2861	S ELM ST	1964	10	152	ACP	171	170.82	51	69	10488	51	0	51	1	1	3	3	0	0	0	0	0	7	7
2862	ASPEN ST	1976	6	143	ACP	20	20.31	39	55	7865	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2863	ASPEN ST	1976	6	28	ACP	38	38.43	39	55	1540	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2864	ASPEN ST	1976	6	93	ACP	38	38.43	39	55	5115	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2865	CEDAR ST	1971	6	26	ACP	0	0.5	44	55	1430	57	0	57	1	1	1	1	0	0	0	0	0	3	3
2866	CEDAR ST	1971	6	11	ACP	0	0.5	44	55	605	58	0	58	1	1	1	1	0	0	0	0	0	3	3
2867	ASPEN ST	1976	6	134	ACP	38	38.43	39	55	7370	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2868	ASPEN ST	1976	6	126	ACP	38	38.43	39	55	6930	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2869	CEDAR ST	1971	6	347	ACP	48	48.34	44	55	19085	56	0	56	1	1	3	1	0	0	0	0	0	5	5
2870	CEDAR ST	1971	6	539	ACP	0	0.5	44	55	29645	56	0	56	1	1	3	1	0	0	0	0	0	5	5
2871	SPRUCE ST	1976	6	11	ACP	60	59.91	39	55	605	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2872	SPRUCE ST	1976	6	12	ACP	60	59.91	39	55	660	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2873	SPRUCE ST	1976	6	5	ACP	60	59.91	39	55	275	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2874	SPRUCE ST	1976	6	28	ACP	27	27.39	39	55	1540	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2875	SPRUCE ST	1976	6	82	ACP	2	1.63	39	55	4510	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2876	SPRUCE ST	1976	6	6	ACP	2	1.63	39	55	330	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2877	SPRUCE ST	1976	6	186	ACP	2	1.63	39	55	10230	62	0	62	1	1	3	1	0	0	0	0	0	5	5
2878	SPRUCE ST	1976	6	15	ACP	2	1.63	39	55	825	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2879	SPRUCE ST	1976	6	144	ACP	35	34.93	39	55	7920	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2880	SPRUCE ST	1976	6	151	ACP	50	50.3	39	55	8305	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2881	SPRUCE ST	1976	6	34	ACP	50	50.3	39	55	1870	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2882	SPRUCE ST	1976	6	89	ACP	50	50.3	39	55	4895	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2883	SPRUCE ST	1976	6	98	ACP	59	58.75	39	55	5390	62	0	62	1	1	2	1	0	0	0	0	0	4	4
2884	CEDAR ST	2001	6	5	ACP	16	15.59	14	55	275	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2885	SPRUCE ST	1976	6	257	ACP	16	15.59	39	55	14135	62	0	62	1	1	3	1	0	0	0	0	0	5	5
2886	CEDAR ST	2001	6	59	ACP	16	15.59	14	55	3245	87	0	87	1	1	1	1	0	0	0	0	0	3	3
2887	SAGE ST	1956	6	269	ACP	53	53.43	59	55	14795	42	0	42	1	1	3	1	0	0	0	0	0	5	5
2888	STRAWBERRY AV	2001	8	329	PVC	38	38.15	14	12	3948	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2889	BLACKBERRY AV	2001	8	307	PVC	26	26	14	12	3684	90	0	90	1	1	1	1	0	0	0	0	0	3	3
2890	BLACKBERRY AV	2001	8	34	PVC	26	26	14	12	408	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2891	BLACKBERRY AV	2001	8	9	PVC	26	26	14	12	108	91	0	91	1	1	1	1	0	0	0	0	0	3	3
2892	SAGE ST	1956	6	12	ACP	51	51.48	59	55	660	42	0	42	1	1	1	1	0	0	0	0	0	3	3
2893	SAGE ST	1956	4	529	ACP	2	1.61	59	42	22218	40	0	40	1	1	3	1	0	0	0	0	0	5	5
2894	SPRUCE ST	1976	6	258	ACP	54	54.22	39	55	14190	62	0	62	1	1	3	1	0	0	0	0	0	5	5
2895	SPRUCE ST	1976	6	9	ACP	54	54.22	39	55	495	63	0	63	1	1	1	1	0	0	0	0	0	3	3
2896	POPLAR ST	1951	6	400	ACP	17	16.87	64	55	22000	36	0	36	1	1	3	1	0	0	0	0	0	5	5
2897	SAGE ST	1956	6	13	ACP	53	53.43	59	55	715	43	0	43	1	1	1	1	0	0	0	0	0	3	3
2898	SAGE ST	1956	6	16	ACP	53	53.43	59	42	672	42	0	42	1	1	1	1	0	0	0	0	0	3	3
2899	POPLAR ST	1951	10	24	ACP	245	244.92	64	55	1320	38	0	38	1	1	1	1	0	0	0	0	0	3	3
2900	E GRAND AV	2002	12	303	PVC	326	325.52	13	5	1515	87	0	87	1	1	1	4	0	0	0	0	0	6	6
2901	POPLAR ST	1951	4	123	ACP	23	23.07	64	55	6765	37	0	37	1	1	2	1	0	0	0	0	0	4	4
2902	POPLAR ST	1951	4	11	ACP	23	23.07	64	42	462	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2903	POPLAR ST	1951	4	13	ACP	23	23.07	64	42	546	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2904	POPLAR ST	1951	4	16	ACP	23	23.07	64	42	672	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2905	POPLAR ST	1951	6	64	ACP	60	60.4	64	55	3520	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2906	ASPEN ST	1976	6	54	ACP	58	57.81	39	55	2970	62	0	62	1	1	1	1	0	0	0	0	0	3	3
2907	POPLAR ST	1951	6	49	ACP	60	60.4	64	55	2695	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2908	POPLAR ST	1951	6	114	ACP	58	57.81	64	55	6270	37	0	37	1	1	2	1	0	0	0	0	0	4	4
2909	POPLAR ST	1951	6	29	ACP	58	57.81	64	55	1595	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2910	POPLAR ST	1951	6	277	ACP	1	0.64	64	55	15235	37	0	37	1	1	3	1	0	0	0	0	0	5	5
2911	POPLAR ST	1951	6	21	ACP	45	45.19	64	55	1155	37	0	37	1	1	1	1	0	0	0	0	0	3	3
2912	POPLAR ST	1951	6	14	ACP	1	0.64	64	55	770	38	0	38	1	1	1	1	0	0	0	0	0	3	3
2913	POPLAR ST	1951	6	12	ACP	1	0.64	64	55	660	37	0	37	1	1	1	1	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
2914	JUNIPER ST	1980	6	236	ACP	54	54.23	35	55	12980	66	0	66	1	1	3	1	0	0	0	0	0	5	5
2915	JUNIPER ST	1980	6	57	ACP	56	55.92	35	55	3135	66	0	66	1	1	1	1	0	0	0	0	0	3	3
2916	JUNIPER ST	1980	6	40	ACP	56	55.92	35	55	2200	66	0	66	1	1	1	1	0	0	0	0	0	3	3
2917	JUNIPER ST	1980	6	133	ACP	56	55.92	35	55	7315	66	0	66	1	2	2	1	0	0	0	0	0	4	4
2918	JUNIPER ST	1980	6	21	ACP	57	56.93	35	77	1617	71	0	71	1	2	1	1	0	0	0	0	0	4	4
2919	JUNIPER ST	1980	6	23	ACP	57	56.93	35	77	1771	71	0	71	1	2	1	1	0	0	0	0	0	4	4
2920	JUNIPER ST	1980	6	140	ACP	42	41.93	35	77	10780	71	0	71	1	1	3	1	0	0	0	0	0	6	6
2921	JUNIPER ST	1980	6	43	ACP	57	56.93	35	55	2365	66	0	66	1	2	1	1	0	0	0	0	0	3	3
2922	E GRAND AV	2002	12	130	PVC	326	326.02	13	28	3640	93	0	93	1	1	1	4	0	0	0	0	0	7	7
2923	POPLAR ST	1951	4	421	ACP	23	23.07	64	42	17682	36	0	36	1	1	3	1	0	0	0	0	0	5	5
2924	POPLAR ST	1951	6	15	ACP	58	57.81	64	55	825	38	0	38	1	1	1	1	0	0	0	0	0	3	3
2925	E GRAND AV	2002	12	300	PVC	326	326.02	13	8	2400	88	0	88	1	2	1	4	0	0	0	0	0	6	6
2926	E GRAND AV	2002	12	427	PVC	334	334.41	13	28	11956	92	0	92	1	1	3	4	0	0	0	0	0	9	9
2927	E GRAND AV	2002	6	15	ACP	42	41.93	13	55	825	89	0	89	1	2	1	4	0	0	0	0	0	6	6
2928	E GRAND AV	2002	6	320	ACP	42	41.93	13	77	24640	92	0	92	1	1	3	4	0	0	0	0	0	9	9
2929	E GRAND AV	2002	6	22	ACP	19	19	13	55	1210	89	0	89	1	1	1	4	0	0	0	0	0	2	8	8
2930	S COURTLAND ST	2001	12	21	PVC	273	273.09	14	8	168	87	0	87	1	2	1	1	0	0	0	0	0	2	5	5
2931	S COURTLAND ST	2001	12	19	PVC	273	273.09	14	28	532	92	0	92	1	2	1	1	0	0	0	0	0	2	6	6
2932	S COURTLAND ST	2001	12	13	PVC	273	273.09	14	28	364	92	0	92	1	2	1	1	0	0	0	0	0	2	6	6
2933	E GRAND AV	2002	6	127	ACP	19	19	13	77	9779	93	0	93	1	1	2	4	0	0	0	0	0	2	10	10
2934	FAIR VIEW DR	1957	6	10	ACP	69	68.84	58	55	550	44	0	44	1	1	1	1	0	0	0	0	0	0	3	3
2935	BRIGHTON AV	1972	6	11	ACP	69	68.84	43	55	605	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
2936	BRIGHTON AV	1972	6	15	ACP	165	165.49	43	55	825	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
2937	CORONA DEL TERRA	1971	6	55	ACP	57	57.32	44	55	3025	58	0	58	1	1	1	1	0	0	0	0	0	2	5	5
2938	RUTH ANN WY	1976	6	11	ACP	40	39.5	39	55	605	63	0	63	1	1	1	1	0	0	0	0	0	2	5	5
2939	RUTH ANN WY	1976	6	9	ACP	40	39.5	39	55	495	63	0	63	1	1	1	1	0	0	0	0	0	2	5	5
2940	RUTH ANN WY	1976	6	12	ACP	4	3.84	39	55	660	63	0	63	1	1	1	1	0	0	0	0	0	2	5	5
2941	RUTH ANN WY	1976	6	12	ACP	4	3.84	39	55	660	63	0	63	1	1	1	1	0	0	0	0	0	2	5	5
2942	BRIGHTON AV	1986	6	24	ACP	17	17	29	55	1320	73	0	73	1	1	1	1	0	0	0	0	0	2	5	5
2943	BRIGHTON AV	1972	6	222	ACP	56	55.5	43	55	12210	58	0	58	1	1	3	1	0	0	0	0	0	2	7	7
2944	BRIGHTON AV	1972	6	9	ACP	63	62.82	43	55	495	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
2945	BRIGHTON AV	1972	6	138	ACP	63	62.82	43	55	7590	59	0	59	1	1	2	1	0	0	0	0	0	2	6	6
2946	CHELSEA CT	1993	6	6	ACP	63	62.82	22	55	330	80	0	80	1	1	1	1	0	0	0	0	0	2	5	5
2947	BRIGHTON AV	1972	6	188	ACP	0	0	43	55	10340	58	0	58	1	1	3	1	0	0	0	0	0	2	7	7
2948	BRIGHTON AV	1972	6	103	ACP	0	0	43	55	5665	59	0	59	1	1	2	1	0	0	0	0	0	2	6	6
2949	E GRAND AV	2002	8	24	PVC	2	1.51	13	8	192	92	0	92	1	1	1	4	0	0	0	0	0	2	8	8
2950	E GRAND AV	2002	8	141	PVC	4	3.94	13	28	3948	93	0	93	1	1	1	4	0	0	0	0	0	2	8	8
2951	RAMONA AV	2001	6	334	PVC	14	14.48	14	8	2672	87	0	87	1	1	1	1	0	0	0	0	0	2	5	5
2952	N COURTLAND ST	1981	6	18	ACP	32	32.13	34	55	990	71	0	71	1	1	1	1	0	0	0	0	0	2	5	5
2953	BRIGHTON AV	1986	6	353	PVC	19	18.86	29	8	2824	72	0	72	1	1	1	1	0	0	0	0	0	2	5	5
2954	HILLCREST DR	1948	8	14	ACP	32	31.88	67	64	896	35	0	35	1	1	1	1	0	0	0	0	0	2	5	5
2955	HILLCREST DR	1948	6	13	ACP	30	30.19	67	55	715	34	0	34	1	1	1	1	0	0	0	0	0	2	5	5
2956	HILLCREST DR	1948	6	346	ACP	30	30.19	67	55	19030	34	0	34	1	1	3	1	0	0	0	0	0	2	7	7
2957	SIERRA DR	1969	6	27	ACP	4	4.38	46	55	1485	55	0	55	1	1	1	1	0	0	0	0	0	2	5	5
2958	MONTEGO ST	1959	10	674	ACP	23	22.94	56	55	37070	43	0	43	1	1	3	1	0	0	0	0	0	2	7	7
2959	NEWPORT AV	1982	6	123	ACP	13	13.35	33	55	6765	68	0	68	1	1	2	1	0	0	0	0	0	2	6	6
2960	N COURTLAND ST	1981	6	229	ACP	18	17.53	34	55	12595	67	0	67	1	1	3	1	0	0	0	0	0	2	7	7
2961	BRIGHTON AV	1972	6	116	ACP	57	57.32	43	55	6380	59	0	59	1	1	2	1	0	0	0	0	0	2	6	6
2962	BRIGHTON AV	1972	6	11	ACP	17	17.04	43	55	605	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
2963	BRIGHTON AV	1972	6	472	ACP	32	32.13	43	55	25960	58	0	58	1	1	3	1	0	0	0	0	0	2	7	7
2964	BRIGHTON AV	1986	6	34	ACP	17	17	29	55	1870	73	0	73	1	1	1	1	0	0	0	0	0	2	5	5
2965	E GRAND AV	2002	12	33	PVC	0	0	13	28	924	93	0	93	1	1	1	4	0	0	0	0	0	2	8	8
2966	E GRAND AV	2002	12	312	PVC	6	5.95	13	28	8736	92	0	92	1	1	2	4	0	0	0	0	0	2	9	9
2967	RAMONA AV	2001	6	12	PVC	14	14.48	14	8	96	90	0	90	1	1	1	1	0	0	0	0	0	2	5	5
2968	E GRAND AV	2002	8	98	PVC	7	6.61	13	8	784	92	0	92	1	2	1	4	0	0	0	0	0	2	8	8
2969	S COURTLAND ST	2001	12	16	PVC	273	273.09	14	28	448	92	0	92	1	1	1	1	0	0	0	0	0	2	6	6
2970	E GRAND AV	2002	6	384	ACP	34	33.88	13	55	21120	88	0	88	1	2	3	4	0	0	0	0	0	2	10	10
2971	E GRAND AV	2002	12	146	PVC	263	262.93	13	28	4088	93	0	93	1	1	1	4	0	0	0	0	0	2	9	9
2972	N COURTLAND ST	1981	6	19	ACP	18	17.53	34	55	1045	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
2973	CHELSEA CT	1993	6	16	ACP	18	17.53	22	55	880	80	0	80	1	1	1	1	0	0	0	0	0	2	5	5
2974	E GRAND AV	2002	6	66	ACP	19	19	13	55	3630	88	0	88	1	2	1	4	0	0	0	0	0	2	8	8
2975	E GRAND AV	2002	6	87	ACP	19	19	13	77	6699	93	0	93	1	1	2	4	0	0	0	0	0	2	10	10
2976	E GRAND AV	2002	6	187	ACP	18	17.53	13	55	10285	88	0	88	1	1	3	4	0	0	0	0	0	2	10	10
2977	CHELSEA CT	1993	6	52	ACP	18	17.53	22	55	2860	80	0	80	1	1	1	1	0	0	0	0	0	2	5	5
2978	N COURTLAND ST	1981	6	247	ACP	18	17.53	34	55	13585	67	0	67	1	1	3	1	0	0	0	0	0	2	7	7
2979	N COURTLAND ST	1981	6	9	ACP	18	17.53	34	55	495	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
2980	N COURTLAND ST	1981	6	92	ACP	18	17.53	34	55	5060	67	0	67	1	1	2	1	0	0	0	0	0	2	6	6
2981	N COURTLAND ST	1981	6	77	ACP	18	17.53	34	55	4235	67	0	67	1	1	1	1	0	0	0	0	0	2	5	5
2982	N COURTLAND ST	1981	6	201	ACP	17	17.04	34	55	11055	67	0	67	1	1	3	1	0	0	0	0	0	2	7	7
2983	S COURTLAND ST	2001	12	94	PVC	273	273.09	14	28	2632	92	0	92	1	1	1	1	0	0	0	0	0	2	5	5
2984	E GRAND AV	2002	8	37	PVC	2	1.51	13	28	1036	93	0	93	1	1	1	4	0	0	0	0	0	2	8	8
2985	RAMONA AV	2001	8	140	PVC	7	7.07	14	12	1680	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
2986	E GRAND AV	2002	8	26	PVC	7	6.61	13	12	312	92	0	92	1	1	1	4	0	0	0	0	0	2	8	8
2987	RAMONA AV	2001	8	17	PVC	7	7.07	14	12	204	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
2988	RAMONA AV	2001	6	139	PVC	14	14.48	14	12	1668	91	0	91	1	1	1	1	0	0	0	0	0	2	5	5
2989	RAMONA AV	2001	6	56	PVC	14	14.48	14	8	448	88	0	88	1	1	1	1	0	0	0	0	0	2	5	5
2990	RAMONA AV	2001	6	94	ACP	23	22.79	14	55	5170	87	0	87	1	1	2	1	0	0	0	0	0	2	6	6
2991	N COURTLAND ST	1981	6	15	ACP	17	17.04	34	55	825	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
2992	N COURTLAND ST	1981	6	10	ACP	17	17.04	34	55	550	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
2993	BRIGHTON AVE	1986	6	353	PVC	19	18.86	29	8	2824	75	0	75	1	1	1	1	0	0	0	0	0	2	5	5
2994	BRIGHTON AVE	1986	6	7	PVC	19	18.86	29	8	56	76	0	76	1	1	1	1	0	0	0	0	0	2	5	5
2995	N COURTLAND ST	1981	6	16	ACP	17	17.04	34	55	880	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
2996	BRIGHTON AV	1986	6	342	ACP	28	27.71	29	55	18810	72	0	72	1	1	3	1	0	0	0	0	0	2	7	7
2997	BRIGHTON AV	1986	6	12	ACP	17	17	29	55	660	73	0	73	1	1	1	1	0	0	0	0	0	2	5	5
2998	BRIGHTON AV	1986	6	530	ACP	11	10.71	29	55	29150	72	0	72	1	1	3	0	0	0	0	0	0	2	6	6
2999	N COURTLAND ST	1981	6	74	ACP	11	10.71	34	55	4070	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
3000	BRIGHTON AV	1986	6	25	ACP	11	10.71	29	55	1375	73	0	73	1	1	1	0	0	0	0	0	0	2	4	4
3001	N COURTLAND ST	1981	6	11	ACP	11	10.71	34	55	605	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
3002	N COURTLAND ST	1981	6	716	ACP	11	10.71	34	55	39380	66	0	66	1	1	3	0	0	0	0	0	0	2	6	6
3003	NEWPORT AV	1982	6	20	ACP	0	0	33	55	1100	69	0	69	1	1	1	1	0	0	0	0	0	2	5	5
3004	NEWPORT AV	1982	6	507	ACP	0	0	33	55	27885	67	0	67	1	1	3	1	0	0	0	0	0	2	7	7
3005	N COURTLAND ST	1981	6	10	ACP	11	10.71	34	55	550	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
3006	N COURTLAND ST	1981	6	9	ACP	11	10.71	34	55	495	68	0	68	1	1	1	1	0	0	0	0	0	2	5	5
3007	BRIGHTON AV	1972	6	271	ACP	4	4.16	43	55	14905	58	0	58	1	1	3	1	0	0	0	0	0	2	7	7

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
3008	BRIGHTON AV	1972	6	17	ACP	56	55.5	43	55	935	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
3009	BRIGHTON AV	1972	6	8	ACP	56	55.5	43	55	440	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
3010	BRIGHTON AV	1972	6	30	ACP	56	55.5	43	55	1650	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
3011	BRIGHTON AV	1972	6	7	ACP	0	0	43	55	385	59	0	59	1	2	1	1	0	0	0	0	0	2	5	5
3012	E GRAND AV	2002	12	149	PVC	284	283.7	13	28	4172	93	0	93	1	1	1	4	0	0	0	0	0	0	7	7
3013	E GRAND AV	2002	6	62	ACP	42	41.93	13	55	3410	88	0	88	1	1	1	4	0	0	0	0	0	0	6	6
3014	FAIR VIEW DR	1957	6	798	ACP	44	44.03	58	55	43890	42	0	42	1	2	3	1	0	0	0	0	0	0	5	5
3015	E GRAND AV	2002	12	11	PVC	326	326.02	13	28	308	93	0	93	1	1	1	4	0	0	0	0	0	0	7	7
3016	RUTH ANN WY	1976	6	185	ACP	0	0	39	55	10175	62	0	62	1	1	3	1	0	0	0	0	2	0	7	7
3017	PRISCILLA LN	1976	6	10	ACP	49	48.59	39	55	550	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
3018	PRISCILLA LN	1976	6	103	ACP	49	48.59	39	55	5665	63	0	63	1	1	2	1	0	0	0	0	2	0	6	6
3019	PRISCILLA LN	1976	6	344	ACP	57	57.32	39	55	18920	62	0	62	1	1	3	1	0	0	0	0	2	0	7	7
3020	PRISCILLA LN	1976	6	70	ACP	57	57.32	39	55	3850	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
3021	RUTH ANN WY	1976	6	39	ACP	4	3.84	39	55	2145	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
3022	PRISCILLA LN	1976	6	153	ACP	49	48.59	39	55	8415	62	0	62	1	1	2	1	0	0	0	0	2	0	6	6
3023	RUTH ANN WY	1976	6	13	ACP	4	3.84	39	55	715	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
3024	RUTH ANN WY	1976	6	264	ACP	43	42.87	39	55	14520	62	0	62	1	1	3	1	0	0	0	0	2	0	7	7
3025	BRIGHTON AV	1972	6	286	ACP	128	128.23	43	55	15730	58	0	58	1	1	3	1	0	0	0	0	2	0	7	7
3026	RUTH ANN WY	1976	6	18	ACP	40	39.5	39	55	990	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
3027	RUTH ANN WY	1976	6	25	ACP	40	39.5	39	55	1375	63	0	63	1	1	1	1	0	0	0	0	2	0	5	5
3028	BRIGHTON AV	1972	6	33	ACP	9	8.71	43	55	1815	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
3029	BRIGHTON AV	1972	6	13	ACP	69	68.84	43	55	715	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
3030	BRIGHTON AV	1972	6	12	ACP	69	68.84	43	55	660	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
3031	FAIR VIEW DR	1957	6	333	ACP	69	68.84	58	55	18315	43	0	43	1	1	3	1	0	0	0	0	0	2	7	7
3032	CHELSEA CT	1993	6	29	ACP	4	3.62	22	55	1595	80	0	80	1	1	1	1	0	0	0	0	0	2	5	5
3033	BETA CT	1982	6	35	ACP	1	1.2	33	55	1925	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
3034	BETA CT	1982	6	98	ACP	1	1.2	33	55	5390	69	0	69	1	1	2	1	0	0	0	0	0	2	6	6
3035	BRIGHTON AV	1972	6	7	ACP	63	62.82	43	55	385	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
3036	BRIGHTON AV	1972	6	10	ACP	63	62.82	43	55	550	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
3037	CHELSEA CT	1993	6	12	ACP	63	62.82	22	55	660	80	0	80	1	1	1	1	0	0	0	0	0	2	5	5
3038	CHELSEA CT	1993	6	126	ACP	4	3.62	22	55	6930	80	0	80	1	1	2	1	0	0	0	0	0	2	6	6
3039	BRIGHTON AV	1972	6	59	ACP	5	4.96	43	55	3245	59	0	59	1	1	1	1	0	0	0	0	0	2	5	5
3040	BRIGHTON AV	1972	6	13	ACP	165	165.49	43	55	715	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
3041	BRIGHTON AV	1972	6	28	ACP	7	7.2	43	55	1540	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
3042	BRIGHTON AV	1972	6	7	ACP	57	57.32	43	55	385	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
3043	BRIGHTON AV	1972	6	167	ACP	97	97.47	43	55	9185	59	0	59	1	1	2	1	0	0	0	0	2	0	6	6
3044	FAIR VIEW DR	1957	6	507	ACP	0	0	58	55	27885	43	0	43	1	1	3	1	0	0	0	0	2	0	7	7
3045	NEWPORT AV	1982	6	13	ACP	13	13.35	33	55	715	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
3046	NEWPORT AV	1982	6	10	ACP	13	13.35	33	55	550	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
3047	NEWPORT AV	1982	6	16	ACP	13	13.35	33	55	880	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
3048	NEWPORT AV	1982	6	19	ACP	2	1.87	33	55	1045	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
3049	NEWPORT AV	1982	6	8	ACP	0	0	33	55	440	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
3050	RUTH ANN WY	1976	6	117	ACP	1	1.08	39	55	6435	63	0	63	1	1	2	1	0	0	0	0	2	0	6	6
3051	BRIGHTON AV	1972	6	310	ACP	40	39.5	43	55	17050	58	0	58	1	1	3	1	0	0	0	0	2	0	7	7
3052	CORONA DEL TERRA	1971	6	323	ACP	7	7.2	44	55	17765	58	0	58	1	1	3	1	0	0	0	0	2	0	7	7
3053	CORONA DEL TERRA	1971	6	58	ACP	2	1.52	44	55	3190	58	0	58	1	1	1	1	0	0	0	0	2	0	5	5
3054	MONTEGO ST	1959	6	80	ACP	19	19.27	56	55	4400	45	0	45	1	1	1	1	0	0	0	0	2	0	5	5
3055	NEWPORT AV	1982	6	87	ACP	19	19.27	33	55	4785	68	0	68	1	1	1	1	0	0	0	0	2	0	5	5
3056	NEWPORT AV	1982	6	400	ACP	11	11.48	33	55	22000	67	1	60	1	1	3	1	0	0	0	0	2	0	7	7
3057	HILLCREST DR	1948	6	13	ACP	30	30.19	67	55	715	34	0	34	1	1	1	1	0	0	0	0	2	0	5	5
3058	MONTEGO ST	1959	6	115	ACP	4	4.33	56	55	6325	45	0	45	1	1	2	1	0	0	0	0	2	0	6	6
3059	HILLCREST DR	1948	12	263	PVC	32	32.33	67	12	3156	35	0	35	1	1	1	1	0	0	0	0	2	0	5	5
3060	SIERRA DR	1969	6	11	ACP	4	4.38	46	55	605	56	0	56	1	1	1	1	0	0	0	0	2	0	5	5
3061	SIERRA DR	1969	6	24	ACP	4	4.38	46	42	1008	55	0	55	1	1	1	1	0	0	0	0	2	0	5	5
3062	MONTEGO ST	1959	12	9	PVC	32	32.33	56	28	252	50	0	50	1	1	1	1	0	0	0	0	2	0	5	5
3063	MONTEGO ST	1959	8	6	ACP	0	0	56	64	384	46	0	46	1	1	1	1	0	0	0	0	2	0	5	5
3064	HILLCREST DR	1948	8	18	ACP	32	31.88	67	55	990	35	0	35	1	1	1	1	0	0	0	0	2	0	5	5
3065	SIERRA DR	1969	4	399	ACP	0	0.35	46	55	21945	54	0	54	1	2	3	1	0	0	0	0	0	0	5	5
3066	HILLCREST DR	1948	12	419	ACP	240	240.22	67	77	32263	36	0	36	1	1	3	1	0	0	0	0	2	0	8	8
3067	W BRANCH ST ON-RAMP	1971	8	18	ACP	21	20.68	44	77	1386	60	0	60	1	1	1	5	0	0	0	0	0	0	7	7
3068	CHILTON ST	1970	2	155	GALV	0	0	45	40	6200	57	0	57	1	2	2	1	0	0	0	0	0	0	4	4
3069	S HWY 101	1971	12	198	ACP	210	209.71	44	77	15246	59	0	59	1	1	3	5	0	0	0	0	0	0	10	10
3070	EL CAMINO REAL	1964	12	7	ACP	0	0	51	77	539	53	0	53	1	2	1	3	0	0	0	0	0	0	5	5
3071	EL CAMINO REAL	1964	12	17	ACP	0	0	51	77	1309	53	0	53	1	1	1	3	0	0	0	0	0	0	6	6
3072	W BRANCH ST	1977	12	22	ACP	210	209.71	38	77	1694	66	0	66	1	1	1	4	0	0	0	0	0	0	6	6
3073	W BRANCH ST	1977	12	136	ACP	67	67.34	38	77	10472	65	0	65	1	1	3	4	0	0	0	0	0	0	8	8
3074	W BRANCH ST	1977	12	18	ACP	210	209.71	38	77	1386	66	0	66	1	2	1	4	0	0	0	0	0	0	6	6
3075	W BRANCH ST	1977	12	16	ACP	210	209.71	38	77	1232	66	0	66	1	1	1	4	0	0	0	0	0	0	7	7
3076	W BRANCH ST ON-RAMP	1971	8	16	ACP	21	20.68	44	64	1024	58	0	58	1	1	1	5	0	0	0	0	0	0	7	7
3077	W BRANCH ST ON-RAMP	1971	12	143	ACP	121	121.06	44	77	11011	59	0	59	1	1	3	5	0	0	0	0	0	0	9	9
3078	CHILTON ST	1970	6	95	ACP	22	22.04	45	55	5225	57	0	57	1	1	2	1	0	0	0	0	0	0	4	4
3079	CHILTON ST	1970	6	8	ACP	22	22.04	45	55	440	57	0	57	1	1	1	1	0	0	0	0	0	0	3	3
3080	CHILTON ST	1970	6	7	ACP	22	22.04	45	55	385	57	0	57	1	2	1	1	0	0	0	0	0	0	3	3
3081	ROBLES RD	1982	12	8	ACP	210	209.71	33	77	616	71	0	71	1	2	1	1	0	0	0	0	0	0	4	4
3082	ROBLES RD	1982	12	197	ACP	0	0	33	77	15169	70	0	70	1	1	3	1	0	0	0	0	0	0	6	6
3083	ROBLES RD	1982	12	8	ACP	210	209.71	33	55	440	69	0	69	1	2	1	1	0	0	0	0	0	0	3	3
3084	ROBLES RD	1982	12	10	ACP	210	209.71	33	77	770	71	0	71	1	2	1	1	0	0	0	0	0	0	4	4
3085	W BRANCH ST ON-RAMP	1971	12	69	ACP	210	209.71	44	77	5313	60	0	60	1	1	2	5	0	0	0	0	0	0	9	9
3086	ROBLES RD	1982	6	15	ACP	31	30.51	33	55	825	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
3087	CHILTON ST	1970	6	15	ACP	2	2.15	45	55	825	57	0	57	1	1	1	1	0	0	0	0	0	0	3	3
3088	CHILTON ST	1970	6	105	ACP	2	2.15	45	55	5775	57	0	57	1	1	2	1	0	0	0	0	0	0	4	4
3089	CHILTON ST	1970	2	9	GALV	0	0	45	11	99	14	0	14	4	1	1	1	0	0	0	0	0	0	3	12
3090	CHILTON ST	1970	2	268	GALV	0	0	45	11	2948	13	0	13	4	1	1	1	0	0	0	0	0	0	3	12
3091	CHILTON ST	1970	6	8	ACP	8	7.62	45	55	440	56	0	56	1	1	1	1	0	0	0	0	0	0	3	3
3092	CHILTON ST	1970	6	760	ACP	0	0	45	55	41800	54	0	54	1	1	3	1	0	0	0	0	0	0	5	5
3093	HILLCREST DR	1948	6	11	ACP	0	0	67	55	605	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
3094	HILLCREST DR	1948	6	10	ACP	0	0	67	55	550	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
3095	SIERRA DR	1969	6	263	ACP	6	6.04	46	55	14465	54	0	54	1	1	3	1	0	0	0	0	0	0	5	5
3096	SIERRA DR	1969	6	10	ACP	0	0	46	55	550	55	0	55	1	1	1	1	0	0	0	0	0	0	3	3
3097	HILLCREST DR	1948	6	17	ACP	12	11.67	67	55	935	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
3098	HILLCREST DR	1948	6	576	ACP	26	25.87	67	55	31680	33	0	33	1	1	3	1	0	0	0	0	0	0	5	5
3099	HILLCREST DR	1948	6	6	ACP	26	25.87	67	55	330	34	0	34	1	1	1	1	0	0	0	0	0	0	3	3
3100	SIERRA DR	1969	4	372	ACP	0	0.35	46	42	15624	54	0	54	1	1	3	1	0	0	0	0	0	0	5	5
3101	SIERRA DR	1969	4	17	ACP	0	0.35	46	42	714	55	0	55	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
3102	SIERRA DR	1969	4	97	ACP	12	11.54	46	42	4074	55	0	55	1	1	1	1	0	0	0	0	0	3	3
3103	ROBLES RD	1982	4	465	ACP	16	15.54	33	42	19530	66	0	66	1	1	3	1	0	0	0	0	2	7	7
3104	ROBLES RD	1982	6	161	ACP	31	30.51	33	55	8855	69	0	69	1	1	2	1	0	0	0	0	0	4	4
3105	CHILTON ST	1970	6	318	ACP	22	22.04	45	55	17490	56	0	56	1	1	3	1	0	0	0	0	0	5	5
3106	CHILTON ST	1970	6	571	ACP	19	18.55	45	55	31405	55	0	55	1	1	3	1	0	0	0	0	0	5	5
3107	CHILTON ST	1970	6	269	ACP	8	7.62	45	55	14795	55	0	55	1	1	3	1	0	0	0	0	0	5	5
3108	HILLCREST DR	1948	6	7	ACP	14	13.8	67	55	385	34	0	34	1	1	1	1	0	0	0	0	2	5	5
3109	HILLCREST DR	1948	6	9	ACP	14	13.8	67	55	495	34	0	34	1	1	1	1	0	0	0	0	2	5	5
3110	SIERRA DR	1969	6	405	ACP	14	13.8	46	55	22275	54	0	54	1	1	3	1	0	0	0	0	2	7	7
3111	HILLCREST DR	1948	6	149	ACP	1	1.11	67	55	8195	35	0	35	1	4	2	1	0	0	0	0	2	6	6
3112	MONTEGO ST	1959	8	7	ACP	0	0	56	64	448	47	0	47	1	4	1	1	0	0	0	0	2	8	8
3113	MONTEGO ST	1959	12	25	ACP	683	682.68	56	77	1925	49	0	49	1	1	1	1	0	0	0	0	2	8	8
3114	MONTEGO ST	1959	8	38	ACP	0	0	56	64	2432	48	0	48	1	1	1	1	0	0	0	0	2	5	5
3115	MONTEGO ST	1959	8	9	ACP	0	0	56	64	576	48	0	48	1	1	1	1	0	0	0	0	2	5	5
3116	MONTEGO ST	1959	8	8	ACP	0	0	56	64	512	46	0	46	1	4	1	1	0	0	0	0	2	5	5
3117	MONTEGO ST	1959	12	214	ACP	49	49.34	56	77	16478	48	0	48	1	1	3	1	0	0	0	0	2	10	10
3118	MONTEGO ST	1959	8	122	ACP	0	0	56	64	7808	47	0	47	1	1	2	1	0	0	0	0	2	6	6
3119	HILLCREST DR	1948	6	248	ACP	30	30.19	67	55	13640	34	0	34	1	1	3	1	0	0	0	0	2	7	7
3120	W BRANCH ST	1977	12	12	ACP	58	58.26	38	64	768	64	0	64	1	1	1	4	0	0	0	0	0	6	6
3121	W BRANCH ST	1977	12	60	ACP	49	48.86	38	55	3300	63	0	63	1	1	1	4	0	0	0	0	0	6	6
3122	W BRANCH ST	1977	8	10	ACP	4	3.84	38	64	640	64	0	64	1	1	1	4	0	0	0	0	0	6	6
3123	W BRANCH ST	1977	12	136	PVC	0	0	38	12	1632	66	0	66	1	1	1	4	0	0	0	0	0	6	6
3124	W BRANCH ST	1977	12	11	ACP	67	67.34	38	77	847	66	0	66	1	1	1	4	0	0	0	0	0	6	6
3125	W BRANCH ST	1977	12	7	ACP	67	67.34	38	77	539	66	0	66	1	1	1	4	0	0	0	0	0	6	6
3126	W BRANCH ST	1977	12	287	ACP	67	67.34	38	77	22099	65	0	65	1	1	3	4	0	0	0	0	0	8	8
3127	W BRANCH ST	1977	12	11	ACP	58	58.26	38	77	847	65	0	65	1	1	1	4	0	0	0	0	0	6	6
3128	W BRANCH ST	1977	8	281	ACP	9	9.08	38	64	17984	64	0	64	1	1	3	4	0	0	0	0	0	8	8
3129	W BRANCH ST	1977	12	168	ACP	58	58.26	38	77	12936	65	0	65	1	1	3	4	0	0	0	0	0	8	8
3130	W BRANCH ST	1977	8	298	ACP	9	9.08	38	64	19072	63	0	63	1	1	3	4	0	0	0	0	0	8	8
3131	MEADOW WY	1990	8	237	ACP	9	9.08	25	64	15168	76	0	76	1	1	3	1	0	0	0	0	0	5	5
3132	W BRANCH ST	1977	12	12	ACP	49	48.86	38	77	924	65	0	65	1	1	1	4	0	0	0	0	0	6	6
3133	W BRANCH ST	1977	12	41	ACP	49	48.86	38	77	3157	65	0	65	1	1	1	4	0	0	0	0	0	6	6
3134	W BRANCH ST	1977	8	382	ACP	4	3.84	38	77	29414	64	0	64	1	1	3	4	0	0	0	0	0	8	8
3135	W BRANCH ST	1977	6	316	ACP	9	9.4	38	55	17380	62	0	62	1	1	3	4	0	0	0	0	0	8	8
3136	W BRANCH ST	1977	6	384	ACP	4	3.56	38	55	21120	62	0	62	1	1	3	4	0	0	0	0	0	8	8
3137	W BRANCH ST	1977	8	22	ACP	13	12.64	38	64	1408	66	0	66	1	1	1	4	0	0	0	0	0	6	6
3138	W BRANCH ST	1977	12	13	PVC	0	0	38	28	364	68	0	68	1	1	1	4	0	0	0	0	0	6	6
3139	W BRANCH ST	1977	12	62	PVC	0	0	38	28	1736	68	0	68	1	1	1	4	0	0	0	0	0	6	6
3140	W BRANCH ST	1977	8	9	ACP	13	12.64	38	64	576	64	0	64	1	1	1	4	0	0	0	0	0	6	6
3141	W BRANCH ST	1977	8	10	ACP	13	12.64	38	55	550	63	0	63	1	1	1	4	0	0	0	0	0	6	6
3142	W BRANCH ST	1977	6	11	ACP	4	3.56	38	55	605	63	0	63	1	1	1	4	0	0	0	0	0	6	6
3143	W BRANCH ST	1977	8	12	ACP	4	3.84	38	77	924	65	0	65	1	1	1	4	0	0	0	0	0	6	6
3144	W BRANCH ST	1977	8	279	ACP	13	12.64	38	64	17856	63	0	63	1	1	3	4	0	0	0	0	0	8	8
3145	W BRANCH ST	1977	8	45	ACP	4	3.84	38	64	2880	64	0	64	1	1	1	4	0	0	0	0	0	6	6
3146	W BRANCH ST	1977	12	177	ACP	52	51.62	38	77	13629	65	0	65	1	1	3	4	0	0	0	0	0	8	8
3147	W BRANCH ST	1977	12	183	ACP	49	48.71	38	77	14091	65	0	65	1	1	3	4	0	0	0	0	0	8	8
3148	OAK PARK BLVD	1978	12	64	ACP	49	48.71	37	77	4928	66	0	66	1	1	1	1	0	0	0	0	0	3	3
3149	MEADOW WY	1990	8	142	PVC	9	9.08	25	12	1704	76	0	76	1	1	1	1	0	0	0	0	0	3	3
3150	MEADOW WY	1990	8	117	ACP	9	9.08	25	64	7488	76	0	76	1	1	2	1	0	0	0	0	0	4	4
3151	OAK PARK BLVD	1978	12	11	ACP	0	0	37	77	847	66	0	66	1	1	1	1	0	0	0	0	0	3	3
3152	OAK PARK BLVD	1978	12	20	ACP	50	50.16	37	77	1540	67	0	67	1	1	1	1	0	0	0	0	0	3	3
3153	OAK PARK BLVD	1978	12	19	ACP	50	50.16	37	77	1463	67	0	67	1	1	1	1	0	0	0	0	0	3	3
3154	OAK PARK BLVD	1978	12	88	ACP	54	54.12	37	77	6776	66	0	66	1	1	2	1	0	0	0	0	0	4	4
3155	JAMES WY	1975	8	10	ACP	12	12.21	40	64	640	62	0	62	1	1	1	3	0	0	0	0	0	5	5
3156	JAMES WY	1975	8	354	ACP	12	12.21	40	77	27258	62	0	62	1	1	3	3	0	0	0	0	0	7	7
3157	JAMES WY	1975	8	5	ACP	12	12.21	40	64	320	62	0	62	1	1	1	3	0	0	0	0	0	5	5
3158	JAMES WY	1975	8	10	ACP	12	12.21	40	64	640	62	0	62	1	1	1	3	0	0	0	0	0	5	5
3159	MEADOW WY	1971	8	114	ACP	3	3.07	44	64	7296	58	0	58	1	1	2	1	0	0	0	0	0	4	4
3160	CLEVENGER DR	1971	8	169	ACP	4	4.27	44	64	10816	58	0	58	1	1	3	1	0	0	0	0	0	5	5
3161	CLEVENGER DR	1971	8	23	ACP	4	4.27	44	64	1472	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3162	JAMES WY	1975	12	12	ACP	40	40.14	40	64	768	62	0	62	1	1	1	3	0	0	0	0	0	5	5
3163	MEADOW WY	1971	8	293	ACP	3	3.07	44	64	18752	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3164	GRIEB DR	1971	8	10	ACP	5	4.78	44	64	640	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3165	GRIEB DR	1971	8	205	ACP	8	7.92	44	64	13120	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3166	JAMES WY	1975	12	516	ACP	40	40.14	40	77	39732	62	0	62	1	1	3	3	0	0	0	0	0	7	7
3167	GRIEB DR	1971	8	91	ACP	5	4.84	44	64	5824	58	0	58	1	1	2	1	0	0	0	0	0	4	4
3168	LEISURE DR	1971	8	32	ACP	8	7.92	44	64	2048	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3169	GRIEB DR	1971	8	9	ACP	8	7.92	44	64	576	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3170	GRIEB DR	1971	8	12	ACP	8	7.92	44	64	768	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3171	GRIEB DR	1971	8	228	ACP	8	7.92	44	64	14592	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3172	GRIEB DR	1971	8	179	ACP	5	4.78	44	64	11456	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3173	GRIEB DR	1971	8	12	ACP	5	4.78	44	64	768	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3174	CLUBHOUSE CR	1971	8	333	ACP	3	2.78	44	64	21312	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3175	CLUBHOUSE CR	1971	8	9	ACP	0	0.18	44	64	576	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3176	CLUBHOUSE CR	1971	8	11	ACP	0	0.18	44	64	704	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3177	CLUBHOUSE CR	1971	8	12	ACP	3	2.78	44	64	768	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3178	CLUBHOUSE CR	1971	8	5	ACP	3	2.78	44	64	320	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3179	CLUBHOUSE CR	1971	8	31	ACP	3	2.78	44	64	1984	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3180	MEADOW WY	1971	8	61	ACP	3	2.67	44	64	3904	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3181	MEADOW WY	1971	8	115	ACP	1	1.34	44	64	7360	58	0	58	1	1	2	1	0	0	0	0	0	4	4
3182	MEADOW WY	1971	8	13	ACP	1	1.34	44	64	832	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3183	MEADOW WY	1971	8	11	ACP	1	1.34	44	64	704	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3184	MEADOW WY	1971	8	351	ACP	5	4.84	44	64	22464	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3185	MEADOW WY	1971	8	171	ACP	1	1.34	44	64	10944	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3186	MEADOW WY	1971	8	324	ACP	1	1.34	44	64	20736	57	0	57	1	1	3	1	0	0	0	0	0	5	5
3187	MEADOW WY	1971	8	10	ACP	3	3.07	44	64	640	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3188	MEADOW WY	1971	8	10	ACP	3	3.07	44	64	640	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3189	GRIEB DR	1971	8	17	ACP	0	0.01	44	64	1088	58	0	58	1	1	1	1	0	0	0	0	0	3	3
3190	JAMES WY	1975	8	59	ACP	12	12.21	40	77	4543	63	0	63	1	1	1	3	0	0	0	0	0	5	5
3191	JAMES WY	1975	8	11	ACP	3	3.07	40	64	704	62	0	62	1	1	1	3	0	0	0	0	0	5	5
3192	JAMES WY	1975	8	112	ACP	20	19.74	40	64	7168	62	0	62	1	1	2	3	0	0	0	0	0	6	6
3193	JAMES WY	1975	12	12	ACP	40	40.14	40	77	924	63	0	63	1	1	1	3	0	0	0	0	0	5	5
3194	OAK PARK BLVD	1978	8	9	ACP	41	41.43	37	64	576	65	0	65	1	1	1	1	0	0	0	0	0	3	3
3195	OAK PARK BLVD	1978	8	12	ACP	41	41.43	37	77	924	66	0	66	1	1	1	1	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
3196	JAMES WY	1975	8	9	ACP	10	9.73	40	64	576	62	0	62	1	1	1	3	0	0	0	0	0	0	5	5
3197	OAK PARK BLVD	1978	8	10	ACP	11	10.9	37	64	640	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
3198	OAK PARK BLVD	1978	8	285	ACP	11	10.9	37	77	21945	66	0	66	1	1	3	1	0	0	0	0	0	0	5	5
3199	JAMES WY	1975	8	38	ACP	11	10.52	40	64	2432	62	0	62	1	1	1	0	0	0	0	0	0	0	2	2
3200	OAK PARK BLVD	1978	8	14	ACP	41	41.43	37	64	896	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
3201	OAK PARK BLVD	1978	12	251	ACP	7	7.28	37	77	19327	66	0	66	1	1	3	1	0	0	0	0	0	0	5	5
3202	OAK PARK BLVD	1978	8	352	ACP	41	41.43	37	64	22528	64	0	64	1	1	3	0	0	0	0	0	0	0	4	4
3203	MEADOW WY	2001	8	475	ACP	11	10.52	14	64	30400	87	0	87	1	1	3	0	0	0	0	0	0	0	4	4
3204	JAMES WY	1975	8	262	ACP	5	5.49	40	64	16768	61	0	61	1	1	3	0	0	0	0	0	0	0	4	4
3205	JAMES WY	1975	8	17	ACP	10	9.73	40	77	1309	63	0	63	1	1	1	3	0	0	0	0	0	0	5	5
3206	JAMES WY	1975	8	13	ACP	10	9.73	40	77	1001	63	0	63	1	1	1	3	0	0	0	0	0	0	5	5
3207	JAMES WY	1975	8	67	ACP	5	5.49	40	64	4288	62	0	62	1	1	1	3	0	0	0	0	0	0	5	5
3208	JAMES WY	1975	12	392	ACP	50	50.16	40	77	30184	62	0	62	1	1	3	3	0	0	0	0	0	0	7	7
3209	JAMES WY	1975	8	9	ACP	5	5.49	40	64	576	62	0	62	1	1	1	3	0	0	0	0	0	0	5	5
3210	JAMES WY	1975	8	99	ACP	5	5.49	40	64	6336	62	0	62	1	1	2	3	0	0	0	0	0	0	6	6
3211	JAMES WY	1975	8	11	ACP	5	5.49	40	64	704	62	0	62	1	1	1	3	0	0	0	0	0	0	5	5
3212	OAK PARK BLVD	1978	12	67	ACP	7	6.94	37	77	5159	66	0	66	1	1	2	1	0	0	0	0	0	0	4	4
3213	OAK PARK BLVD	1978	12	19	ACP	7	6.94	37	77	1463	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3214	OAK PARK BLVD	1978	8	239	ACP	11	10.9	37	77	18403	66	0	66	1	1	3	1	0	0	0	0	0	0	5	5
3215	OAK PARK BLVD	1978	8	13	ACP	11	10.9	37	64	832	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
3216	OAK PARK BLVD	1978	8	48	ACP	11	10.9	37	64	3072	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
3217	OAK PARK BLVD	1978	4	4	PVC	0	0.38	37	5	20	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3218	OAK PARK BLVD	1978	3	4	PVC	0	0	37	4	16	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3219	OAK PARK BLVD	1978	3	300	PVC	0	0	37	12	3600	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
3220	OAK PARK BLVD	1978	3	19	PVC	0	0	37	12	228	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
3221	OAK PARK BLVD	1978	4	9	PVC	0	0.38	37	12	108	65	0	65	1	1	1	1	0	0	0	0	0	0	3	3
3222	OAK PARK BLVD	1978	4	22	PVC	0	0.38	37	5	110	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3223	OAK PARK BLVD	1978	3	24	PVC	0	0	37	4	96	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3224	JAMES WY	1975	12	31	ACP	50	50.16	40	77	2387	64	0	64	1	1	1	3	0	0	0	0	0	0	5	5
3225	OAK PARK BLVD	1978	12	530	ACP	54	54.12	37	77	40810	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
3226	OAK PARK BLVD	1978	12	14	ACP	54	54.12	37	77	1078	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
3227	OAK PARK BLVD	1978	12	21	ACP	63	63.17	37	77	1617	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
3228	OAK PARK BLVD	1978	12	365	ACP	63	63.17	37	77	28105	66	0	66	1	1	3	1	0	0	0	0	0	0	5	5
3229	OAK PARK BLVD	1978	12	32	ACP	63	63.17	37	77	2464	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
3230	ROBIN CR	1985	12	369	ACP	41	41.47	30	77	28413	73	0	73	1	1	3	1	0	0	0	0	0	0	5	5
3231	ROBIN CR	1985	12	251	ACP	63	63.17	30	77	19327	73	0	73	1	1	3	0	0	0	0	0	0	0	4	4
3232	ROBIN CR	1985	12	13	ACP	41	41.47	30	77	1001	74	0	74	1	1	1	0	0	0	0	0	0	0	2	2
3233	ROBIN CR	1985	12	8	ACP	41	41.47	30	77	616	74	0	74	1	1	1	0	0	0	0	0	0	0	2	2
3234	ROBIN CR	1985	12	8	ACP	41	41.47	30	77	616	74	0	74	1	1	1	0	0	0	0	0	0	0	2	2
3235	ROBIN CR	1985	12	10	ACP	23	23.14	30	55	550	72	0	72	1	1	1	0	0	0	0	0	0	0	2	2
3236	QUAIL CT	1985	6	10	ACP	7	6.89	30	55	550	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3237	MEADOWLARK DR	1985	12	80	ACP	3	3.18	30	55	4400	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3238	MEADOWLARK DR	1985	12	458	ACP	23	23.14	30	77	35266	73	0	73	1	1	3	0	0	0	0	0	0	0	4	4
3239	CARDINAL CT	1985	6	10	ACP	3	3.09	30	55	550	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3240	ROBIN CR	1985	6	27	ACP	3	3.09	30	55	1485	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3241	MEADOWLARK DR	1985	6	33	ACP	3	2.82	30	55	1815	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3242	QUAIL CT	1985	6	9	ACP	7	6.89	30	55	495	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3243	MEADOWLARK DR	1985	6	12	ACP	1	0.56	30	55	660	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3244	ROBIN CR	1985	6	280	ACP	3	3.19	30	55	15400	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3245	MEADOWLARK DR	1985	6	252	ACP	6	6.36	30	55	13860	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3246	MEADOWLARK DR	1985	6	12	ACP	1	0.56	30	55	660	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3247	MEADOWLARK DR	1985	6	212	ACP	3	2.82	30	55	11660	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3248	MEADOWLARK DR	1985	6	11	ACP	11	11.17	30	55	605	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3249	MEADOWLARK DR	1985	12	11	ACP	3	3.18	30	77	847	74	0	74	1	1	1	0	0	0	0	0	0	0	2	2
3250	MEADOWLARK DR	1985	12	14	ACP	3	3.18	30	64	896	72	0	72	1	1	1	0	0	0	0	0	0	0	2	2
3251	MEADOWLARK DR	1985	8	89	ACP	0	0	30	64	5696	72	0	72	1	1	2	0	0	0	0	0	0	0	3	3
3252	MEADOWLARK DR	1985	12	41	ACP	3	3.18	30	77	3157	74	0	74	1	1	1	0	0	0	0	0	0	0	2	2
3253	CARDINAL CT	1985	6	143	ACP	2	1.91	30	55	7865	71	0	71	1	1	2	1	0	0	0	0	0	0	4	4
3254	CARDINAL CT	1985	6	9	ACP	3	3.09	30	55	495	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3255	CARDINAL CT	1985	6	215	ACP	3	3.09	30	55	11825	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3256	ROBIN CR	1985	6	80	ACP	3	3.09	30	55	4400	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3257	ROBIN CR	1985	6	12	ACP	17	16.73	30	55	660	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3258	QUAIL CT	1985	6	132	ACP	4	3.77	30	55	7260	71	0	71	1	1	2	1	0	0	0	0	0	0	4	4
3259	QUAIL CT	1985	6	247	ACP	7	6.89	30	55	13585	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3260	QUAIL CT	1985	6	186	ACP	7	6.89	30	55	10230	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3261	ROBIN CR	1985	6	56	ACP	3	3.09	30	55	3080	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3262	MEADOWLARK DR	1985	6	13	ACP	3	2.82	30	55	715	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3263	QUAIL CT	1985	6	115	ACP	1	1.01	30	55	6325	71	0	71	1	1	2	1	0	0	0	0	0	0	4	4
3264	ROBIN CR	1985	12	173	ACP	41	41.47	30	77	13321	73	0	73	1	1	3	0	0	0	0	0	0	0	4	4
3265	ROBIN CR	1985	12	10	ACP	23	23.14	30	77	770	74	0	74	1	1	1	0	0	0	0	0	0	0	2	2
3266	ROBIN CR	1985	6	38	ACP	18	18.33	30	55	2090	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3267	ROBIN CR	1985	6	199	ACP	17	16.73	30	55	10945	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3268	MEADOWLARK DR	1985	6	208	ACP	11	11.17	30	55	11440	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3269	MEADOWLARK DR	1985	12	164	ACP	3	3.18	30	77	12628	73	0	73	1	1	3	0	0	0	0	0	0	0	4	4
3270	MEADOWLARK DR	1985	12	280	ACP	3	3.18	30	77	21560	73	0	73	1	1	3	0	0	0	0	0	0	0	4	4
3271	MEADOWLARK DR	1985	6	176	ACP	11	11.17	30	55	9680	71	0	71	1	1	2	1	0	0	0	0	0	0	4	4
3272	ROBIN CR	1985	6	9	ACP	3	3.19	30	55	495	72	0	72	1	1	1	1	0	0	0	0	0	0	3	3
3273	ROBIN CR	1985	6	294	ACP	3	3.19	30	55	16170	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3274	ROBIN CR	1985	6	56	ACP	5	5.31	30	55	3080	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3275	MEADOWLARK DR	1985	6	26	ACP	1	0.56	30	55	1430	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3276	CROWN HILL	1982	6	310	ACP	37	36.53	33	64	19840	72	0	72	1	1	3	1	0	0	0	2	2	0	9	9
3277	CROWN TR	1982	4	185	CIP	0	0.48	33	18	3330	52	0	52	1	1	1	1	0	0	0	2	0	0	5	5
3278	CROWN HILL	1982	8	15	PVC	92	92.45	33	12	180	72	0	72	1	1	1	1	0	0	0	2	0	0	5	5
3279	LE POINT ST	1985	4	908	ACP	11	10.57	30	42	38136	53	0	53	1	1	3	1	0	0	0	2	2	0	9	9
3280	CROWN TR	1982	4	9	CIP	0	0.48	33	18	162	53	0	53	1	2	1	1	0	0	0	2	2	0	7	7
3281	E BRANCH ST	0	6	166	PVC	0	0	2	28	4648	101	0	101	1	2	1	1	0	0	0	0	0	0	4	4
3282	E BRANCH ST	0	12	6	ACP	269	269.07	2	77	462	102	0	102	1	2	1	1	0	0	0	0	0	0	4	4
3283	E BRANCH ST	1971	8	578	PVC	128	127.64	44	19	10982	58	0	58	1	1	3	1	0	0	0	2	2	0	10	10
3284	GARDEN ST	1971	10	140	ACP	138	137.87	44	69	9660	23	0	23	1	1	2	1	0	0	0	0	2	0	6	6
3285	GARDEN ST	1971	10	111	ACP	137	137.48	44	69	7659	59	0	59	1	1	2	1	0	0	0	0	2	0	6	6
3286	E CHERRY AV	1982	4	9	ACP	11	10.61	33	42	378	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
3287	E CHERRY AV	1982	4	155	ACP	11	10.61	33	64	9920	72	0	72	1	1	2	1	0	0	0	0	0	0	4	4
3288	LAUNA LN	1982	4	32	ACP	11	10.61	33	42	1344	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
3289	W BRANCH ST	1977	8	8	ACP	0	0.02	38	64	512	64	0	64	1	1	1	4	0	4	0	0	0	0	10	10

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
3290	BRIDGE ST	1977	8	21	PVC	43	42.78	38	12	252	67	0	67	1	1	1	1	0	4	0	0	0	0	7	7
3291	NELSON ST	1991	8	151	PVC	47	46.65	24	12	1812	81	0	81	1	1	1	1	0	4	0	0	0	0	7	7
3292	NELSON ST	1991	8	305	PVC	43	42.78	24	12	3660	80	0	80	1	1	1	1	0	4	0	0	0	0	7	7
3293	NELSON ST	1991	6	11	PVC	2	1.68	24	8	88	80	0	80	1	1	1	1	0	0	0	0	0	0	3	3
3294	SHORT ST	1982	6	26	ACP	25	25.12	33	55	1430	69	0	69	1	2	1	1	0	0	0	0	0	0	3	3
3295	E BRANCH ST	0	12	16	ACP	211	211.11	2	77	1232	102	0	102	1	1	1	1	0	4	0	0	0	0	8	8
3296	GARDEN ST	1971	4	8	ACP	30	29.74	44	42	336	57	0	57	1	1	1	1	0	0	0	0	2	0	5	5
3297	SHORT ST	1982	6	399	PVC	18	18.26	33	8	3192	67	0	67	1	1	1	1	0	0	0	0	0	0	3	3
3298	POOLE ST	1956	6	20	PVC	18	18.26	59	8	160	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
3299	POOLE ST	1956	6	320	PVC	22	22.06	59	8	2560	42	0	42	1	1	1	1	0	0	0	0	0	0	3	3
3300	SHORT ST	1982	6	13	PVC	18	18.26	33	8	104	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3301	SHORT ST	1982	6	20	PVC	3	2.51	33	8	160	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3302	POOLE ST	1956	6	10	PVC	18	18.26	59	8	80	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
3303	POOLE ST	1992	6	53	PVC	25	24.86	23	28	1484	83	0	83	1	1	1	1	0	0	0	0	0	0	3	3
3304	S MASON ST	1995	6	18	ACP	25	24.86	20	55	990	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
3305	POOLE ST	1992	6	18	PVC	25	24.86	23	8	144	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
3306	IDE ST	1981	6	221	ACP	28	27.96	34	64	14144	70	0	70	1	1	3	1	0	0	0	0	0	0	5	5
3307	SHORT ST	1982	6	12	ACP	9	9.42	33	55	660	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
3308	ALLEN ST	0	12	11	PVC	188	187.6	2	28	308	104	0	104	1	1	1	1	0	0	0	0	0	0	3	3
3309	CROSS ST	1975	12	336	PVC	131	131.05	40	28	9408	66	0	66	1	1	2	1	0	0	0	0	0	0	4	4
3310	CROSS ST	1975	6	220	ACP	6	5.77	40	55	12100	61	0	61	1	1	3	1	0	0	0	0	0	0	5	5
3311	STATION WY	1982	8	29	PVC	30	29.74	33	12	348	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
3312	VERNON ST	1964	6	43	ACP	16	15.87	51	55	2365	51	0	51	1	1	1	1	0	0	0	0	0	0	3	3
3313	W BRANCH ST	1977	4	460	CIP	4	4.33	38	123	56580	65	0	65	1	1	4	0	0	0	0	0	0	0	5	5
3314	W BRANCH ST	1977	12	12	CIP	324	324.03	38	50	600	67	0	67	1	2	1	4	0	0	0	0	0	0	6	6
3315	W BRANCH ST	1977	12	7	CIP	324	324.03	38	123	861	50	0	50	1	1	1	0	0	0	0	0	0	0	3	3
3316	RESERVOIR RD	0	8	34	PVC	0	0	2	12	408	104	0	104	1	1	1	0	0	0	0	0	0	0	2	2
3317	OLD RANCH RD	1997	8	47	PVC	2	1.88	18	12	564	86	0	86	1	1	1	1	0	0	0	0	0	0	3	3
3318	RESERVOIR RD	0	6	232	PVC	7	7.16	2	8	1856	103	0	103	1	1	1	0	0	0	0	0	0	0	2	2
3319	RODEO DR	1988	10	341	ACP	17	17.04	27	69	23529	76	0	76	1	1	3	0	0	0	0	0	0	2	6	6
3320	AVENIDA DE DIAMANTE	1992	8	8	PVC	40	39.85	23	12	96	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
3321	AVENIDA DE DIAMANTE	1992	6	190	PVC	0	0	23	8	1520	81	0	81	1	1	1	1	0	0	0	0	0	0	3	3
3322	AVENIDA DE DIAMANTE	1992	8	10	PVC	40	39.85	23	12	120	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
3323	CROWN HILL	1982	8	186	PVC	136	136.01	33	12	2232	72	0	72	1	1	1	1	0	0	0	2	2	0	7	7
3324	CROWN HILL	1982	8	78	PVC	138	138.35	33	12	936	73	0	73	1	1	1	1	0	0	0	2	2	0	7	7
3325	MCKINLEY ST	1976	4	6	ACP	16	16.21	39	42	252	63	0	63	1	1	1	1	0	0	0	2	2	0	7	7
3326	TALLY HO RD	1977	12	226	PVC	54	53.55	38	28	6328	68	0	68	1	1	2	2	0	0	0	2	0	0	7	7
3327	MILLER WY	1977	8	254	PVC	35	34.74	38	12	3048	64	0	64	1	1	1	1	0	0	0	0	0	0	3	3
3328	COACH RD	1964	4	573	ACP	6	5.88	51	69	39537	51	0	51	1	1	3	1	0	0	0	0	0	0	5	5
3329	COACH RD	1964	4	11	ACP	6	5.88	51	42	462	50	0	50	1	1	1	1	0	0	0	0	0	0	3	3
3330	VIA LAS AGUILAS	1992	12	255	PVC	7	6.79	23	28	7140	82	0	82	1	1	2	1	0	0	0	0	0	0	4	4
3331	W BRANCH ST	1977	8	175	ACP	21	20.68	38	64	11200	64	0	64	1	1	3	4	0	0	0	0	0	0	8	8
3332	OAK PARK BLVD	1978	12	17	ACP	0	0	37	77	1309	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3333	OAK PARK BLVD	1978	12	11	ACP	0	0	37	77	847	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3334	OAK PARK BLVD	1978	8	285	ACP	41	41.43	37	77	21945	65	0	65	1	1	3	1	0	0	0	0	0	0	5	5
3335	OAK PARK BLVD	1978	12	15	ACP	0	0	37	77	1155	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3336	JENNY PL	2001	8	14	PVC	1	1.46	14	12	168	91	0	91	1	1	1	1	0	0	0	0	0	0	3	3
3337	RUTH ANN WY	1976	6	4	ACP	0	0	39	55	220	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
3338	ALDER ST	2001	6	11	ACP	33	32.95	14	55	605	88	0	88	1	1	1	1	5	0	0	2	2	0	12	12
3339	PECAN ST	1982	4	366	ACP	14	13.61	33	42	15372	67	0	67	1	1	3	1	0	0	0	2	2	0	9	9
3340	FAIR OAKS AV	1929	8	32	CIP	18	18.13	86	50	1600	0	0	0	10	1	1	3	0	0	0	2	0	2	9	90
3341	FAIR OAKS AV	1929	8	114	CIP	18	18.13	86	50	5700	0	0	0	10	1	2	3	0	0	0	2	0	2	10	100
3342	ASH ST	1966	6	32	ACP	7	6.86	49	55	1760	52	0	52	1	1	1	3	0	0	0	0	0	0	5	5
3343	ORCHARD AV	1964	8	18	ACP	190	189.83	51	64	1152	51	0	51	1	1	1	1	0	0	0	0	2	2	7	7
3344	BEDLOE LN	1975	6	9	PVC	90	90.13	40	8	72	64	0	64	1	1	1	1	0	0	0	0	0	2	5	5
3345	SHORT ST	1982	6	403	ACP	9	9.42	33	55	22165	68	0	68	1	1	3	1	0	0	0	0	0	0	5	5
3346	STAGECOACH RD	1976	8	6	ACP	32	32.15	39	64	384	63	0	63	1	1	1	1	0	0	0	0	0	0	3	3
3347	ORO DR	1975	8	48	ACP	0	0	40	64	3072	62	0	62	1	1	1	0	0	0	0	0	0	0	2	2
3348	GULARTE RD	1987	6	15	ACP	1	0.89	28	55	825	73	0	73	1	1	1	1	0	0	0	0	0	0	3	3
3349	GULARTE RD	1987	8	19	ACP	0	0	28	64	1216	75	0	75	1	1	1	1	0	0	0	0	0	0	3	3
3350	CORBETT CANYON RD	1973	8	9	ACP	12	12.44	42	64	576	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
3351	CORRAL PL	1975	6	538	ACP	3	2.85	40	55	29590	61	0	61	1	1	3	1	0	0	0	0	0	0	5	5
3352	GULARTE RD	1987	8	645	ACP	1	1.21	28	64	41280	73	0	73	1	1	3	1	0	0	0	0	0	0	5	5
3353	CORBETT CANYON RD	1973	8	73	ACP	2	2.37	42	64	4672	61	0	61	1	1	1	1	0	0	0	0	0	0	3	3
3354	PRINTZ RD	0	12	5	ACP	118	118.16	2	77	385	102	0	102	1	1	1	1	0	0	0	0	0	0	3	3
3355	PRINTZ RD	0	12	328	ACP	118	118.15	2	77	25256	101	0	101	1	1	3	1	0	0	0	0	0	0	5	5
3356	MAGNOLIA DR	1963	6	379	ACP	6	5.63	52	55	20845	49	0	49	1	1	3	1	0	0	0	0	0	0	5	5
3357	WOODLAND DR	1975	6	15	ACP	65	65.2	40	55	825	61	0	61	1	1	1	1	5	0	0	0	2	0	10	10
3358	WOODLAND DR	1975	6	142	ACP	25	25.29	40	55	7810	61	0	61	1	1	2	1	5	0	0	0	2	0	11	11
3359	WOODLAND DR	1985	6	14	CIP	7	6.59	30	32	448	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3360	WOODLAND DR	1985	6	156	CIP	7	6.59	30	32	4992	71	0	71	1	1	1	1	0	0	0	0	0	0	3	3
3361	S VIA BELMONTE	2001	8	315	PVC	7	6.69	14	12	3780	90	0	90	1	1	1	1	0	0	0	0	0	0	3	3
3362	ORCHARD AV	1964	10	113	PVC	190	189.83	51	19	2147	54	0	54	1	1	1	1	0	0	0	0	2	2	7	7
3363	VISTA DR	1998	10	8	PVC	77	76.57	17	19	152	88	0	88	1	2	1	1	0	0	0	0	0	0	3	3
3364	VISTA DR	1998	16	8	PVC	893	893.39	17	19	152	90	0	90	1	5	1	1	0	0	0	0	0	0	4	4
3365	VISTA DR	1998	16	51	PVC	893	893.39	17	43	2193	92	0	92	1	1	1	1	0	0	0	0	0	0	7	7
3366	VISTA DR	1998	10	264	PVC	77	76.57	17	19	5016	88	0	88	1	1	2	1	0	0	0	0	0	0	4	4
3367	VISTA DR	1998	10	8	PVC	77	76.57	17	19	152	88	0	88	1	4	1	1	0	0	0	0	0	0	3	3
3368	LA CANADA	2000	16	137	DIP	610	609.73	15	50	6850	93	0	93	1	4	2	1	0	0	0	0	0	0	7	7
3369	VISTA DR	1998	16	9	DIP	690	690.14	17	50	450	98	0	98	1	4	1	1	0	0	0	0	0	0	6	6
3370	VISTA DR	1998	16	64	PVC	692	691.8	17	43	2752	91	0	91	1	1	1	1	0	0	0	0	0	0	6	6
3371	LOS CIERVOS	1998	8	231	PVC	18	18.41	17	12	2772	87	0	87	1	1	1	1	0	0	0	0	0	0	3	3
3372	VISTA DR	1998	10	191	PVC	19	19.16	17	19	3629	88	0	88	1	1	1	1	0	0	0	0	0	0	3	3
3373	CLINTON CT	2001	12	8	PVC	0	0	14	28	224	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
3374	E GRAND AV	2002	6	52	ACP	3	3.25	13	55	2860	89	0	89	1	1	1	4	0	0	0	0	0	0	6	6
3375	E GRAND AV	2002	6	415	ACP	1	1.25	13	55	22825	88	0	88	1	2	3	4	0	0	0	0	0	0	8	8
3376	HUEBNER LN	1981	16	84	ACP	308	308.04	34	98	8232	72	0	72	1	1	2	0	0	0	0	0	0	0	4	4
3377	CANYON WY	1995	12	331	ACP	0	0	20	77	25487	82	0	82	1	1	3	1	0	0	0	0	0	0	5	5
3378	WILD OAK PL	1995	12	290	ACP	0	0	20	64	18560	81	0	81	1	1	3	1	0	0	0	0	0	0	5	5
3379	VIA LA BARRANCA	1992	6	12	ACP	3	2.71	23	55	660	79	0	79	1	1	1	1	0	0	0	0	0	0	3	3
3380	REFUGIO PL	1992	8	108	PVC	91	91.06	23	12	1296	82	0	82	1	1	1	1	0	0	0	0	0	0	3	3
3381	FARROLL AV	1982	6	2	ACP	0	0	33	55	110	69	0	69	1	1	1	1	5	0	0	0	2	0	10	10
3382	TAYLOR PL	1979	6	4	ACP	0	0	36	55	220	66	0	66	1	1	1	1	0	0	0	0	0	0	3	3
3383	WHITE CT	1987	8	33	PVC	0	0	28	12	396	78	0	78	1	1	1	1	0	0	0	0	0	0	3	3

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
3384	RUTH ANN WY	1976	6	5	ACP	1	1.08	39	55	275	64	0	64	1	1	1	1	0	0	0	0	2	0	5	5
3385	BEECH ST	1959	4	342	ACP	13	12.7	56	42	14364	44	0	44	1	1	3	1	5	0	0	2	2	0	14	14
3386	VILLAGE GLEN DR	1995	12	343	PVC	15	14.66	20	28	9604	86	0	86	1	1	2	1	0	0	0	0	0	0	4	4
3387	BRANCH MILL RD	1969	8	63	PVC	1	0.54	46	12	756	59	0	59	1	1	1	1	0	0	0	0	0	0	3	3
3388	RIDGEVIEW WY	1978	8	59	PVC	6	5.64	37	12	708	69	0	69	1	1	1	1	0	0	0	0	0	0	3	3
3389	GRACE LN	1988	10	13	PVC	0	0	27	19	247	78	0	78	1	1	1	1	0	0	0	0	0	0	3	3
3390	RODEO DR	1988	10	11	PVC	0	0	27	19	209	78	0	78	1	1	1	2	0	0	0	0	0	0	4	4
3391	W CHERRY AV	1982	6	13	ACP	190	189.58	33	55	715	69	0	69	1	2	1	1	0	0	0	0	2	2	7	7
3392	W CHERRY AV	1982	6	26	ACP	190	189.58	33	55	1430	69	0	69	1	1	1	1	0	0	0	0	2	2	8	8
3393	W CHERRY AV	1982	6	15	ACP	190	189.58	33	42	630	68	0	68	1	1	1	1	0	0	0	0	2	2	7	7
3394	W CHERRY AV	1982	4	15	ACP	70	69.53	33	42	630	68	0	68	1	1	1	1	0	0	0	0	2	2	7	7
3395	VISTA DR	1998	10	217	PVC	46	45.58	17	19	4123	88	0	88	1	1	1	1	0	0	0	0	0	0	3	3
3396	ASILO	1998	8	1192	PVC	56	55.56	17	19	22648	84	0	84	1	1	3	1	0	0	0	0	0	0	5	5
3397	ROSEMARY LN	2001	8	1075	PVC	0	0	14	19	20425	87	0	87	1	4	3	1	0	0	0	0	0	0	5	5
3398	MATTHEW WY	2001	16	340	PVC	685	685.46	14	43	14620	92	0	92	1	4	3	1	0	0	0	0	0	0	8	8
3399	ROSEMARY CT	2001	16	410	PVC	743	742.87	14	43	17630	92	0	92	1	4	3	1	0	0	0	0	0	0	8	8
3400	ROSEMARY CT	2001	16	484	PVC	751	750.73	14	43	20812	92	0	92	1	1	3	1	0	0	0	0	0	0	8	8
3401	LA CANADA	2000	8	336	PVC	0	0	15	19	6384	88	0	88	1	1	2	1	0	0	0	0	0	0	4	4
3402	LA CANADA	2000	10	137	PVC	34	33.87	15	19	2603	89	0	89	1	4	1	1	0	0	0	0	0	0	3	3
3403	ASILO	1998	8	183	PVC	92	92.45	17	43	7869	90	0	90	1	4	2	1	0	0	0	0	0	0	7	7
3404	LA CANADA	2000	16	117	PVC	609	609.25	15	43	5031	92	0	92	1	4	2	1	0	0	0	0	0	0	7	7
3405	VISTA DR	1998	16	407	PVC	692	691.8	17	43	17501	91	0	91	1	2	3	1	0	0	0	0	0	0	8	8
3406	VISTA DR	1998	10	31	PVC	201	201.07	17	28	868	90	0	90	1	1	1	1	0	0	0	0	0	0	4	4
3407	VISTA DR	1998	10	126	PVC	31	30.99	17	19	2394	88	0	88	1	1	1	1	0	0	0	0	0	0	3	3
3408	VISTA DR	1998	10	235	PVC	31	30.99	17	19	4465	88	0	88	1	2	1	1	0	0	0	0	0	0	3	3
3409	VISTA DR	1998	12	489	PVC	201	201.07	17	28	13692	89	0	89	1	1	3	1	0	0	0	0	0	0	6	6
3410	VISTA DR	1998	10	199	PVC	25	24.54	17	19	3781	88	0	88	1	1	1	1	0	0	0	0	0	0	3	3
3411	VISTA DR	1998	10	188	PVC	20	20	17	19	3572	88	0	88	1	2	1	1	0	0	0	0	0	0	3	3
3412	ASILO	1998	12	47	PVC	200	200.16	17	28	1316	90	0	90	1	1	1	1	0	0	0	0	0	0	4	4
3413	VISTA DR	1998	12	350	PVC	89	89.48	17	28	9800	89	0	89	1	1	2	1	0	0	0	0	0	0	4	4
3414	W BRANCH ST	1977	10	59	ACP	17	17.04	38	69	4071	68	0	68	1	2	1	4	0	0	0	0	0	2	8	8
3415	EL CAMINO REAL	1953	12	1084	ACP	296	296.34	62	77	83468	39	0	39	1	1	5	3	0	0	0	0	2	2	14	14
3416	WILDWOOD DR	1981	8	344	ACP	0	0	34	64	22016	68	0	68	1	1	3	1	0	0	0	2	2	0	9	9
3417	GAYNFAIR TR	1963	6	396	ACP	23	22.58	52	55	21780	48	0	48	1	1	3	1	0	0	0	0	2	0	7	7
3418	GAYNFAIR TR	1963	6	86	ACP	14	13.53	52	55	4730	49	0	49	1	1	1	1	0	0	0	0	0	0	3	3
3419	S ELM ST	1964	4	36	ACP	34	34.32	51	42	1512	50	0	50	1	1	1	3	0	0	0	0	0	0	5	5
3420	SUNSET DR	1953	6	564	ACP	20	19.56	62	42	23688	37	0	37	1	1	3	1	0	0	0	0	0	0	5	5
3421	RANCHO PKWY	1992	12	673	PVC	183	182.66	23	28	18844	82	0	82	1	3	3	2	0	0	0	0	0	0	6	6
3422	CROWN HILL	1982	10	26	ACP	593	593.37	33	69	1794	70	0	70	1	3	1	1	0	0	0	2	2	0	9	9
3423	CROWN HILL	1982	10	7	ACP	594	593.81	33	69	483	70	0	70	1	1	1	1	0	0	0	2	2	0	9	9
3424	EQUESTRIAN WY	1980	12	326	ACP	5	4.88	35	77	25102	71	0	71	1	1	3	1	0	0	0	0	0	0	5	5
3425	RODEO DR	1988	12	506	PVC	12	11.52	27	28	14168	78	0	78	1	1	3	2	0	0	0	0	0	0	6	6
3426	E GRAND AV	2002	8	221	ACP	54	54.12	13	64	14144	73	0	73	1	1	3	4	0	0	4	0	0	0	12	12
3427	N HALCYON RD	1960	8	146	ACP	55	55.19	55	64	9344	47	0	47	1	1	2	3	0	0	4	0	0	0	10	10
3428	VALLEY RD	1967	12	588	ACP	131	131.35	48	77	45276	54	0	54	1	1	3	1	0	0	0	0	2	0	7	7
3429	S RENA ST	1978	6	405	ACP	65	65.15	37	55	22275	64	0	64	1	1	3	1	5	0	0	2	2	0	14	14
3430	S RENA ST	1978	6	168	ACP	73	73.06	37	55	9240	64	0	64	1	1	2	1	5	0	0	2	0	0	11	11
3431	LOGANBERRY AV	2001	12	170	PVC	2	1.54	14	28	4760	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
3432	S COURTLAND ST	2001	12	167	PVC	47	47.07	14	28	4676	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
3433	HUCKLEBERRY AV	2001	8	106	PVC	0	0	14	28	2968	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
3434	BLACKBERRY AV	2001	12	161	PVC	102	102.43	14	28	4508	92	0	92	1	1	1	1	0	0	0	0	0	0	3	3
3435	ORCHARD AV	1964	8	320	PVC	36	35.93	51	12	3840	53	0	53	1	1	1	1	0	0	0	0	2	2	7	7
3436	FAIR OAKS AV	1991	12	1081	ACP	131	131.35	24	77	83237	76	0	76	1	1	5	3	5	0	0	0	0	0	14	14
3437	VALLEY RD	1967	10	1028	ACP	168	167.9	48	69	70932	52	0	52	1	1	4	0	0	0	0	0	0	0	5	5
3438	POOLE ST	1956	6	11	PVC	18	18.26	59	12	132	46	0	46	1	1	1	1	0	4	0	0	0	0	7	7
3439	POOLE ST	1956	6	13	PVC	18	18.26	59	8	104	45	0	45	1	1	1	1	0	0	0	0	0	0	3	3
3440	S MASON ST	1995	6	19	PVC	25	24.86	20	8	152	84	0	84	1	1	1	1	0	0	0	0	0	0	3	3
3441	GARDEN ST	1971	4	13	ACP	30	29.74	44	69	897	59	0	59	1	1	1	1	0	0	0	0	2	0	5	5
3442	STATION WY	1982	8	46	PVC	23	22.86	33	12	552	72	0	72	1	1	1	1	0	4	0	0	0	0	7	7
3443	STATION WY	1982	8	251	PVC	30	29.74	33	12	3012	71	0	71	1	1	1	1	0	4	0	0	0	0	7	7
3444	STATION WY	1982	8	279	PVC	30	29.74	33	12	3348	71	0	71	1	1	1	1	0	4	0	0	0	0	7	7
3445	STATION WY	1982	8	220	PVC	30	29.74	33	12	2640	71	0	71	1	1	1	1	0	4	0	0	0	0	7	7
3446	MILLER WY	1977	6	185	ACP	0	0	38	55	10175	63	0	63	1	1	3	1	0	0	0	0	0	0	5	5
3447	MILLER WY	1977	6	315	ACP	4	4.31	38	55	17325	63	0	63	1	2	3	1	0	0	0	0	0	0	5	5
3448	TALLY HO RD	1977	12	486	PVC	232	232.37	38	28	13608	67	0	67	1	2	3	2	0	0	0	2	0	0	9	9
3449	TALLY HO RD	1977	6	150	PVC	0	0	38	28	4200	68	0	68	1	2	1	2	0	0	0	2	0	0	7	7
3450	TALLY HO RD	1977	12	10	PVC	235	235.38	38	28	280	69	0	69	1	1	1	2	0	0	0	2	0	0	7	7
3451	VIA LA BARRANCA	1992	8	211	PVC	33	33.41	23	12	2532	63	0	63	1	1	1	1	0	0	0	2	0	0	5	5
3452	UNNAMED ST	0	8	383	ACP	87	86.64	2	64	24512	99	0	99	1	1	3	1	0	0	0	0	0	2	7	7
3453	S TRAFFIC WY	1987	8	718	ACP	0	0	28	64	45952	72	3	51	1	1	3	4	0	0	0	0	0	2	10	10
3454	HUEBNER LN	1981	10	885	PVC	122	122.06	34	43	38055	69	0	69	1	2	3	1	0	0	0	0	0	0	5	5
3455	HUEBNER LN	1981	10	182	PVC	122	122.06	34	43	7826	72	0	72	1	2	2	0	0	0	0	0	0	0	4	4
3456	HUEBNER LN	1981	16	342	ACP	308	308.04	34	98	33516	71	0	71	1	1	3	0	0	0	0	0	0	0	5	5
3457	W BRANCH ST	1977	12	498	ACP	15	15.31	38	77	38346	64	0	64	1	1	3	4	0	0	0	0	0	2	10	10
3458	BRISCO RD	1982	14	691	ACP	0	0	33	87	60117	70	0	70	1	2	4	3	0	0	0	0	2	0	10	10
3459	BRISCO RD	1982	8	9	PVC	259	258.52	33	12	108	73	0	73	1	2	1	3	0	0	0	0	2	0	8	8
3460	BRISCO RD	1982	8	56	PVC	259	258.52	33	12	672	72	0	72	1	2	1	3	0	0	0	0	2	0	8	8
3461	BRISCO RD	1982	8	59	PVC	264	264.1	33	12	708	73	0	73	1	1	1	3	0	0	0	0	2	0	8	8
3462	N ALPINE ST	0	4	7	ACP	3	3	2	55	385	100	0	100	1	1	1	1	0	0	0	0	0	0	3	3
3463	N ALPINE ST	0	4	6	ACP	3	3	2	42	252	99	0	99	1	1	1	1	0	0	0	0	0	0	3	3
3464	N ALPINE ST	0	6	8	ACP	32	32.11	2	55	440	100	0	100	1	1	1	1	0	0	0	0	0	0	3	3
3465	RODEO DR	1988	10	175	ACP	17	17.04	27	69	12075	76	0	76	1	1	3	0	0	0	0	0	0	2	6	6
3466	FLORA RD	1963	6	16	ACP	11	11.23	52	69	1104	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
3467	FLORA RD	1963	10	134	ACP	0	0	52	69	9246	51	0	51	1	1	2	1	0	0	0	0	0	0	4	4
3468	FLORA RD	1963	10	15	ACP	0	0	52	69	1035	52	0	52	1	1	1	1	0	0	0	0	0	0	3	3
3469	HILLCREST DR	1948	6	668	ACP	26	25.87	67	55	36740	32	1	29	1	1	3	1	0	0	0	0	0	0	5	5
3470	HILLCREST DR	1948	6	402	ACP	0	0	67	55	22110	33	0	33	1	1	3	1	0	0	0	0	0	0	5	5
3471	VIA BANDOLERO	1995	8	329	PVC	7	7.17	20	12	3948	84	0	84	1	1	1	1	0	0	0	0	0	2	5	5
3472	AVENIDA DE DIAMANTE	1992	8	16	PVC	7	7.09	23	12	192	82	0	82	1	1	1	1	0	0	0	0	0	2	5	5
3473	VIA BANDOLERO	1995	8	176	PVC	20	19.81	20	12	2112	85	0	85	1	1	1	1	0	0	0	0	0	2	5	5
3474	CROWN HILL	1982	4	4	ACP	16	15.71	33	42	168	69	0	69	1	2	1	1	0	0	0	2	2	0	7	7
3475	TALLY HO RD	1977	12	14	ACP	232	232.45	38	77	1078	66	1	59	1	1	1	2	0	0	0	2	0	0	7	7
3476	TEMPUS CR	1981	8	15	ACP	14	14.47	34	64	960	68	0	68	1	1	1	1	0	0	0	0	0	0	3	3
3477	ORO DR	1975	8	392	ACP	8	8	40	64	25088	62	0	62	1	1	3	1	0	0	0	0	0	0	5	5

FID	FULLNAME	Year Installed	Diameter (in)	Length (ft)	Material	Demand (gpm)	Flow (gpm)	Pipe_Age	Price ($) /ft	RepairCost ($)	RUL	Break_Hist	Adj _RUL	Prob_Fail_Score	Flow_Score	Cost Score	Traffic_Score	Hospital	Fire_Stn	Police_Stn	Nursing_H	School_Public	School_Private	Sum	Risk of Failure Score
3478	LA CRESTA DR	1978	8	84	ACP	13	12.96	37	64	5376	65	0	65	1	1	2	1	0	0	0	0	0	4	4
3479	LA CRESTA DR	1978	8	14	ACP	2	2.12	37	64	896	65	0	65	1	1	1	1	0	0	0	0	0	3	3
3480	PLATINO LN	1997	8	4	ACP	6	6.15	18	64	256	84	0	84	1	1	1	1	0	0	0	0	0	3	3
3481	PLATINO LN	1997	8	73	ACP	6	6.15	18	64	4672	84	0	84	1	1	1	1	0	0	0	0	0	3	3
3482	HUASNA RD	1967	10	114	ACP	60	59.93	48	64	7296	54	0	54	1	1	2	0	0	0	0	0	0	3	3
3483	LA CRESTA DR	1978	8	5	PVC	0	0	37	12	60	68	0	68	1	1	1	1	0	0	0	0	0	3	3
3484	LA CRESTA DR	1978	8	4	PVC	0	0	37	12	48	69	0	69	1	1	1	1	0	0	0	0	0	3	3
3485	MEADOW WY	0	8	6	ACP	11	10.52	2	64	384	100	0	100	1	1	1	0	0	0	0	0	0	2	2
3486	ROSEMARY LN	2001	10	12	PVC	7	7.12	14	19	228	91	0	91	1	1	1	1	0	0	0	0	0	3	3
3487	CANYON WY	1950	6	10	PVC	0	0	65	8	80	40	0	40	1	1	1	1	0	0	0	0	0	3	3
3488	CANYON WY	1950	8	16	ACP	1	1.14	65	64	1024	38	0	38	1	1	1	1	0	0	0	0	0	3	3
3489	MEADOWLARK DR	1985	6	15	ACP	11	11.17	30	55	825	72	0	72	1	1	1	1	0	0	0	0	0	3	3
3490	SOMBRILLO WY	1998	10	208	PVC	7	7.01	17	19	3952	88	0	88	1	1	1	1	0	0	0	0	0	3	3
3491	SPRUCE ST	1976	6	283	ACP	1	0.64	39	55	15565	62	0	62	1	1	3	1	0	0	0	0	0	5	5
3492	STAGECOACH RD	1976	8	8	ACP	85	84.96	39	64	512	66	0	66	1	1	1	1	0	0	0	0	0	3	3
3493	DOS CERROS	1994	8	518	PVC	0	0	21	12	6216	82	0	82	1	1	2	1	0	0	0	0	0	4	4
3494	CAMINO MERCADO	1985	8	492	PVC	0	0	30	12	5904	73	0	73	1	1	2	3	0	0	0	0	0	6	6
3495	MYRTLE ST	2001	10	1433	ACP	106	106.09	14	64	91712	87	0	87	1	1	5	1	0	0	0	0	2	9	9
3496	LIERLY LN	2001	4	315	PVC	14	13.98	14	12	3780	90	0	90	1	1	1	1	0	0	0	0	0	3	3
3497	E CHERRY AV	2001	12	456	ACP	30	30	14	64	29184	90	0	90	1	1	3	1	0	0	0	0	0	5	5
3498	MYRTLE ST	2001	8	601	PVC	30	30	14	12	7212	89	0	89	1	1	2	1	0	0	0	0	2	6	6
3499	CINDY ST	2001	8	925	ACP	29	29.15	14	64	59200	88	0	88	1	1	4	1	0	0	0	0	2	8	8
3500	UNNAMED ST	0	10	335	ACP	114	114.18	2	64	21440	102	0	102	1	1	3	1	0	0	0	2	0	9	9
3501	W BRANCH ST	1977	8	169	STL	0	0	38	138	23322	29	0	29	1	1	3	4	0	0	0	0	0	8	8
3502	CAMINO MERCADO	1985	8	147	STL	0	0	30	138	20286	74	0	74	1	1	3	3	0	0	0	0	0	7	7
3503	CAMINO MERCADO	1985	8	168	STL	0	0	30	138	23184	75	0	75	1	1	3	3	0	0	0	0	0	7	7
3504	W BRANCH ST	1977	12	59	ACP	142	141.74	38	64	3776	67	0	67	1	1	1	4	0	0	0	0	0	6	6
3505	BAKEMAN LN	1987	8	66	ACP	33	33.29	28	64	4224	77	0	77	1	1	1	1	0	0	0	2	2	9	9
3506	E BRANCH ST	2001	10	528	ACP	87	87.35	14	64	33792	89	0	89	1	1	3	1	0	0	0	2	2	9	9
3507	GRACE LN	1988	8	273	PVC	25	24.64	27	12	3276	77	0	77	1	1	1	0	0	0	0	0	0	2	2
3508	E GRAND AV	2002	8	28	PVC	2	1.51	13	12	336	92	0	92	1	1	1	4	0	0	0	0	2	8	8
3509	ALDER ST	1961	4	447	ACP	22	22.05	54	42	18774	46	0	46	1	1	3	1	5	0	0	2	2	14	14
3510	ALDER ST	2001	6	241	ACP	33	32.95	14	64	15424	90	0	90	1	1	3	1	5	0	0	2	2	14	14
3511	MEADOWLARK DR	1985	12	99	ACP	3	3.18	30	42	4158	74	0	74	1	1	1	0	0	0	0	0	0	2	2
3512	DEER TRAIL CR	1970	4	45	PVC	60	60	45	5	225	59	0	59	1	1	1	0	0	0	0	0	0	2	2
3513	S ELM ST	1964	10	32	ACP	5	5.04	51	69	2208	52	0	52	1	1	1	0	0	0	0	2	0	6	6
3514	EL CAMINO REAL	1953	10	3	DIP	0	0	62	24	72	50	0	50	1	1	1	3	0	0	0	0	2	7	7
3515	EL CAMINO REAL	1953	10	7	DIP	0	0	62	24	168	50	0	50	1	1	1	3	0	0	0	0	2	7	7
3516	EL CAMINO REAL	1953	10	3	DIP	0	0	62	24	72	48	0	48	1	1	1	3	0	0	0	0	2	7	7
3517	CASTILLO DEL MAR	2001	10	23	PVC	36	35.93	14	19	437	89	0	89	1	1	1	0	0	0	0	0	2	6	6
3518	CASTILLO DEL MAR	2001	10	25	PVC	36	35.93	14	19	475	93	0	93	1	1	1	0	0	0	0	0	2	6	6
3519	MILLER WY	1977	2	729	PVC	4	4.39	38	2	1458	64	0	64	1	1	1	1	0	0	0	0	0	3	3
3520	MILLER WY	1977	8	753	ACP	27	26.78	38	30	22590	18	0	18	2	1	3	1	0	0	0	0	0	5	10
3521	MILLER WY	1977	8	17	ACP	27	26.78	38	42	714	66	0	66	1	1	1	1	0	0	0	0	0	3	3
3522	CORBETT CANYON RD	1973	8	73	PVC	68	67.56	42	12	876	63	0	63	1	1	1	0	0	0	0	0	0	2	2
3523	FAIR OAKS AV	1991	8	315	PVC	30	30.38	24	12	3780	81	0	81	1	1	1	3	5	0	0	0	2	12	12
3524	CREEKVIEW WY	2001	8	501	PVC	32	31.86	14	12	6012	90	0	90	1	1	2	1	5	0	0	0	2	11	11
3525	LOS BERROS RD	2001	6	640	ACP	6	6.26	14	64	40960	90	0	90	1	1	3	1	0	0	0	0	0	5	5
3526	RANCHO PKWY	1992	8	23	PVC	7	7.23	23	12	276	81	0	81	1	1	1	2	0	0	0	0	2	6	6
3527	DEER TRAIL CR	1970	12	82	ACP	5	4.88	45	77	6314	58	0	58	1	1	2	1	0	0	0	0	0	4	4
3528	SIERRA DR	1969	6	66	ACP	0	0	46	55	3630	55	0	55	1	1	1	1	0	0	0	0	0	3	3
3529	HILLCREST DR	1948	6	10	ACP	18	17.78	67	55	550	34	0	34	1	1	1	1	0	0	0	0	2	5	5
3530	NEWPORT AV	1982	6	5	ACP	0	0	33	55	275	70	0	70	1	1	1	1	0	0	0	0	0	2	5	5
3531	NEWPORT AV	1982	6	15	ACP	0	0	33	55	825	69	0	69	1	1	1	1	0	0	0	0	2	0	5	5
3532	W BRANCH ST	1995	12	81	PVC	86	86.2	20	28	2268	86	0	86	1	1	1	4	0	0	0	0	2	2	10	10
3533	PUESTA DEL SOL	1998	10	8	PVC	62	62.15	17	19	152	89	0	89	1	1	1	0	0	0	0	0	0	2	2
3534	E GRAND AV	2002	8	4	ACP	178	177.91	13	77	308	93	0	93	1	1	1	4	0	0	4	0	0	10	10
3535	E GRAND AV	2002	8	3	ACP	178	177.91	13	64	192	89	0	89	1	1	1	4	0	0	4	0	0	10	10
3536	S HALCYON RD	1960	8	5	ACP	150	150.09	55	64	320	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
3537	S HALCYON RD	1960	8	6	ACP	150	150.09	55	55	330	47	0	47	1	1	1	3	5	0	0	2	2	0	14	14
3538	CORNWALL AV	1976	4	7	CIP	11	10.76	39	18	126	47	0	47	1	1	1	1	0	0	0	0	0	3	3
3539	N ALPINE ST	1929	4	12	CIP	11	10.76	86	50	600	1	0	1	10	3	1	1	0	0	4	0	0	7	70
3540	CROWN HILL	1982	10	8	ACP	594	593.81	33	69	552	70	0	70	1	1	1	1	0	0	0	2	2	9	9
3541	CROWN HILL	1982	10	19	ACP	593	593.37	33	64	1216	69	0	69	1	1	1	1	0	0	0	2	2	7	7
3542	BRISCO RD	1984	8	10	PVC	274	274.22	31	5	50	70	0	70	1	2	1	3	0	0	0	0	2	7	7
3543	BRISCO RD	1984	8	3	PVC	274	274.22	31	12	36	74	0	74	1	3	1	3	0	0	0	0	2	8	8
3544	N HWY 101	0	12	29	ACP	200	199.59	2	77	2233	86	0	86	1	1	1	0	0	0	0	0	0	4	4
3545	E GRAND AV ON-RAMP	0	12	15	ACP	200	199.59	2	77	1155	102	0	102	1	1	1	0	0	0	0	0	0	2	2
3546	S COURTLAND ST	2001	12	52	PVC	149	149.08	14	12	624	91	0	91	1	1	1	1	0	0	0	0	0	3	3
3547	CROWN HILL	1982	10	150	ACP	165	164.52	33	69	10350	69	0	69	1	1	3	1	0	0	0	2	0	7	7
3548	E BRANCH ST	2001	10	45	ACP	86	86.14	14	69	3105	89	0	89	1	1	1	1	0	0	0	2	2	7	7
3549	CREEKVIEW CT	2001	8	97	PVC	32	31.86	14	12	1164	91	0	91	1	1	1	1	5	0	0	0	2	10	10
3550	WOODLAND DR	1975	8	26	ACP	62	62.05	40	64	1664	62	0	62	1	2	1	1	5	0	0	0	2	10	10
3551	PASEO ST	1987	8	128	PVC	2	1.75	28	28	3584	76	0	76	1	1	1	1	0	0	0	2	2	8	8
3552	S VIA AVANTE CT	1992	8	385	PVC	11	11.41	23	12	4620	80	0	80	1	1	1	1	0	0	0	0	2	7	7
3553	W BRANCH ST	1977	12	50	ACP	142	141.74	38	77	3850	65	0	65	1	1	1	4	0	0	0	0	0	6	6
3554	CAMINO MERCADO	1985	8	26	ACP	0	0	30	64	1664	72	0	72	1	1	1	3	0	0	0	0	0	5	5
3555	CAMINO MERCADO	1985	8	187	ACP	2	1.86	30	64	11968	72	0	72	1	1	3	3	0	0	0	0	0	7	7
3556	CAMINO MERCADO	1985	8	507	ACP	6	5.77	30	64	32448	73	0	73	1	1	3	3	0	0	0	0	0	7	7
3557	PUESTA DEL SOL	1998	10	6	PVC	0	0	17	19	114	89	0	89	1	1	1	0	0	0	0	0	0	2	2
3558	PUESTA DEL SOL	1998	10	5	PVC	73	72.96	17	19	95	90	0	90	1	1	1	0	0	0	0	0	0	2	2
3559	S ELM ST	1964	8	81	PVC	13	13.01	51	19	1539	52	0	52	1	1	1	3	0	0	0	2	0	9	9
3560	S ELM ST	1964	8	8	ACP	3	3.15	51	64	512	51	0	51	1	1	1	3	0	0	0	2	0	9	9
3561	CORBETT CANYON RD	1973	8	75	PVC	68	67.56	42	12	900	61	0	61	1	1	1	0	0	0	0	0	0	2	2
3562	OAKWOOD CT	1981	8	9	ACP	6	6.43	34	64	576	69	0	69	1	1	1	1	0	0	0	0	0	3	3
3563	ORO DR	1975	8	426	PVC	29	29.15	40	12	5112	62	0	62	1	1	2	1	0	0	0	0	0	4	4
3564	PLATINO LN	1982	8	13	ACP	4	4.44	33	64	832	70	0	70	1	1	1	1	0	0	0	0	0	3	3
3565	PEARWOOD AV	1960	6	470	ACP	0	0	55	55	25850	46	0	46	1	1	3	1	0	0	0	0	0	5	5
3566	HIDDEN OAK RD	1995	8	77	PVC	0	0	20	12	924	84	0	84	1	1	1	1	0	0	0	0	0	3	3
3567	HIDDEN OAK RD	1995	8	5	PVC	0	0	20	12	60	85	0	85	1	1	1	1	0	0	0	0	0	3	3
3568	HIDDEN OAK RD	1995	8	42	PVC	6	6.14	20	12	504	84	0	84	1	1	1	1	0	0	0	0	0	3	3
3569	HILLCREST DR	1948	8	15	PVC	18	18.37	67	8	120	36	0	36	1	1	1	1	0	0	0	0	2	5	5
3570	STONECREST DR	2001	8	49	PVC	11	11.13	14	28	1372	93	0	93	1	1	1	1	0	0	0	0	2	5	5
3571	STONECREST DR	2001	8	77	PVC	11	11.13	14	28	2156	93	0	93	1	1	1	1	0	0	0	0	2	5	5

Appendix B: MATLAB Code

```
%This Program is created in partial fulfillment of the requirements of a Master's
%thesis. It is supposed to estimate the probability of failure of a pipe
%given cetain properties/characteristics. Specifically, Length, Diameter,
%Flow, age, and material.



% Material Characteristcs
%                                MFG SERVICE LIFE
%CI   = CAST IRON                        50-100
%DIP  = DUCTILE IRON PIPE                75-125
%GALV = GALVINIZED IRON                  40-60
%STL  = STEEL                            30-75
%PVC  = PVC                              50-150
%COMP = COMPOSITE                        50-150
%ACP  = ASBESTOS CONCRETE PIPE           75-125
%UKN  = UNKNOWN                          50-150


% Material      Anticipated Service life (MEAN IN YEARS)

CIP_MU      =         75;
DIP_MU      =        100;
GALV_MU     =         50;
STL_MU      =       52.5;
PVC_MU      =        100;
COMP_MU     =        100;
ACP_MU      =        100;
UKN_MU      =        100;

% MATERIAL       STANDARD DEVIATION

CIP_STD      =         15;
DIP_STD      =        15;
GALV_STD     =         6;
STL_STD      =        13;
PVC_STD      =        29;
COMP_STD     =        29;
ACP_STD      =        15;
UKN_STD      =        29;


%ANTECIPATED SERVICE LIFE AS RANDOM VARIABLES

CIP=normrnd(CIP_MU,CIP_STD,100000,1);
DIP=normrnd(DIP_MU,DIP_STD,100000,1);
GALV=normrnd(GALV_MU,GALV_STD,100000,1);
STL=normrnd(STL_MU,STL_STD,100000,1);
PVC=normrnd(PVC_MU,PVC_STD,100000,1);
COMP=normrnd(COMP_MU,COMP_STD,100000,1);
ACP=normrnd(ACP_MU,ACP_STD,100000,1);
UKN=normrnd(UKN_MU,UKN_STD,100000,1);

%FIRST FAILURE INCIDENT EQUATION (CLARK ET AL. 1982)
%NY=X1+X2(D)+X3(P)+X4(I)+X5(RES)+X6(LH)+X7(T)
```

```
% VARIABLES

%NY_i=ANTICIPATED # OF SERCICEBLE YEARS FROM INSTALLATION DATE TO FAILURE
%FOR PIPE i.
%Xi= CONDITIONAL PARAMETERS FOR REGRESSSION-TYPE ANALYSIS (RADIANS)
%D=DIAMETER (INCHES)
%P=ABSOLUTE INTERNAL PRESSURE (PSI)
%I= PERCENT OF PIPE COVERED BY INDUSTRIAL DEVELOPMENT
%RES= PERCENT OF PIPE COVERED BY RESIDENTIAL DEVELOPMENT
%LH=LENGTH OF PIPE EXPOSED TO CORROSIVE SOIL (FT)
%T= PIPE MATERIAL (0=REINFORCED CONCRETE,0.1=ACP,0.3=PVC, 0.5=COMP,0.7=GALV,
0.8= DIP,CIP, 1=STL)



%MINIMUM LIFE EXPECTED


%X1= RANDOM VARIABLE BASED ON PIPE MATERIAL AND EXPECTED LIFE RANGE
%DIAMTER PARAMETER
X2=0.338;
%PRESSURE PARAMETER
X3H=-0.022; %FOR PRESSURES > 100PSI
X3L=-0.022; %FOR PRESSURES < 100PSI
%INDUSTRAIL COVER PARAMETER
X4=-.265;
%RESIDENTIAL COVER PARAMETER
X5=-.0983;
%LENGTH PARAMETER
X6=-.003;
%PIPE MATERIAL PARAMETER
X7=13.28;



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%CALCULATIONS FOR PVC PIPES


PROPERTIES_PVC=load('-ascii','PVC Pipes.txt');


for i=1:size(PROPERTIES_PVC,1);

FID_PVC_X1=PVC;

FID_PVC_D1=PROPERTIES_PVC(i,3); %INCHES
```

```
FID_PVC_P1=PROPERTIES_PVC(i,5); %PSI
FID_PVC_I1=PROPERTIES_PVC(i,7); % 15PERCENT
FID_PVC_RES1=PROPERTIES_PVC(i,6); % 0 PERCENT
FID_PVC_LH1=PROPERTIES_PVC(i,2); %FT
FID_PVC_T1=0.3; %pvc
FID_PVC_AGE=PROPERTIES_PVC(i,8);

if FID_PVC_P1 < 100

   X3=X3L;

else X3=X3H;
end

FID_PVC_NY=FID_PVC_X1+(X2*(FID_PVC_D1))+(X3*(FID_PVC_P1))+(X4*(FID_PVC_I1))+(X5*(
FID_PVC_RES1))+(X6*(FID_PVC_LH1))+(X7*(FID_PVC_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_PVC_RUL=(FID_PVC_NY-FID_PVC_AGE);

%figure(1,10);
%hist(FID_PVC_RUL,10000);
FID_PVC_RUL_MU(i)=mean(FID_PVC_RUL);
FID_PVC_RUL_STD(i)=std(FID_PVC_RUL);

end




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%CALCULATIONS FOR PVC PIPES


PROPERTIES_ACP=load('-ascii','ACP Pipes.txt');


for i=1:size(PROPERTIES_ACP,1);

FID_ACP_X1=ACP;

FID_ACP_D1=PROPERTIES_ACP(i,3); %INCHES
FID_ACP_P1=PROPERTIES_ACP(i,5); %PSI
FID_ACP_I1=PROPERTIES_ACP(i,7); % 15PERCENT
```

```
FID_ACP_RES1=PROPERTIES_ACP(i,6); % 0 PERCENT
FID_ACP_LH1=PROPERTIES_ACP(i,2); %FT
FID_ACP_T1=0.1; %ACP
FID_ACP_AGE=PROPERTIES_ACP(i,8);

if FID_ACP_P1 < 100

   X3=X3L;

else X3=X3H;
end

FID_ACP_NY=FID_ACP_X1+(X2*(FID_ACP_D1))+(X3*(FID_ACP_P1))+(X4*(FID_ACP_I1))+(X5*(
FID_ACP_RES1))+(X6*(FID_ACP_LH1))+(X7*(FID_ACP_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_ACP_RUL=(FID_ACP_NY-FID_ACP_AGE);

%figure(1,10);
%hist(FID_ACP_RUL,10000);
FID_ACP_RUL_MU(i)=mean(FID_ACP_RUL);
FID_ACP_RUL_STD(i)=std(FID_ACP_RUL);

end


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%CALCULATIONS FOR DIP PIPES


PROPERTIES_DIP=load('-ascii','DIP Pipes.txt');


for i=1:size(PROPERTIES_DIP,1);

FID_DIP_X1=DIP;

FID_DIP_D1=PROPERTIES_DIP(i,3); %INCHES
FID_DIP_P1=PROPERTIES_DIP(i,5); %PSI
FID_DIP_I1=PROPERTIES_DIP(i,7); % 15PERCENT
FID_DIP_RES1=PROPERTIES_DIP(i,6); % 0 PERCENT
FID_DIP_LH1=PROPERTIES_DIP(i,2); %FT
FID_DIP_T1=0.8; %DIP
FID_DIP_AGE=PROPERTIES_DIP(i,8);
```

```
if FID_DIP_P1 < 100

   X3=X3L;

else X3=X3H;
end

FID_DIP_NY=FID_DIP_X1+(X2*(FID_DIP_D1))+(X3*(FID_DIP_P1))+(X4*(FID_DIP_I1))+(X5*(FID
_DIP_RES1))+(X6*(FID_DIP_LH1))+(X7*(FID_DIP_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_DIP_RUL=(FID_DIP_NY-FID_DIP_AGE);

%figure(1,10);
%hist(FID_DIP_RUL,10000);
FID_DIP_RUL_MU(i)=mean(FID_DIP_RUL);
FID_DIP_RUL_STD(i)=std(FID_DIP_RUL);

end



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%CALCULATIONS FOR COMP PIPES


PROPERTIES_COMP=load('-ascii','COMP Pipes.txt');


for i=1:size(PROPERTIES_COMP,1);

FID_COMP_X1=COMP;

FID_COMP_D1=PROPERTIES_COMP(i,3); %INCHES
FID_COMP_P1=PROPERTIES_COMP(i,5); %PSI
FID_COMP_I1=PROPERTIES_COMP(i,7); % 15PERCENT
FID_COMP_RES1=PROPERTIES_COMP(i,6); % 0 PERCENT
FID_COMP_LH1=PROPERTIES_COMP(i,2); %FT
FID_COMP_T1=0.5; %COMP
FID_COMP_AGE=PROPERTIES_COMP(i,8);

if FID_COMP_P1 < 100
```

```
   X3=X3L;

else X3=X3H;
end

FID_COMP_NY=FID_COMP_X1+(X2*(FID_COMP_D1))+(X3*(FID_COMP_P1))+(X4*(FID_COMP_
I1))+(X5*(FID_COMP_RES1))+(X6*(FID_COMP_LH1))+(X7*(FID_COMP_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_COMP_RUL=(FID_COMP_NY-FID_COMP_AGE);

%figure(1,10);
%hist(FID_COMP_RUL,10000);
FID_COMP_RUL_MU(i)=mean(FID_COMP_RUL);
FID_COMP_RUL_STD(i)=std(FID_COMP_RUL);

end




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%CALCULATIONS FOR GALV PIPES


PROPERTIES_GALV=load('-ascii','GALV Pipes.txt');


for i=1:size(PROPERTIES_GALV,1);

FID_GALV_X1=GALV;

FID_GALV_D1=PROPERTIES_GALV(i,3); %INCHES
FID_GALV_P1=PROPERTIES_GALV(i,5); %PSI
FID_GALV_I1=PROPERTIES_GALV(i,7); % 15PERCENT
FID_GALV_RES1=PROPERTIES_GALV(i,6); % 0 PERCENT
FID_GALV_LH1=PROPERTIES_GALV(i,2); %FT
FID_GALV_T1=0.7; %GALV
FID_GALV_AGE=PROPERTIES_GALV(i,8);

if FID_GALV_P1 < 100

   X3=X3L;
```

```
else X3=X3H;
end

FID_GALV_NY=FID_GALV_X1+(X2*(FID_GALV_D1))+(X3*(FID_GALV_P1))+(X4*(FID_GALV_I
1))+(X5*(FID_GALV_RES1))+(X6*(FID_GALV_LH1))+(X7*(FID_GALV_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_GALV_RUL=(FID_GALV_NY-FID_GALV_AGE);

%figure(1,10);
%hist(FID_GALV_RUL,10000);
FID_GALV_RUL_MU(i)=mean(FID_GALV_RUL);
FID_GALV_RUL_STD(i)=std(FID_GALV_RUL);

end




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%CALCULATIONS FOR STL PIPES


PROPERTIES_STL=load('-ascii','STL Pipes.txt');


for i=1:size(PROPERTIES_STL,1);

FID_STL_X1=STL;

FID_STL_D1=PROPERTIES_STL(i,3); %INCHES
FID_STL_P1=PROPERTIES_STL(i,5); %PSI
FID_STL_I1=PROPERTIES_STL(i,7); % 15PERCENT
FID_STL_RES1=PROPERTIES_STL(i,6); % 0 PERCENT
FID_STL_LH1=PROPERTIES_STL(i,2); %FT
FID_STL_T1=1; %STL
FID_STL_AGE=PROPERTIES_STL(i,8);

if FID_STL_P1 < 100

   X3=X3L;

else X3=X3H;
end
```

```
FID_STL_NY=FID_STL_X1+(X2*(FID_STL_D1))+(X3*(FID_STL_P1))+(X4*(FID_STL_I1))+(X5*(FI
D_STL_RES1))+(X6*(FID_STL_LH1))+(X7*(FID_STL_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_STL_RUL=(FID_STL_NY-FID_STL_AGE);

%figure(1,10);
%hist(FID_STL_RUL,10000);
FID_STL_RUL_MU(i)=mean(FID_STL_RUL);
FID_STL_RUL_STD(i)=std(FID_STL_RUL);

end




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%CALCULATIONS FOR CIP PIPES


PROPERTIES_CIP=load('-ascii','CIP Pipes.txt');


for i=1:size(PROPERTIES_CIP,1);

FID_CIP_X1=CIP;

FID_CIP_D1=PROPERTIES_CIP(i,3); %INCHES
FID_CIP_P1=PROPERTIES_CIP(i,5); %PSI
FID_CIP_I1=PROPERTIES_CIP(i,7); % 15PERCENT
FID_CIP_RES1=PROPERTIES_CIP(i,6); % 0 PERCENT
FID_CIP_LH1=PROPERTIES_CIP(i,2); %FT
FID_CIP_T1=0.8; %CIP
FID_CIP_AGE=PROPERTIES_CIP(i,8);

if FID_CIP_P1 < 100

   X3=X3L;

else X3=X3H;
end
```
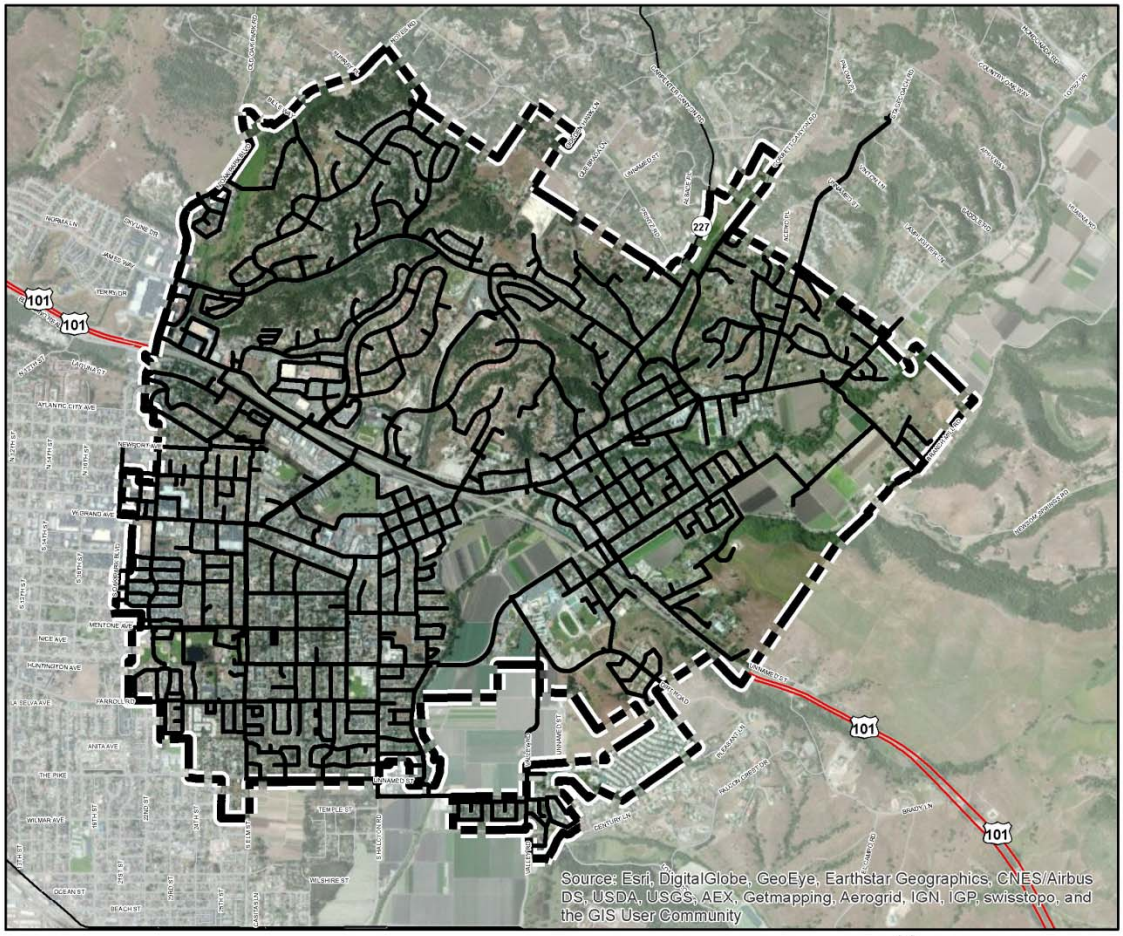

```
FID_CIP_NY=FID_CIP_X1+(X2*(FID_CIP_D1))+(X3*(FID_CIP_P1))+(X4*(FID_CIP_I1))+(X5*(FID_
CIP_RES1))+(X6*(FID_CIP_LH1))+(X7*(FID_CIP_T1));

%REMAINING USEFUL LIFE (RUL) = (NYi-AGE)*Padj
%NY ANTICIPATED SERVICEABLE LIFE(CALCULATED ABOVE)
%AGE = ACTUAL AGE SINCE INSTALLATION



FID_CIP_RUL=(FID_CIP_NY-FID_CIP_AGE);

%figure(1,10);
%hist(FID_CIP_RUL,10000);
FID_CIP_RUL_MU(i)=mean(FID_CIP_RUL);
FID_CIP_RUL_STD(i)=std(FID_CIP_RUL);

end
```

Appendix C: Arroyo Grande Existing WDS Exhibit

City of Arroyo Grande Existing Water Distribution System



Legend

— Arroyo Grande WDS selection

N

0 0.375 0.75 1.5 Miles