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RURAL TRUCK TRAFFIC AND PAVEMENT CONDITIONS IN TEXAS

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1. Rural Truck Traffic in Texas

"Although it may not be apparent, all Texans, regardless of where they reside, depend on the state's rural resources. Rural Texas is the foundation upon which Texas is built. The rural areas constitute the base for the entire state, in terms of economy, natural resources, culture, and history." (Office of Rural Community Affairs, 2002)

1.1 Introduction

Texas is in many aspects a rural state:

- approximately 80 percent of the state's land area is rural (213,297 of 267,277 square miles);
- 196 of Texas's 254 counties are rural counties;¹
- Texas has 227,000 farms twice as many as any other state;
- farm land is Texas's principle land use farm acreage comprises 78 percent of the total land area in Texas;
- Texas produce approximately seven percent of the total U.S. agricultural income (\$13.8 billion in 2000);
- farming and farm-related jobs provide employment to about 15 percent of all Texans (Office of Rural Community Affairs, 2002).

But only about 15.2 percent (3.16 million) of Texas's total population lived in rural areas in 2000 (Office of Rural Community Affairs, 2002), and more than 70 percent of the state's gross product is produced in the "Golden Triangle" bordered by Dallas/Fort Worth, Houston, and San Antonio/Austin, with the result that the perception often exists that urban needs dominate. In addition, policies designed to address urban needs may not always be directly transferable to rural areas, and since rural areas are sparsely populated, higher costs than those in urban areas are imposed per capita to provide government services, including rural road infrastructure.

In 2002 the Texas Department of Transportation (TxDOT) contracted with the Center for Transportation Research (CTR) at The University of Texas at Austin and Texas Tech University to provide evidence of the truck volume and pavement damage associated with major rural truck traffic generators in Texas. It was felt that given increased funding shortfalls for the maintenance and modernization of rural infrastructure, TxDOT staff responsible for rural infrastructure will benefit from a better understanding of the rural truck trip generators in these areas that impact rural infrastructure. The objectives of this first-year report are to highlight the factors that result in greater demands on rural roads, describe the condition of the existing rural road system in Texas, provide evidence of the impact of increased demand for trucking on rural roads, and highlight the role of rail in rural areas before concluding the report.

^{1. &}quot;A county is designated as "metropolitan" if it contains a place with a minimum population of 50,000 and has a total population of at least 100,000" (Office of Rural Community Affairs, 2002).

2. Background

2.1 Introduction

Rural Texas faces a number of social challenges at a time when the rural tax base is diminishing because of rural migration to urban areas and declining rural economies. Rural areas tend to have a narrower economic base — based predominantly on natural resources, such as farming, oil, and mining — compared to their urban counterparts. In Texas agriculture is the second largest industry, producing 16 percent of the state's gross product and contributing \$80 billion to the Texas economy (Office of Rural Community Affairs, 2002). The objective of this chapter is to highlight the social challenges and to identify the major revenue earning sectors in rural Texas.

2.2 Socio-Demographic Challenges in Rural Texas

The Office of Rural Community Affairs (2002) identified the following sociodemographic challenges that rural Texas is struggling with:

- The rural young migrating to urban areas and the urban elderly migrating to rural areas have resulted in an aging population. On average the population in rural Texas is aging. In 2000 the median age in rural Texas was 35.4 years, as compared to 31.7 years in urban Texas. In other words, more than 15 percent of the people in rural Texas are older than 65 years, compared to nine percent in urban areas.
- Texas's rural population is comparatively poorer than its urban counterparts. The rural population has substantially lower per capita incomes compared to the urban population: \$20,887 versus \$24,383 in 2000. In 1998 approximately 19.5 percent of rural people of all ages were regarded as poor. This point is further illustrated by the fact that the median household income in rural Texas was \$28,594 in 1998, compared to \$37,639 in urban Texas.
- Rural Texans generally have fewer years of education than urban Texans do. In 2000 13.6 percent of the population in rural Texas had a college degree, compared to 25.1 percent in urban counties. This is aggravated by the fact that rural Texas struggles to maintain student enrollments or attract skilled teachers and administrators.
- Rural Texans, in general, have less access to health services. The Office of Rural Community Affairs (2002) reported that 24 rural counties had no primary care physician, 20 had only one primary care physician, and 22 had only two primary care physicians. In addition, 64 rural counties had no hospital, 13 had no pharmacist, and 40 had no dentist. The office also reported that in 1995 more than 797,000 rural Texans had no health insurance. Access to healthcare by minorities in rural areas is further complicated by inadequate transit services.
- Finally, available housing is a major issue in rural Texas. Some of the major concerns include: the availability of substandard housing, lack of affordable housing, and relatively high construction costs of rural housing projects because of developer's inability to negotiate volume discounts on building supplies.

Given these concerns and the fact that the Texas rural road network is comparatively good (see Chapter 4), less emphasis has been put on the increasing demands on rural roads. Available resources and political energies have been focused on addressing the socio-demographic concerns listed above. However, in a survey of rural chambers of commerce in the summer of 2003, 92 percent of the respondents perceived rural road and rail transportation to be a major issue or concern (see Report 4169-P2 entitled "What is Moving in Rural Texas?"). Although rural communities are thus concerned about business recruitment and retention — to stimulate job creation in their communities — and those aspects that impact the quality of life of rural residents — health, education, housing, transit, social services, safety — the need for rural transportation infrastructure is well recognized.

2.3 Economic Characteristics of Rural Texas

2.3.1 Major Revenue Generators in Rural Texas

Data obtained from the Bureau of Economic Analysis on major revenue generators by county in 2000 were graphically displayed using ArcMap. Figure 2.1 displays the most important revenue-generating sectors in rural Texas. As can be seen from Figure 2.1, "Government and Government Services" is the major revenue-earning sector in 79 rural counties (approximately 40 percent) in 2000 (see Appendix A for a detailed category description). The service sector was identified as the major revenue earner in 45 rural counties in Texas. Finally, farming generated the most revenue in 30 rural counties, and mining generated the most revenue in 22 rural counties. These four sectors were the major revenue earners in 176 of the 196 rural counties in Texas — almost 90 percent of the rural counties in Texas. Of the four sectors highlighted, only farming and mining potentially generate substantial truck traffic volumes.

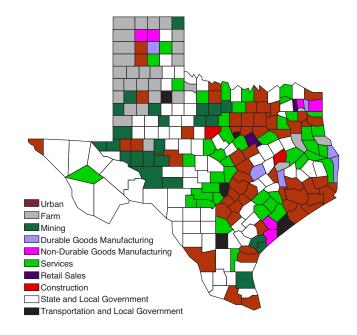


Figure 2.1 Major Revenue-Earning Sectors in Rural Texas

The importance of "Government and Government Services" and the service industry in rural Texas is further illustrated in Figure 2.2 and Figure 2.3, respectively. Figure 2.2 displays those rural counties in which "Government and Government Services" was identified as one of the top three revenue-earning sectors. As can be seen

from this figure, almost all the rural counties are dependent on "Government and Government Services" as a source of revenue.

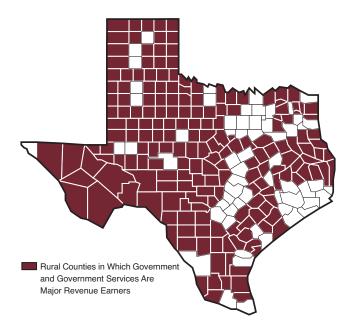


Figure 2.2 Rural Counties in Which "Government and Government Services" is a Major Revenue Earner

Figure 2.3 displays the rural counties in which the service sector was identified as one of the top three revenue earners in the specific rural county. As can be seen from Figure 2.3, the service sector was a major revenue earner in 158 of Texas's 196 rural counties.

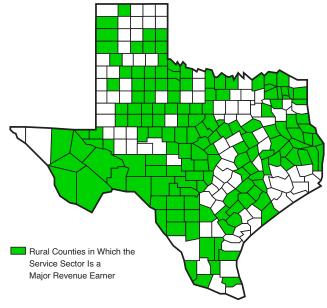


Figure 2.3 Rural Counties in Which the Service Sector is a Major Revenue Earner

For the purpose of characterizing the different types of rural traffic generators and identifying specific infrastructure issues in this study, Texas was divided into four geographic regions: northern Texas, southern Texas, eastern Texas and western Texas (see Figure 2.4 for a map of the four regions). In each of these regions, different revenue generators impact rural infrastructure differently. As is evident from the data from the Bureau of Economic Analysis, farming is the major revenue earner in northern Texas; mining — mostly oil and gas — and government and government services are the major revenue earners in western Texas, and government and government services and, to some extent, services are the major revenue earners in southern and eastern Texas.

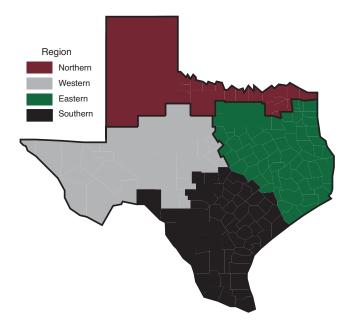


Figure 2.4 Geographic Regions

These four regions formed the basis for interviewing TxDOT district offices, and in the subsequent phase of this study they will form the basis for analyzing different rural pavement designs. In the subsequent discussions of traffic generators and the factors that are impacting rural Texas, the reader is referred to Figure 2.4 to put the issues and concerns into geographical perspective.

3. Factors Impacting Rural Roads in Texas

Rural areas used to have a narrower economic base — based predominantly on natural resources — compared to their urban counterparts. These commodities — often bulky in nature — drove the demand for rural transportation. Historically, rail served the key transportation needs of rural agriculture and industry. In recent years, however, changes in rural agriculture/industry and in the transportation sector resulted in an increased use of rural trucking. Initiatives that impact rural output thus potentially impact the demand for rural trucking. The objective of this section is to highlight the factors that have resulted in increased rural truck volume in Texas that could threaten the sustainability of the rural road system. Additional information on rural transportation challenges collected by Texas Tech University in conducting interviews with TxDOT district personnel in northern Texas are summarized in Appendix B.

3.1 Agricultural Industrialization

Farming is a very important sector in rural Texas.² As can be seen from Figure 3.1, in 50 out of Texas's 196 rural counties, farming is the major income generator in the county, being one of the top three revenue generators in the county. Also evident from Figure 3.1 is that farming is concentrated in northern Texas. Appendix C provides a detailed review of the agricultural sector in Texas by geographical region (see Figure 2.4).

Since the 1950s U.S. agriculture has started to apply industrial principles to agricultural production, but it has only been during the past 20 years, when farmers were able to control diseases in large animal production operations, that industrialization started to dramatically change the sector. Increased agricultural industrialization is impacting rural Texas as follows:

- Approximately 3 percent of farm operations (7,000 farms) have sales in excess of \$250,000. These farm operations account for 30 percent of the farm land in Texas.
- In 1997 8.6 percent of Texas farms accounted for 86.7 percent of total farm sales in Texas (Gleaton and Anderson, 2003).

These statistics highlight the fact that agricultural industrialization resulted in farm consolidations in Texas. In addition, industrialization required the move away from diversified (multi-product) farms to specialized (single-product) farms. This has resulted in fewer but larger farms and the need to move products between specialized operations.

^{2.} Farms and farm-related jobs account for approximately 15 percent of Texas employment and 27 percent of the number of jobs in nonmetro areas (Office of Rural Community Affairs, 2002).

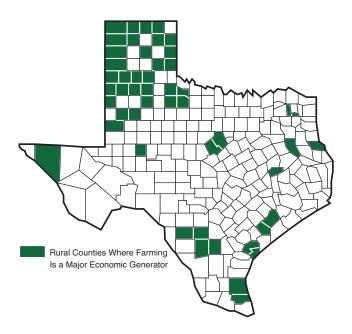


Figure 3.1 Rural Counties Where Farming is a Major Economic Generator

Statistics from the U.S. Department of Agriculture (1993) revealed that agricultural products were predominantly shipped by truck in 1993. More than a decade ago, trucks already had a modal share of 45 percent in terms of ton-miles. Trucks specifically dominated the shipments of fresh fruits and vegetables, livestock, meat, poultry, dairy products, and canned food (U.S. Department of Agriculture, 1993).

Some evidence exists that trucks are currently dominating the movement of agricultural shipments in Texas, particularly if these shipments have both an origin and destination in the state (see Appendix C). By legislative mandate, higher axle loads are permissible for certain commodities, of which agricultural produce is an example. During the interviews conducted by Texas Tech University, the TxDOT district offices in northern Texas have expressed concern about the impact of trucks moving agricultural produce during the harvesting season. The situation is aggravated by the fact that overloaded agricultural trucks often use the farm-to-market road system to avoid weight stations on the interstate. Figure 3.2 provides an example of the considerable damage that grain trucks can cause to the road system (personal communication with Mike Murphy, 2003). In addition, concern has been expressed over the traffic impact of large trucks accelerating and decelerating when exiting and entering feed lots in northern Texas.



Figure 3.2 Example of Damage Done by Grain Haulers (Source: Mike Murphy, 2003)

Since agricultural shippers have come to rely on trucking to move their produce, any increase in agricultural output will result in increased truck volumes and/or loads on rural pavements. Two agricultural trends that could result in increased usage of trucks are worth highlighting in this section (see also Chapter 5 for a discussion on the future role of rail in serving rural agriculture and industry). First, globalized agriculture has resulted in continuing pressure on the industry to stay cost-competitive. Since price-sensitive consumers tend to purchase the cheapest commodity irrespective of where it was produced (personal communication with Stephen Fuller, June 2003), it is predicted that commercial farm sizes will continue to increase as large operations continue to seek economies of scale to remain cost-competitive in an increasingly global economy. Since the increased scale of farming operations has brought about farm ownership of semi-trailer trucks (Babcock and Bunch, 2003), any growth in outputs and inputs required will evidently be moved in trucks. Given this trend, truck volume is expected to increase on rural highways in the future, with potentially adverse impacts on rural highways and bridges.

Furthermore, concerns have been expressed about the water pollution impact of large industrialized farming operations and about the use of hormones and antibiotics to control deceases at large industrialized agricultural facilities. Consumers are thus increasingly requiring "identity preservation." Although the trend towards preserving the identity of agricultural produce from field to consumer is currently more prevalent on the national level, it will become more important in Texas as the demand for meeting customers' specific food needs increase. "Identity preservation" usually requires the movement of smaller shipment sizes, careful handling to prevent damage, and reduced transit times, which seems to favor trucking (see also Chapter 5).

3.2 Agricultural Equipment

Statistics compiled by Gleaton and Anderson (2003) show that farmers are starting to lease or jointly own large and expensive pieces of farm equipment, or else outsource these services to custom operators. Given this trend and the fact that the size of this farming equipment has been increasing (from 2-row tractors in the 1940s to 18-to-24-row tractors, currently), the potential impact on rural road infrastructure is a concern in northern Texas (personal communication with Carl Anderson, June 2003). Heavy farm equipment operating on the edge of the roads can cause significant damage to the edges of rural pavements. By law, agricultural equipment is not restricted by a maximum weight limit (personal communication with TxDOT Amarillo District). Oversized harvesting equipment and other implements increase the load on rural pavements, especially the farm-to-market road system, reducing the life of these pavements.



Figure 3.3 Example of Shoulder Damage (Source: Mike Murphy, 2003)

3.3 Oil and Gas Industry

In 1999 rural Texas produced approximately 75 percent of the state's oil and gas (Office of Rural Community Affairs, 2002). The oil and gas industry necessitates the movement of equipment, water to the site, and brine water from the site. The economic revival of the oil industry in recent years is thus accompanied by an increase in the volume of truck traffic. Most of the oil-associated movements are, however, over relatively short distances. Oil is usually trucked over short distances to collection points from where it is moved by pipe or pipe and rail. Brine water is also usually moved over relatively short distances to brine water injection sites. Personnel of the TxDOT district office in West Texas were particularly concerned about the damage done by trucks moving brine water. The liquid weight of brine water results in the weight limit of the truck being reached long before the cubic capacity is filled. Trucks loaded to fill the cubic capacity can thus cause considerable damage to the rural road

infrastructure (see Figure 3.5). In West Texas roads designed for 10 years had to be rebuilt in 3 years because of the damage done by brine water trucks (personal communication TxDOT Odessa District, 2003).



Figure 3.4 Example of Damage Done by Oil Field Trucks (Source: Mike Murphy, 2003)



Figure 3.5 Example of Damage Done by Salt Water Trucks (Source: Mike Murphy, 2003)

3.4 House Bill **2060**

Approximately 21 percent of Texas's roads are load posted — the gross weight limit on these roads is 58,420 lbs. These load posted roads are almost exclusively farm-to-market roads. House Bill 2060, however, provided for the trucking industry to

purchase permits at a cost of \$75 that allow 84,000-lb. vehicles (gross vehicle weight) to traverse load posted roads (personal communication with Mike Murphy, 2003). Figures 3.6 and 3.7 show examples of trucks with gross vehicle weights in excess of 58,240 lbs. operating on a load posted farm-to-market road in Texas.



Figure 3.6 Example of 62,000 GVW Allowable, Photographed on a Farm-to-Market Road

(Source: Mike Murphy, 2003)



Figure 3.7 Example of 84,000 GVW Allowable, Photographed on a Farm-to-Market Road

(Source: Mike Murphy, 2003)

These trucks can cause considerable damage to the farm-to-market road system, which was not designed to carry these truck loads.

3.5 Location of Large Distribution Centers

Changes in supply, processing, and marketing chains — facilitated by the evolution of information technology — favor the trucking mode relative to rail. The logistics changes associated with just-in-time manufacturing and supply chains have led to hub and spoke distribution systems. This is evident in the site selection and location of large distribution centers of retail chains, such as Wal-Mart, HEB, and Target. Because of the size of these centers, they are usually located in rural counties adjacent to metropolitan markets, where land is comparatively inexpensive. Sites are selected next to major highways that provide access to these major metropolitan markets.

Since these centers hold the potential of increased employment opportunities and an increased tax base for the rural counties, they exhibit substantial negotiating power and often demand certain road improvements to a site under consideration. In the past, TxDOT district staff had to transfer scarce district funds to improve links to such sites, which are substantial truck traffic generators in these counties. In documentation provided to TxDOT, Wal-Mart stated that its Palestine distribution center in eastern Texas operates 390 trucks inbound and 390 trucks outbound (personal communication with TxDOT Tyler District). The Wal-Mart distribution center near Gainesville in northern Texas generates approximately 1,000 trucks per day (personal communication with TxDOT Wichita Falls District).



Figure 3.8 Wal-Mart Distribution Center near Palestine in East Texas (Source: Mike Battles, 2003)

3.6 Location of Landfill Sites

TxDOT district personnel in both western Texas and northern Texas have raised concerns about the location of future landfill sites. In the Childress District, garbage trucks were found to be consistently overloaded, causing rutting in the pavement lanes leading to the landfill. TxDOT personnel have observed that the rutting exists only in the lanes leading to the landfill (when the trucks are full) and not in lanes coming from the landfill (when trucks are empty).



Figure 3.9 Example of Pavement Rutting (Source: Mike Murphy, 2003)

TxDOT district personnel in western Texas reported plans to use deactivated sulfur mines in western Texas as future landfills. These sites will generate considerable truck traffic carrying urban waste from cities as far as New York and Los Angeles. In addition, a number of sites for the disposal of contaminated materials have been and are being developed in western Texas. A low-level radioactive material disposal site in Andrews generates approximately 70 trucks per day (personal communication TxDOT Odessa District, 2003).

3.7 North American Free Trade Agreement

The dramatic growth in trade between the United States and Mexico from 1977 to 2001 (an increase in U.S. exports and imports from \$4.82 billion to \$101.51 billion and from \$4.77 billion to \$131.43 billion, respectively) has focused significant attention on the potential impact of U.S.-Mexico trade on the Texas road system. Concern about Texas's roads is warranted, especially considering that approximately 75 percent of the truck-transported U.S.-Mexico trade value crossed at a Texas border port of entry in 2001 (Prozzi, Henk, McCray, and Harrison, 2002).

In a 1998 study by Louis Berger, it was reported that the North American Free Trade Agreement (NAFTA) trade trucks tend to be concentrated on a small number of interstates and highways. The authors estimated that almost 90 percent of NAFTA truck traffic is carried on 13 Texas highway corridors (Louis Berger Associates, Inc,

1998). Figure 3.10 illustrates the NAFTA trade truck volumes estimated by Dr. John McCray in a TxDOT research study entitled "Inland Ports: Planning Successful Developments" (Prozzi, Henk, McCray, and Harrison, 2002). As is evident from Figure 3.10, most of the NAFTA corridors are interstates, U.S. or state highways that traverse a number of rural counties in Texas.

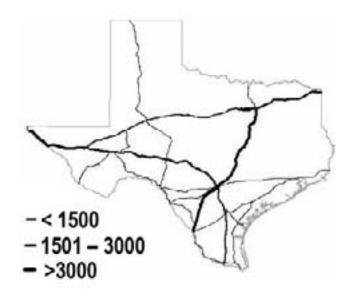


Figure 3.10 NAFTA Trade Truck Volumes on Texas Corridors (Source: Prozzi et al., 2002)

Concern has been expressed that growth in NAFTA trade truck volumes is accelerating the deterioration of the highway infrastructure in Texas. This deterioration manifests primarily as damage to pavement and bridge decks (Harrison, 2000). The pavement damage costs to the Texas highway system associated with NAFTA freight trucks in 1996 were estimated at \$90.9 million. About 41.3 percent of this cost was incurred in rural areas and 58.7 percent in urban areas (Louis Berger Associates Inc., 1998). It is thus not surprising that interviews with TxDOT districts with large rural areas have revealed cases where these districts had to divert limited funding to maintain the interstate and U.S./state highway systems traversing rural counties.

3.8 Rural Rail Line Abandonment

The Staggers Act of 1980 resulted in the deregulation of the railroad industry, which allowed greater railroad pricing flexibility, expedited abandonment procedures, and accelerated railroad mergers. Railroads were thus allowed to abandon unprofitable rural rail links. The state of Texas lost approximately 2,400 miles of rail track between 1981 and 1998 (Texas Department of Transportation, 2003). Figure 3.11 illustrates the miles of rail line approved for abandonment between 1981 and 1998.

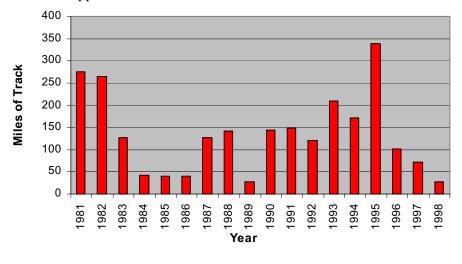


Figure 3.11 Miles of Rail Line Approved for Abandonment (1981-1998) (Source: Texas Department of Transportation, 2003)

Given the miles of abandoned rail lines in northern Texas, the potential for large Class I railroads to serve rural agricultural shippers has been substantially reduced (see Figure 3.12).

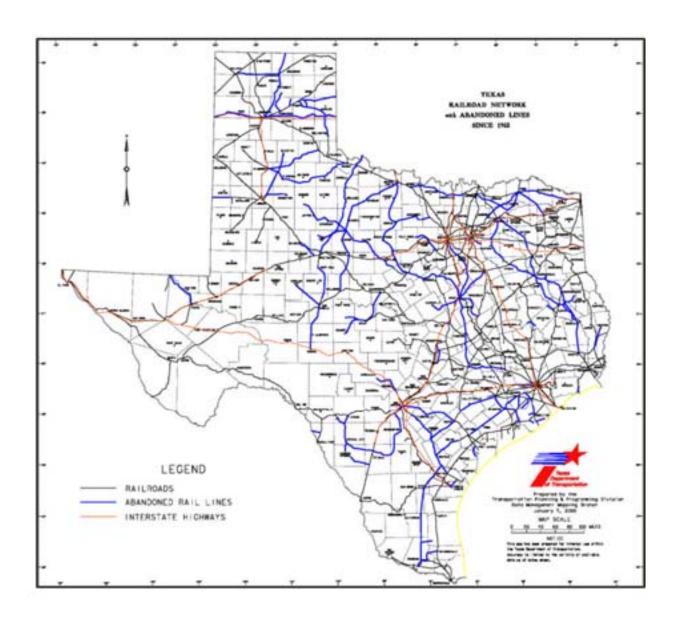


Figure 3.12 Abandoned Rail Lines in Texas since 1953

(Source: Texas Department of Transportation, 2003)

On the other hand, the Staggers Act brought about railroad investments in plants and equipment that were innovative and more productive. In the late 1990s the industry invested in high-strength rail corridors, new locomotives, and more productive cars, and adopted a business philosophy that promoted unit and shuttle trains — loaded rapidly at major terminals and moved efficiently between points in the system — in an effort to reduce their costs. Larger agricultural shippers thus stand to benefit. But for those not on a rail network (or unable to put together high carload numbers to link with unit train schedules), rail service has become a major issue (Prozzi, Harrison, and Prozzi, 2003). In addition, Brennan (1998) speculates that Class I railroads will experience capacity limitations on many of their segments in the following decade. Already the use of rail by the agricultural sector in Texas is limited due to a shortage of rail equipment during the harvest season (personal communication, June 2003). Capacity constraints can thus

have significant implications for larger agricultural users in the form of higher rates, poorer service, or both. This will result in an even larger number of bulk commodities being moved on rural roads, since any growth in rural output will have to be accommodated by trucks (Brennan, 1998).

3.9 Other Factors

Other factors that were highlighted by the TxDOT districts include:

- Trucking companies using the farm-to-market roads to circumvent weight stations. For example, farmers in Childress claimed that they can tell the days when the weigh station is open by the surge in truck traffic on the farmto-market roads. These roads thus experience truck volumes and loads beyond their design volumes and loads.
- Temporary material handling sites required during construction or rehabilitation projects result in the movement of heavy loads over farm-to-market roads. In Wichita Falls construction in the nearby metroplex has required the development of new sources of sand and gravel in the district. This has resulted in heavily loaded trucks traveling over roads previously considered to be low volume roads. Figure 3.13 illustrates the sand, stone, and, gravel sites in Texas as documented by the U.S. Geological Survey.
- Permitted super-heavy and oversized loads present occasional challenges in rural transportation. For example, the movement of an electric transformer that weighed 608,000 pounds through the Lubbock District required a 216foot trailer.
- Increased truck traffic has resulted in the need for additional truck stops in rural areas. Issues of concern that arise from truck stops on roadways without controlled access are due to the lack of exit ramps or acceleration lanes leading to or from the truck stops. Trucks not only enter and leave the truck stops at slow speeds, creating a safety concern for vehicles traveling at the speed limit, but are often required to execute turns in a limited distance. Insufficient truck stops are also a concern. In Amarillo trucks are forced to park at the edge of ramps leading to the rest areas, because of a lack of capacity at the truck stops.

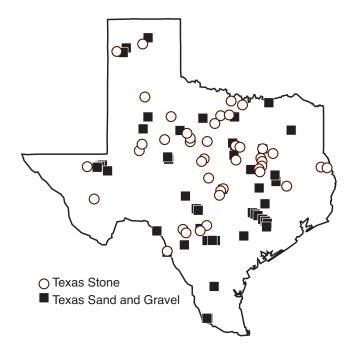


Figure 3.13 Texas Stone, Sand, and Gravel Locations (Source: Aggregate Industry Atlas of the U.S. Geological Survey)

3.10 Resultant Increased Demands on Rural Roads

The previous section aimed to highlight the factors contributing to increasing demands on rural roads. Nationally this trend towards increasing truck volumes on rural roads is supported by the monthly traffic volume data collected by the Office of Highway Policy Information (OHPI). Figure 3.14 illustrates the average annual daily traffic and load growth on the rural interstate system between 1970 and 2000. It is evident that the increase in the average load exceeded the average annual increase in daily traffic by a factor of more than 4 — the annual daily load growth rate was 4.33 times higher than the average annual daily traffic growth.

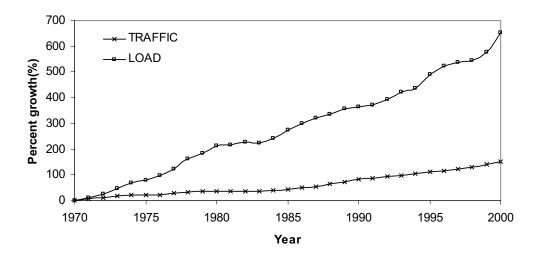


Figure 3.14 Percent Growth in Rural Average Annual Daily Traffic and Rural Average Annual Daily Load

(Source: Office of Highway Policy Information, 2001)

Insufficient information exists to graph this relationship for rural Texas, but available truck count data collected at sites in rural counties in Texas were used to calculate the annual growth in daily truck traffic volume between 1997 and 2001. As can be seen from Table 3.1, in 14 of the 24 TxDOT districts, the average annual growth in daily truck traffic volume in rural Texas exceeded 5 percent. In two TxDOT districts — Austin and El Paso — the growth in average annual daily truck traffic volume exceeded 10 percent. Even more pronounced is the fact that all the districts in western Texas experienced high average annual daily truck growth — exceeding 5 percent — between 1997 and 2001. In only one TxDOT district in northern Texas, Wichita Falls, the growth in annual daily truck traffic exceeded 5 percent. Figure 3.15 illustrates the average annual daily truck traffic on Texas roads in rural counties for 2001.

Table 3.1 Percent Growth in Average Annual Daily Truck Traffic Volumes in Rural Texas

District	Average Annual Daily Growth in Truck Traffic (1997 to 2001)	District	Average Annual Daily Growth in Truck Traffic (1997 to 2001)
Paris	3.12	Austin	13.00
Forth Worth	7.34	San Antonio	4.72
Wichita Falls	7.85	Corpus Christi	4.91
Amarillo	3.04	Bryan	5.76
Lubbock	3.65	Dallas	5.91
Odessa	7.38	Atlanta	3.65
San Angelo	5.85	Beaumont	3.64
Abilene	6.23	Pharr	6.87
Waco	6.41	Laredo	6.06
Tyler	5.51	Brownwood	5.18
Lufkin	4.57	El Paso	10.38
Yoakum	3.99	Childress	4.96

(Source: Texas Department of Transportation, 2003)

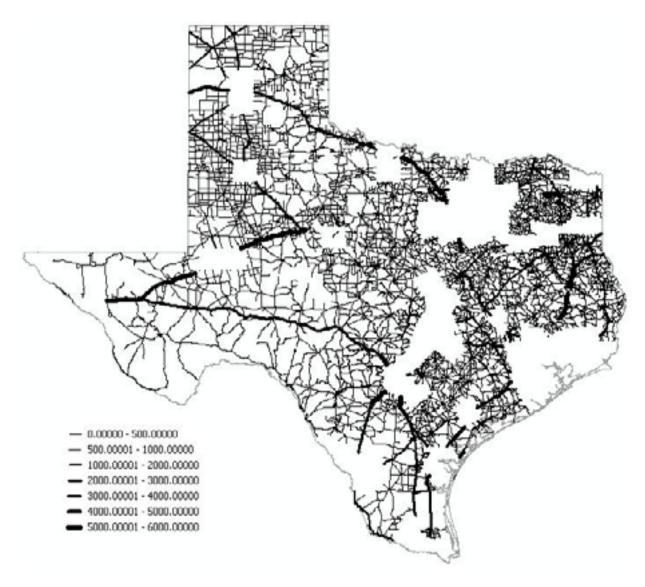


Figure 3.15 Average Annual Daily Truck Traffic Volumes in Rural Texas (2001)
Source: Texas Department of Transportation, 2003

Most pavement design procedures account for the expected traffic volume growth during the design life of the pavement. Few procedures, however, account for increases in average loads, which are potentially critical in the case of the rural network (see Figure 3.14). For example, using the growth rates from Figure 3.14 (i.e., 5 percent annual traffic volume growth and 20 percent annual average load growth) and assuming that only the volume growth was considered in the design of these rural pavements, one can estimate the effect of the unaccounted load growth on the pavement life under various assumptions. Under the most conservative assumption, that is assuming that the rate of pavement deterioration is proportional to the load increase — in other words a 20 percent increase in load will accelerate the damage by 20 percent — then a rural payement designed for 20 years will only last between 12 and 13 years. However, a number of researchers have shown that the relationship between load increases and pavement damage is not linear, but rather exponential. With the result that a 20 percent increase in load could potentially increase the pavement damage by 44 percent, 73 percent or 100 percent depending on the particular exponent of the exponential relationship between load and damage (two, three and four, respectively). The higher the exponent, the faster the pavement is consumed. There is, however, no agreement as to what the appropriate exponent value for the Texas rural network should be. For pavement structures that primarily fail under fatigue cracking this exponent is close to four. On the other hand, for pavement whose dominant failure mechanism is rutting, the exponent could be between one and two. Accelerated pavement testing using the Texas Mobile Load Simulator (TxMLS) is being conducted at the Center for Transportation Research to estimate this value for pavement structures similar to those used for the farm-to-market and ranch-to-market networks.

4. Rural Road Network in Texas

Texas — the second largest state in the United States in terms of land area — has the largest highway system, the highest volume of truck traffic (Brian, 2001), and the highest percentage of truck traffic in the United States (Middleton and Crawford, 2001). Texas has more interstate miles than any other state in the United States and more than half of the state's highway system is comprised of farm-to-market (FM) and ranch-to-market (RM) roads (Turnbull, Dresser, and Higgins, 1999). TxDOT is currently responsible for about 77,145 centerline miles of state-maintained highways (184,576 lane miles) (Texas Department of Transportation, 2001/2002).

4.1 Existing Rural Road Network in Texas

In 1936 Texas initiated a system of farm-to-market and ranch-to-market roads in an effort to provide Texas farmers and ranchers with access to a high-quality system of roads and bridges to move their products from farms and ranches to markets in cities. Although initiated in 1936, the system expanded only after the 1949 Texas Legislature dedicated \$15 million annually from the Omnibus Clearance Fund for the construction of roads that did not have sufficient traffic to justify their construction and maintenance (Texas State Historical Association, Undated). Most of these roads were designed to accommodate load limits of 58,200 lbs. in line with the traffic characteristics of the 1940s and 1950s.

Today the Texas rural road network consists of farm-to-market roads, ranch-to-market roads, interstate highways, and U.S. highways — 61,712 of the total of 92,331 roadbed section-miles³ included in TxDOT's Pavement Management Information System database in 2003. The farm-to-market and ranch-to-market roads are important not only to the rural counties but also to the Texas road system, representing more than half of the centerline miles — 40,784 miles — of the state maintained system.

Texas's rural road system facilitated the low-cost movement of agricultural products to markets and enhanced the competitiveness of Texas farmers. Concern has been expressed that Texas is struggling to maintain many of its roads and bridges, especially in rural areas.

4.2 Rural Pavement Condition

4.2.1 Rural PMIS Scores

In 1983 TxDOT initiated the Pavement Surface Distress Data Collection (PSDDC) program to record the condition of the state-maintained road network (Turnbull, Dresser, and Higgins, 1999). As part of this effort, TxDOT collects pavement condition data each fiscal year (September 1 through August 31) to update its Pavement Management Information System (PMIS) database. The PSDDC program is conducted on a county-by-county basis. TxDOT measures ride quality and rates pavement distress on all state-maintained roads. The formulas used to calculate these scores are provided in Appendix D. Table 4.1 summarizes the distress, condition, and ride scores for Texas's rural counties in 2001, 2002, and 2003. From Table 4.1 it is

A roadbed section mile is one mile of a highway section categorized as a single mainlane road, right frontage/service road, right mainlane road, left frontage/service road, or left mainlane road that is assigned a test rating.

evident that about 10 percent of the roadbed section-miles in rural Texas have been rated poor or very poor in terms of the distress score in 2003. The overall condition and ride scores for rural Texas reveal that four percent and three percent of the roadbed section-miles were rated poor or very poor in 2003, respectively. Figures 4.1, 4.2, and 4.3 display the overall summary scores for 2003 for the condition, distress, and ride scores for rural Texas, respectively. Maps for 2001 and 2002 are included in Appendix E.

Table 4.1 TxDOT Rural County Overall Summary Scores for 2001, 2002, and 2003

			Summary Scores	s for 2001		
Grade	Distress Sc	ore	Condition S	Score	Ride Sco	re
	Length	%	Length	%	Length	%
Very Good A	42,372.40	76	39,147.60	70	11,513.10	19
Good B	4,203.60	8	8,291.80	15	28,876.80	49
Fair C	3,055.70	5	4,684.90	8	16,127.40	27
Poor D	2,503.20	4	1,384.40	2	1,981.90	3
Very Poor F	3,807.20	7	2,199.70	4	707.30	1
Total	55,942.10	100	55,708.40	100	59,206.50	100
			Summary Score			
Grade	Distress Sc		Condition S		Ride Sco	
	Length	%	Length	%	Length	%
Very Good A	42,530.50	77	39,883.90	73	11,226.50	19
Good B	4,046.60	7	8,074.00	15	29,498.00	50
Fair C	3,110.00	6	4,689.80	9	16,835.40	28
Poor D	2,781.80	5	1,312.30	2	1,557.70	3
Very Poor F	2,510.10	5	926.50	2	48.90	0
Total	54,979.00	100	54,886.50	100	59,166.50	100
	Summary Scores for 2003					
Grade						
	Length	%	Length	%	Length	%
Very Good A	43,414.80	78	40,953.00	74	10,969.70	20
Good B	3,784.00	7	7,623.1	14	28,283.40	50
Fair C	2,991.50	5	4,544.90	8	15,362.90	27
Poor D	2,635.70	5	1,291.90	2	1,406.20	3
Very Poor F	2,563.80	5	878.50	2	49.0	0
Total	55,389.80	100	55,291.40	100	56,071.2	100

(Source: PMIS data for 2001, 2002, and 2003)

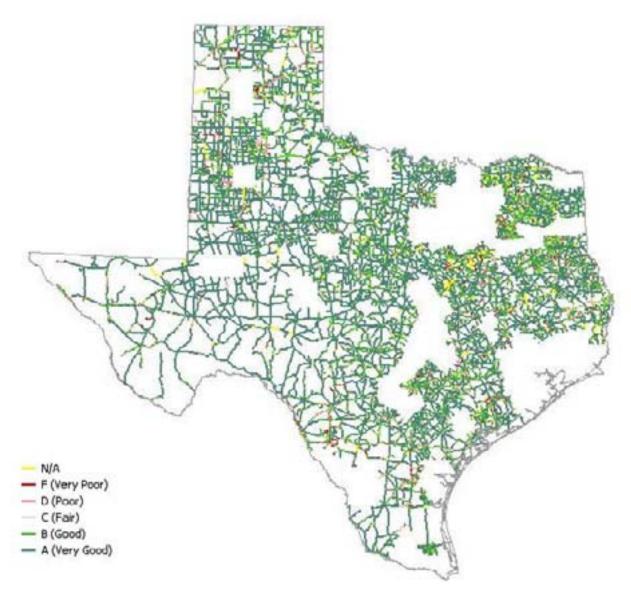


Figure 4.1 Overall Condition Scores for Rural Texas (2003)

(Source: PMIS data for 2003)

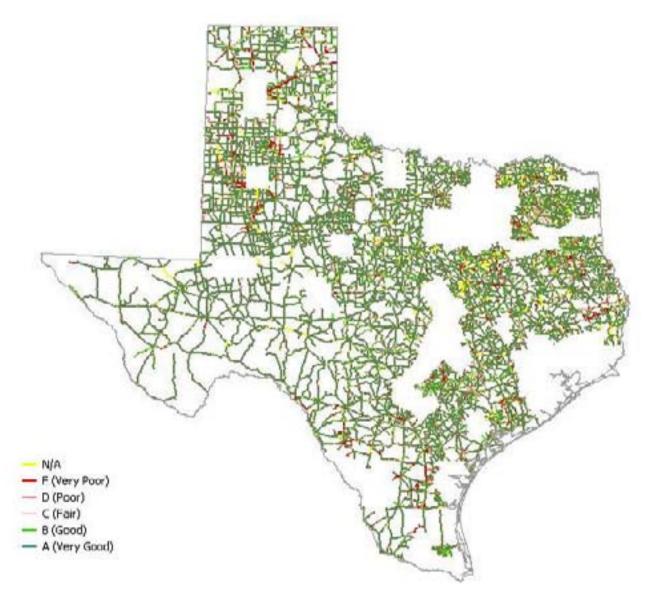


Figure 4.2 Distress Scores for Rural Texas (2003) (Source: PMIS data for 2003)

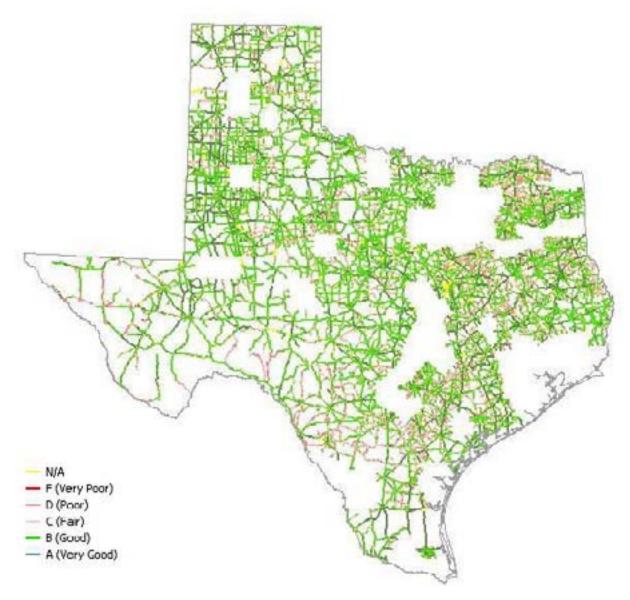


Figure 4.3 Ride Scores for Rural Texas (2003) (Source: PMIS data for 2003)

In addition to the aggregate analysis, the PMIS scores for rural Texas were summarized by district to determine if certain districts had worse scores than others. Appendix F summarizes the PMIS scores for rural pavements by TxDOT district for 2001, 2002, and 2003. The nine TxDOT districts that have more than 10 percent of their rural roadbed section-miles rated poor or very poor in terms of the distress score in 2003 are highlighted in Table 4.2.

Table 4.2 TxDOT Districts with More Than 10 Percent of Rural Roadbed Sectionmiles Rated Poor or Very Poor (Distress Scores, 2003)

TxDOT District	Roadbed Section-miles	% of Rural Roadbed Section-miles in District
Paris	258	12.06
Amarillo	606	17.09
Lubbock	627	12.77
Tyler	345	13.97
Lufkin	298	10.34
Yoakum	377	11.17
Corpus Christi	230	10.43
Dallas	93	19.6
Beaumont	172	20.93
Laredo	264	14.21

(Source: PMIS data for 2003)

As can be seen from Table 4.2, Dallas and Beaumont Districts have the highest percentage of roadbed section-miles rated poor or very poor, but both these districts have a relatively small rural network. The total rural roadbed section-miles rated poor to very poor in these two districts total 265 miles — approximately the number of poor to very poor rated roadbed section-miles in the Laredo District. In terms of the number of roadbed section-miles, Amarillo and Lubbock Districts had the most miles rated poor to very poor with 606 and 627 miles, respectively. Although PMIS data represent a surface measurement — not subsurface⁴ measurement — distress scores in Category D (poor) and F (very poor) are most probably an indication of structural problems (personnel communication with Bryan Stampley, 2003).

Seven of these districts are in northern and eastern Texas, as per the geographical boundaries specified in this research study. This information supports many of the views expressed by rural stakeholders about the impact of increased agricultural industrialization and the usage of larger and heavier trucks to move agricultural produce in northern Texas (see Report 4169-P2 entitled "What is Moving in Rural Texas?") and the impact of timber harvesting in eastern Texas.

Table 4.3 lists the TxDOT districts with more than 5 percent of their roadbed section-miles rated poor or very poor in terms of the overall condition score for 2003. Overall only 4 percent of the roadbed section-miles in rural Texas were rated poor or very poor in 2003.

Subsurface measurements to determine structural damage are undertaken with Falling Weight Deflectometers (FWD). The sample of FWD data is, however, very limited, and districts do not survey every roadbed section every year.

Table 4.3 TxDOT Districts with More Than 5 Percent of Rural Roadbed Section-miles Rated Poor or Very Poor (Overall Condition Scores, 2003)

TxDOT District	Roadbed Section-miles	% of Rural Roadbed Section-miles in District
Paris	135.7	6.36
Amarillo	238.6	6.77
Tyler	163.4	6.63
Corpus Christi	119.1	5.39
Bryan	178.7	6.09
Dallas	65.6	13.87
Beaumont	49.0	5.96
Laredo	146.4	7.90
El Paso	79.0	5.30

(Source: PMIS data for 2003)

The condition score is a function of the distress score and the ride utility value (see Appendix D). The ride utility value is a function of the ride quality lost, which is calculated considering both the traffic speed and the traffic volume. In other words, the overall condition score for a given section will be lower given higher traffic speeds and volumes compared to low traffic speeds and volume sections, all else being constant. Thus, similar to the distress scores, six of the nine districts with more than 5 percent of their rural roadbed section-miles rated poor or very poor are in northern and eastern Texas (see Table 4.3). Also, although Dallas has the highest percentage of roadbed section-miles rated poor or very poor, the overall size of the rural network is relatively smaller.

Table 4.4 lists the TxDOT districts with more than 5 percent of their roadbed section-miles rated poor or very poor in terms of the ride score for 2003. Overall only 3 percent of the roadbed section-miles in rural Texas was rated poor or very poor in 2003.

Table 4.4 TxDOT Districts with More Than 5 Percent of Rural Roadbed Section-miles Rated Poor or Very Poor (Ride Scores, 2003)

TxDOT District	Roadbed Section-miles	% of Rural Roadbed
		Section-miles in District
Paris	118.7	5.31
Dallas	38.7	7.09
Laredo	177.3	9.43
El Paso	166.0	11.12

(Source: PMIS data for 2003)

TxDOT measures the International Roughness Index (IRI) and converts these values to a ride score. As can be seen from Table 4.4, only four districts had more than 5 percent of their rural roadbed section-miles rated poor or very poor.

4.2.2 Rural PMIS Scores by Road Type

Table 4.5 summarizes the rural pavement condition of Texas roads by highway type for fiscal year 2003. Additional detail is provided in Appendix G.

Table 4.5 Texas Rural Pavement Condition by Road Type (% Roadbed section-miles, FY2003)

Score		Interstate Highways	United States Highways	State Highways	Farm-to- Market Highways
	Ride Score	45	41	28	5
A	Distress Score	83	79	82	77
	Condition Score	81	77	79	72
	Ride Score	36	53	60	50
В	Distress Score	6	12	7	7
	Condition Score	10	6	13	15
	Ride Score	16	6	12	41
C	Distress Score	3	5	5	6
	Condition Score	5	8	6	9
	Ride Score	2	0	1	3
D	Distress Score	3	4	4	5
	Condition Score	2	2	1	2
	Ride Score	0	0	0	0
F	Distress Score	5	6	3	4
	Condition Score	2	1	1	2

(Source: PMIS data for 2003)

From Table 4.5 it is evident that the condition of the farm-to-market roads and U.S. highways is rated below that of the interstate highways and state highways. In 2003 about 83 percent of U.S. highways and 87 percent of farm-to-market roadbed section-miles have been rated in good or very good condition in terms of the overall condition score, compared to 91 percent and 92 percent for interstate highways and state highways, respectively. In general, however, TxDOT is maintaining its network to a good overall condition. Of possible concern, however, is the fact that the calculated ride score in 2003 revealed that almost 44 percent of the farm-to-market roadbed section-miles are rated fair to very poor as compared to 18 percent, 6 percent, and 13 percent for interstate highways, U.S. highways, and state highways, respectively. Poor ride scores can point to a possible maintenance need.

Finally, the PMIS data by highway type were also analyzed for each TxDOT district. Detailed information on the rural pavement condition by highway type for each of the TxDOT districts is summarized in Appendix H. Table 4.6 summarizes those TxDOT districts that have more than 10 percent of the rural roadbed section-miles for one of the road types rated poor to very poor in terms of the distress score in 2003. The Amarillo District had the most rural interstate, U.S., and state highway roadbed section-miles rated poor or very poor in 2003 — 81.4 roadbed section-miles or almost 25 percent of interstate roadbed section-miles; 304.2 roadbed section-miles or almost 43 percent of U.S. highways; and 95.7 roadbed section-miles or about 13 percent of the state highways. The Dallas District was second in terms of the percentage of interstate roadbed section-miles rated poor or very poor, but as was indicated previously the

Dallas District has a relatively small rural network. The Beaumont District was second in terms of the percentage of U.S. highways rated poor or very poor, but as is the case with the Dallas District, Beaumont District also has a comparatively small rural network. Lubbock, Yoakum, and Tyler Districts had the most rural farm-to-market roadbed section-miles rated poor or very poor in 2003 at 431, 292, and 253 miles, respectively.

Table 4.6 TxDOT Districts with More Than 10 Percent of Rural Roadbed Sectionmiles Rated Poor or Very Poor (Distress Scores, 2003)

District	Inter High		United High	States ways	State Hi	ighways		-market ways
	Length	%	Length	%	Length	%	Length	%
Paris	27.1	17.02			35.9	10.26	184.5	13.33
Fort Worth			42.9	11.86				
Wichita Falls	8.8	10.56						
Amarillo	81.4	24.95	304.2	42.94	95.7	13.08		
Lubbock			135.8	12.19			431.0	14.65
San Angelo	35.9	12.14						
Waco	10.5	14.63					130.0	11.31
Tyler	14.9	21.41					253.1	17.5
Lufkin							228.7	13.39
Yoakum							291.9	16.27
San Antonio			35.4	14.01				
Corpus Christi			91.3	17.29	39.7	10.98		
Bryan	38.2	10.76					198.7	11.87
Dallas	22.5	23.91	4.9	24.5	14.10	15.02	50.70	19.55
Atlanta	10.6	13.97						
Beaumont			76.7	41.19	25.6	18.49		
Pharr					16.5	11.09		
Laredo	26.7	17.12	64.1	13.9	54.2	16.06	117.8	13.28
Childress			64.4	10.94				

(Source: PMIS data for 2003)

Of the nine districts that had more than 10 percent of their rural farm-to-market roadbed section-miles rated poor or very poor, five are in eastern Texas, two are in northern Texas, and two are in southern Texas.

Table 4.7 summarizes those TxDOT districts that have more than 5 percent of their rural roadbed section-miles for one of the road types rated poor or very poor in terms of the overall condition score in 2003. Similar to the results for the distress scores, the Amarillo District had the most roadbed section-miles of interstate highways (40 miles) and U.S. highways (120 miles) rated poor or very poor in 2003 in terms of the overall condition score. Only two districts — Dallas (nine miles) and Laredo (23 miles) — had more than 5 percent of their rural state highway roadbed section-miles rated poor or very poor. Almost half (12) of the TxDOT districts had more that 5 percent of their rural farm-to-market roadbed section-miles rated poor or very poor. Lubbock, Bryan, and Yoakum Districts had the most rural farm-to-market roadbed section-miles rated poor or very poor in 2003 at 153, 135, and 130 miles, respectively.

Table 4.7 TxDOT Districts with More Than 5 Percent of Rural Roadbed Section-miles Rated Poor or Very Poor (Overall Condition Scores, 2003)

District	Inter High		United High	States	State H	ighways	Farm-to high	
	Length	<u>%</u>	Length	% %	Length	%	Length	% ways
Paris	9.5	5.99					100.3	7.25
Fort Worth			18.4	5.1				
Amarillo	40.3	12.99	120.2	16.99				
Lubbock							153.3	5.21
San Angelo	22.0	7.45						
Waco							59.7	5.2
Tyler	5.6	8.05					123.4	8.54
Lufkin							99.2	5.81
Yoakum							130.0	7.25
San Antonio			14.2	5.63			62.8	5.52
Corpus Christi			41.0	7.77			59.8	5.45
Bryan	26.3	7.49					135.3	8.08
Dallas	19.2	20.4	1.4	7.04	8.8	9.43	34.7	13.43
Beaumont			33.9	18.23				
Laredo	9.6	6.16	31.1	6.74	22.8	6.77	81.9	9.27
El Paso							47.2	9.53

(Source: PMIS data for 2003)

Table 4.8 summarizes those TxDOT districts that have more than 5 percent of their rural roadbed section-miles for one of the road categories rated poor to very poor in terms of the ride score in 2003. The Abilene District had the most rural interstate roadbed section-miles rated poor or very poor in 2003 — 28.3 miles or 5.65 percent of the interstate roadbed section-miles scored. None of the districts had more than five percent of their U.S. highway roadbed section-miles rated poor or very poor in 2003. In the case of the state highways, only two districts — Laredo (23 miles) and El Paso (41 miles) — had more than five percent of the rural roadbed section-miles rated poor or very poor. Eight districts, however, had more than five percent of their rural farm-to-market roadbed section-miles rated poor or very poor at 141, 109, and 107 miles, respectively. Of the eight districts that had more than five percent of their rural farm-to-market roadbed section-miles rated poor or very poor, four are in southern Texas, and two are in eastern Texas.

Table 4.8 TxDOT Districts with More Than 5 Percent of Rural Roadbed Section-miles Rated Poor or Very Poor (Ride Scores, 2003)

District	Inter High			States ways	State H	ighways	Farm-to high	-market ways
	Length	%	Length	%	Length	%	Length	%
Paris							107.0	7.45
Abilene	28.3	5.65						
Yoakum							102.7	5.72
San Antonio							7.2	6.31
Corpus Christi							101.9	9.24
Bryan							86.3	5.13
Dallas	10.0	10.25					28.2	9.21
Laredo	10.4	6.12			22.6	6.65	140.7	15.79
El Paso	15.6	5.74			40.5	13.04	108.7	21.93

(Source: PMIS data for 2003)

4.3 Rural Pavement Needs

Pavement condition scores are used to determine funding needs by highway type. Funding needs are estimated based on predefined criteria for four categories of treatments: preventive maintenance, light rehabilitation, medium rehabilitation, and heavy rehabilitation. Table 4.11 summarizes the estimated pavement needs — urban and rural — for fiscal year 2002 by highway type, excluding funding required for right-of-way, bridge repair, capacity, safety, traffic control, or other roadside improvement costs (Texas Department of Transportation, 2001/2002).

From Table 4.9 it is evident that TxDOT estimates that approximately \$1.9 billion will be needed to maintain and repair the road system. Of this, it is estimated that approximately 35 percent (\$651 million) is needed for the farm-to-market system. More importantly, of the total preventative maintenance needs calculated, the farm-to-market road system accounts for 47 percent (\$168 million). It is equally troubling that the farm-to-market road system accounts for 66 percent of the total light rehabilitation needs calculated (\$189 million).

The total state highway fund disbursements for maintenance in fiscal year 2002 were \$988.7 million (Texas Department of Transportation). Given the estimated needs and available funding, TxDOT will be faced with increasingly difficult decisions about prioritization—a situation similar to what Class I railroads experienced in the 1980s.

Table 4.9 Texas Pavements Needs (Millions U.S. Dollars)

Highway Type	Lane Mile	es in PMIS	Percent Lane	Percent of Total	Preventive Mainte-	Light Rehabili-	Medium Rehabili-	Heavy Rehabili-	Total
	2001	2002	Miles	Needs	nance	tation	tation	tation	
Interstate Highways	24,426	24,175	13	19	24	21	105	200	350
United States	37,788	37,768	20	19	78	22	102	156	358
Highways									
State Highways	39,462	39,767	21	24	92	49	170	160	455
Farm-to-market	84,291	84,380	44	35	168	189	190	104	651
Highways									
Other Highways	3,540	3,551	2	3	10	9	25	18	59
Total	189,506	189,643	100	100	356	287	592	638	1,873
Total Measured	162,244	168,918							

Note: Farm-to-market highways include ranch roads and ranch-to-market roads. Other highways include business routes, park roads, and principal arterial streets. Park roads include recreational roads.

(Source: Texas Department of Transportation, 2002)

4.4 Available Funding for the Farm-to-Market Road System

The farm-to-market road system is entirely funded by state resources. The Texas Department of Transportation, through its 25 district offices, is responsible for rural transportation planning and the provision and maintenance of rural infrastructure. Previously, two funding categories existed to fund the expansion and rehabilitation of Texas farm-to-market roads: Category 8A: Rehabilitation of Texas Farm to Market Roads, and 8B: Texas Farm to Market Roads System Expansion. Funds from these categories were restricted and could only be spent outside urbanized areas with populations of 50,000 or more, considered rural areas. District allocations to Category 8A and all projects selected under Category 8B had to be approved by the Commission (Texas Department of Transportation, 2002). As of January 2004, TxDOT has streamlined its number of funding categories from 34 to 12 with the result that no separate funding categories currently exist to maintain and update the farm-to-market roads.

Maintenance funding allocations among districts are made centrally, based on formulas that consider a number of factors, including regional rainfall, pavement condition (failures and ride quality), number of lane miles, average daily traffic, daily vehicle truck miles, etc. These formulas will be reviewed in the near future. Once the allocations are made, the maintenance funding priorities are decentralized for all projects to the districts, where the farm-to-market system competes with the needs of the rest of the system. Districts are thus ultimately responsible for balancing rural and metropolitan needs for funding and for balancing maintenance funding by highway type (personal communication with Richard Kirby, July 2003). It is thus conceivable that districts would find it increasingly challenging to prioritize limited maintenance budgets if state budgets decline. One of the objectives of the second phase of the current research project is to develop a methodology to assist TxDOT staff to rank and prioritize rural infrastructure needs.

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^{5 &}quot;The construction of new Farm to Market Roads and Ranch to Market Roads is limited to extensions of previously designated facilities, or new sections which will complete a gap in the existing system, or new sections which will provide access to new prison sites located near existing Farm to Market Roads. Funds will not be used to add capacity (additional through lanes) to existing Farm to Market Roads" (Texas Department of Transportation, 2002).

5. Rural Rail in Texas

Rural rail is often seen as a potential strategy to divert truck traffic off the rural road infrastructure, thereby preserving the system. The objective of this chapter is to highlight the formation of Rural Rail Transportation Districts in Texas and to identify key trends that will impact the future of rural rail transportation in Texas.

5.1 Texas Rural Rail Transportation Districts

The formation of Rural Rail Transportation Districts (RRTDs) was authorized in 1981 by the 67th Texas Legislature in an effort to preserve abandoned Class I rail lines as a transportation option for rural Texas. RRTDs function as special public districts and "are considered political sub-divisions of the Texas state government." RRTDs have the authority to issue revenue bonds and use anticipation notes to fund rail maintenance, improvements, and operations. Subsequent amendments have allowed single counties to establish a RRTD and for RRTDs to promote economic development. Finally, the passage of State Bill 406 during the 2001 legislature prevents the abandonment of railroad lines purchased with state appropriated funds without the approval of the Texas Transportation Commission (Roop et al., 2001).

As of September 1, 2001, 16 RRTDs existed in Texas (see Table 5.1). Some of these districts, however, exist only on "paper" without any physical rail assets. Others control existing rail rights-of-way, although some of these rights-of-ways have been converted and are used for highway expansion projects, utility right-of-ways, or for recreational purposes. Three of the RRTDs own the rural rail lines within their jurisdiction and have entered into operation and maintenance contracts (Roop et al., 2001).

One of the key objectives of the RRTDs was to save the rail service for use by small farmers and to provide these farmers with an alternative to trucking that was anticipated to be more costly. The argument was that smaller farmers could go bankrupt due to increased transportation costs. Although one of the key objectives of RRTDs was to preserve/increase agricultural jobs and allow small farmers to compete in the agricultural sector, it is unclear that these RRTDS provide an important service to the agricultural sector or to small farmers (see Appendix C).

NETEX and Centex Rural Rail Districts have been considered the most successful examples of an active and involved rail district. Centex is serving 65 shippers, and annual traffic levels exceed 20,000 carloads (Roop et al., 2001). Success seems to be dependent on commodity diversification. In addition to grain, NETEX remains successful by transporting plastic, rock, and aluminum. Currently, the emphasis for RRTDs has changed to serving "industrial parks, intermodal facilities, and trans-loading facilities" by rail (Railroad Commission of Texas website).

Table 5.1 Status of Texas Rural Rail Transportation Districts (August 31, 2001)

Rural Rail	Number	Formed	Primary	Current	Status of Line	Ownership	Outside Funding
Transportation	J0		Motivation	Board		1	Sources
District	Counties			Status			
Burnet County	1	2000	Abandonment	Inactive	Operational	None	N/A
Calhoun County	1	1999	Economic Develonment	Inactive	N/A	None	N/A
Centex	5	Early 1990s	Abandonment	Active	Operational	Right-of-Way	Texas Department of
					•		Agriculture (to operator)
Deep East Texas	12	1993/94	Abandonment	Inactive	SP Line Abandoned	None	N/A
Ellis County		1998	Fconomic	Active	Progressing as	Right-of-Way &	Public-Private Partnershin
	1		Development		Planned	Structures	
Fannin	—	1999	Abandonment	Active	Impending	None	N/A
					Abandonment		
Gulf Coast	2	1993/94	Abandonment	Inactive	Inactive line;	None	N/A
					Purchased by TM		
Gulf Link	2	1998	Economic	Inactive	N/A	None	N/A
			Development				
Matagorda County	1	2001	Economic	Active	N/A	None	N/A
			Development				
North Central	2	1995	Abandonment	Inactive	Operational	None	N/A
North Texas	2	1995/96	Abandonment	Active	Abandoned	Purchased 7-mile	Texas Parks & Wildlife
						Segment	Department (for trails)
Northeast Texas	4	1994	Abandonment	Active	Operational	Right-of-Way &	Texas Legislature & U.S.
						Structures	Department of Agriculture
Northwest Texas	7	1993	Abandonment	Inactive	Abandoned	None	N/A
Nueces County	1	2001	Economic	Active	N/A	None	N/A
			Development				
South Orient	11	1991	Abandonment	Inactive	Operational	TxDOT	Texas Legislature
South Texas	3	Early 1990s	Abandonment	Inactive	Abandoned	Right-of-Way	N/A
(Carros)	Doon of ol	01 2001)					

(Source: Roop et al., 2001)

5.2 Trends That Will Impact Future Rural Rail Transportation

5.2.1 Financing Rural Rail Infrastructure

A lack of private enterprise funding and the inability to secure funding to upgrade rural track remain the financial obstacles common to most rural rail service providers nationwide (Saylor, 1999). Nationally, U.S. funding for passenger and freight rail is available through the following programs:

- USDA Rural Development Grants,
- USDA Forest Service Grants,
- USDOT's Rural Initiative
- USDOT Program Grants.

In Texas the only funding source that was made available to RRTDs, other than receiving donations of cash and property, has been the districts' authority to issue revenue bonds. This method, however, has not been executed to date. Most financing was done by private enterprise (personal communication with J. Helsley, June 2003). Two RRTDs have, however, been successful in securing specific legislative appropriation "riders" that granted them funds from state general revenue through TxDOT: South Orient and Northeast Texas RRTD. NEXTEX received both state (\$2 million) and federal funds (\$1.5 million) (personal communication with B. Flohr, June 2003). It is expected of the rail districts to charge rents that are sufficient to maintain their properties and pay off their bonds. A district may not levy or collect ad valorem taxes. Therefore attracting clients is essential for the rural rail district to stay active.

5.2.2 Rural Rail Demand

Consumer-Driven Market

Technological innovations have enabled improvements in transportation, storage, and food production (Anderson, 2003). Genetically modified products (GMPs) lower production costs to farmers, while transportation innovations enable the transportation of perishable products further and faster at lower costs. Information technology innovations — electronic purchase order data tracking — allow the daily tracking of customer demand. This data can subsequently be used to inform farmers' production strategies. This has resulted in the delivery of smaller shipments more frequently, which is a challenging service for rural rail to provide. Typically, rail is more competitive in the transportation of bulk commodities over longer distances.

Business Strategies

Large retailers, such as Wal-Mart, are increasingly entering into alliances with food processors, who sign contracts with fewer producers (Anderson, 2003). These large retailers require specific and consistent product characteristics, assured supplies, and timely delivery, which seem to favor trucking. This has changed the dynamics of distributing and transporting agricultural commodities.

"Food Identity"

The demand for identity preservation has been more prevalent in crop agriculture, for example, soybeans, corn, lentils, beans, sunflower seeds, etc. Examples in crop agriculture include: "low saturated fat soybeans; soybeans with altered carbohydrates that are more easily digested; organically produced grains, wheat with specified baking characteristics; corn with high protein contents, and wheat that produces a creamy, not white, colored noodle" (Reichert and Vachal, 2003). Identity preservation may thus range from the consumer requiring a guarantee that a commodity was produced in a specific region to the requirement for detailed information about production, agronomic practices, commodity handing, marketing (Reichert and Vachal, 2003), and the travel path of the produce. Although Prater (2001) has argued that rail is able to offer ways to segregate and economically transport any product for which "identity preservation" may be required, the requirement for smaller shipment sizes, careful handling to prevent damage, and reduced transit times seem to favor trucking.

Agricultural Exports

Mexico is a very important market for Texas-produced commodities. The efficient transportation of agricultural products to Mexico is critical for Texas farmers to ensure competitiveness in this market. The South Orient and Centex RRTDs have been successful in the transportation of agricultural exports to Mexico and it is foreseen that a significant opportunity exists for rural rail in Texas to serve this market (personal communication with Carl Anderson, June 2003).

5.3 Concluding Remarks

The creation of the RRTDs is unique to the state of Texas. RRTDs have strong support in the legislation that has enabled these districts to expand into multidistrict regions and to add new infrastructure that connect to existing active railroads within Texas. While the RRTD concept was an innovative idea in transportation, the question remains as to whether these districts have the ability to alleviate the burden on the rural roads and also satisfy the expectations of rural shippers.

6. Conclusions

This report documents the first phase of a two-year research project that aims to provide evidence of the increased truck volume and pavement damage associated with major rural traffic generators in Texas. During the first year of the study, the researchers identified the major revenue-earning sectors in each rural county in Texas from data published by the Bureau of Economic Analysis. It was found that four sectors — government and government services, services, farming, and mining — were the major revenue earning sectors in 176 of the 196 rural counties in Texas. Of these four sectors, only farming and mining potentially generate large truck traffic volumes. Farming was found to be a major revenue generator in northern Texas, mining — mostly oil and gas — and government in western Texas, while the government and to some extent services were the major revenue earners in southern and eastern Texas. This information was summarized in Chapter 2 of this report.

Information obtained during the literature review and interviews with stakeholders regarding factors that have resulted in increased rural truck volumes in Texas have been highlighted in Chapter 3 of this report. In northern Texas, for example, agricultural industrialization, the movement of farming equipment, and the abandonment of rural rail lines have resulted in increased truck volumes. In western Texas TxDOT district personnel in Odessa claimed that the recent recovery of the oil and gas industry has resulted in increased truck movements of equipment, water, and brine water trucks. In eastern Texas the location of large retail distribution centers has resulted in 780 trucks per day from the Palestine distribution center. Chapter 3 highlights these and other factors that can potentially impact the future sustainability of the rural road network. Concerns that were expressed by TxDOT staff interviewed in northern Texas were summarized in Appendix B of the report. In parallel, the research team surveyed rural shippers and trucking companies in an effort to characterize the truck traffic generators in rural areas, the commodities transported, and the types of trips undertaken (i.e., intra-county, county-Texas, county-Texas port, county-U.S. state). The results of this survey effort were summarized in a separate document entitled "What is moving in rural Texas?" (4169-P2). Finally, truck count data were obtained for five years from TxDOT. These data were used to calculate the annual growth in daily truck traffic volumes in rural Texas between 1997 and 2001. The data revealed that the average annual growth in daily truck traffic volumes in rural Texas exceeded 5 percent in 14 of the 24 districts. In two TxDOT districts — Austin and El Paso — the growth exceeded 10 percent.

The research team also analyzed available TxDOT data to determine the road condition of the rural state-maintained system. Pavement Management Information System (PMIS) data was obtained for 2001, 2002, and 2003 — the most comprehensive efforts to rate pavement condition. The analysis revealed that 10 percent of the roadbed section-miles in rural Texas have been rated poor or very poor in terms of the distress score in 2003. In addition, 4 percent and 3 percent of the roadbed section-miles were rated poor or very poor in 2003 in terms of the overall condition and ride scores, respectively. In addition to the aggregate analysis, the PMIS scores for rural Texas were summarized by district to determine if certain districts had worse scores than others. Nine TxDOT districts had more than 10 percent of their rural roadbed section-miles rated poor or very poor in

terms of the distress score in 2003. Seven of these districts are in northern and eastern Texas, as per the geographical boundaries specified in this research study. information supports many of the views expressed by rural stakeholders about the impact of increased agricultural industrialization and the usage of larger and heavier trucks to move agricultural produce in northern Texas (see Report 4169-P2 entitled "What is Moving in Rural Texas?"). Finally, the PMIS data were analyzed by road type and district. The analysis showed that the condition of the farm-to-market roads and U.S. highways are rated below that of the interstate highways and state highways. In 2003 about 83 percent of the U.S. highways and 87 percent of the farm-to-market roadbed section-miles have been rated in a good or very good condition in terms of the overall condition score, compared to 91 percent and 92 percent for interstate highways and state highways, respectively. Of possible concern, however, is the fact that the calculated ride score in 2003 revealed that almost 44 percent of the farm-to-market roadbed section-miles are rated fair to very poor as compared to 18 percent, 6 percent, and 13 percent for interstate highways, U.S. highways, and state highways, respectively. Poor ride scores can point to a possible maintenance need. Laredo, El Paso, and Paris District had the most rural farm-to-market roadbed section-miles rated poor or very poor in terms of the ride score at 141, 109, and 107 miles, respectively. Of the eight districts that had more than five percent of their rural farm-tomarket roadbed section-miles rated poor or very poor in terms of ride score, four are in southern Texas, and two are in eastern Texas. The analysis results are summarized in Chapter 4, and additional detail is provided in Appendixes E, F, G, and H. Chapter 4 concluded with a discussion of the pavement needs and the available funding source for the farm-to-market road system in Texas.

Finally, Chapter 5 highlights the formation of the Rural Rail Transportation Districts (RRTDs) in Texas in an effort to secure rural rail service for smaller farmers in Texas. Also, the chapter highlights two factors that will impact rural rail in the future: financing rural rail infrastructure and rural rail demand. While the concept of RRTDs was thus innovative, it has not yet been determined whether these districts have the ability to alleviate the burden on rural roads by diverting truck traffic to rail.

Increasing truck numbers and axle loads on rural pavements and the identified pavement maintenance needs might mean that TxDOT will find it increasingly challenging to maintain and repair its extensive rural road system in the future. Available strategies to the Department include the promotion of rural rail, channeling truck traffic to specific highway routes that have been strengthened to meet weight limits (i.e., Texas Trunk System), increased enforcement of weight restrictions, forming private road associations, and finally the abandonment of some of the infrastructure. The authors will explore these and other strategies in the future in an effort to recommend appropriate strategies to TxDOT to address the rural concerns and prioritize the rural road network. Also, during the subsequent phases of this project the research team will survey eastern, western, and southern Texas in more detail. The team will determine the pavement damage attributable to truck traffic associated with different types of rural truck traffic generators in rural Texas. An equivalency table will be incorporated into the GIS platform to allow users to calculate infrastructure impacts associated with different types of traffic generators on various rural road types in each of the four geographical areas identified during this research study.

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Appendix A: Commodity Classification Codes for Earnings by Industry

Standard Industrial Classification (SIC) Codes: Earnings by Industry

Category	Description
Farm	Cash grains, field crops, vegetables and melons, fruits and tree nuts, horticultural specialties,
	general farms, livestock, dairy farms, poultry and eggs, and animal specialties.
Agricultural Serv	vices, Forestry, Fishing, and Other
Agricultural	Soil preparation services, crop services, veterinary services, animal services, farm labor and
Services	management services, and landscape and horticultural services.
Forestry	Timber tracts, forest nurseries and gathering of forest products, and forestry services.
Fishing	Commercial fishing, fish hatcheries and preserves, and hunting and trapping.
Other	Consists of the wage and salary disbursements of U.S. residents employed by international organizations and foreign embassies and consulates in the U.S.
Mining	
Metal Mining	Iron ores, copper ores, lean and zinc ores, gold and silver ores, ferroalloy ores, metal mining services, and miscellaneous metal ores.
Coal Mining	Bituminous coal and lignite mining, anthracite mining, and coal mining services.
Oil and Gas Extraction	Crude petroleum and natural gas, natural gas liquids, and oil and gas field services.
Nonmetallic Minerals, except Fuels	Dimension stone, crushed and broken stone, sand and gravel, clay, ceramic and refractory minerals, chemical and fertilizer mineral mining, nonmetallic minerals services, and miscellaneous nonmetallic minerals.
Construction	Index. Wild and inclination in the state of
General Building	General building contractors – residential buildings, operative builders, and general building
Contractors	contractors – nonresidential buildings.
Heavy Construction	Highway and street construction, and heavy construction.
Contractors	
Special Trade Contractors	Plumbing, heating and air-conditioning, painting and paper hanging, electrical work, masonry, stonework, tile setting, and plastering, carpentry and floor work, roofing, siding, and sheet metal work, concrete work, water well drilling, and miscellaneous special trade contractors.
Durable Goods M	
Lumber and Wood Products	Logging, sawmills and planning mills, millwork, veneer, plywood, and structural wood members, wood containers, wood buildings and mobile homes, miscellaneous wood products.
Furniture and Fixtures	Household furniture, office furniture, public building and related furniture, partitions, shelving, lockers, and office and store fixtures, and miscellaneous furniture and fixtures.
Stone, Clay, and Glass Products	Flat glass, pressed or blown glass and glassware, glass products made of purchased glass, hydraulic cement, structural clay products, pottery and related products, concrete, gypsum, and plaster products, cut stone and stone products, and abrasive, asbestos, and miscellaneous nonmetallic mineral products.
Primary Metal Industries	Steel works, blast furnaces, and rolling and finishing mills, iron and steel foundries, primary smelting and refining of nonferrous metals, secondary smelting and refining of nonferrous metals, secondary smelting and refining of nonferrous metals, rolling, drawing, and extruding of nonferrous metals, nonferrous foundries (castings) and miscellaneous primary metal products.
Fabricated Metal	Metal cans and shipping containers, cutlery, handtools, and general hardware, heating

Category	Description
Products	equipment and plumbing fixtures, fabricated structural metal products, screw machine products, and bolts, nuts, screws, rivets, and washers, metal forgings and stampings, coating, engraving, and allied services, ordnance and accessories, except vehicles and guided missiles, and miscellaneous fabricated metal products.
Industrial Machinery and Equipment	Engines and turbines, farm and garden machinery and equipment, construction, mining, and materials handling machinery and equipment, metalworking machinery and equipment, special industry machinery, general industrial machinery and equipment, computer and office equipment, refrigeration and service industry machinery, and miscellaneous industrial and commercial machinery and equipment.
Electronic and other Electric Equipment	Electric transmission and distribution equipment, electrical industrial apparatus, household appliances, electric lighting and wiring equipment, household audio and video equipment and audio recordings, communications equipment, electronic components and accessories, and miscellaneous electrical machinery, equipment and supplies.
Transportation Equipment	Motor vehicles and motor vehicle equipment, aircraft and parts, ship and boat building and repairing, railroad equipment, motorcycles, bicycles and parts, and guided missiles and space vehicles and parts.
Instruments and Related Products	Search, detection, navigation, guidance, aeronautical, and nautical, laboratory apparatus and analytical, optical, measuring and controlling devices, surgical, medical, and dental instruments and supplies, ophthalmic goods, photographic equipment and supplies, and watches, clocks, clockwork operated devices, and parts.
Miscellaneous Manufacturing Industries	Jewelry, silverware, and plated ware, musical instruments, dolls, toys, games and sporting and athletic goods, pens, pencils, and other artists' materials, costume jewelry, costume novelties, buttons, and miscellaneous manufacturing industries.
Nondurable Goo	ds Manufacturing
Food and Kindred Products	Meat products, dairy products, canned, frozen, and preserved fruits, vegetables, and special food, grain mill products, bakery products, sugar and confectionery products, fats and oils, beverages, and miscellaneous food preparations and kindred products.
Tobacco Products	Cigarettes, cigars, chewing and smoking tobacco and snuff, and tobacco stemming and redrying.
Textile Mill Products	Cotton broadwoven fabric mills, manmade fiber and silk broadwoven fabric mills, wool (including dyeing and finishing) broadwoven fabric mills, cotton, wool and silk narrow fabric and other smallwares mills, knitting mills, dyeing and finishing textiles, carpets and rugs, yarn and thread mills, and miscellaneous textile goods.
Apparel and Other Textile Products	Men's and boy's suits, coats and overcoats, men's and boy's furnishings, work clothing and allied garments, women's misses' and juniors' outerwear, women's, misses', children's and infants' undergarments, hats, caps, and millinery, girls' children's, and infants' outerwear, fur goods, miscellaneous apparel and accessories, and miscellaneous fabricated textile products.
Paper and Allied Products	Pulp mills, paper mills, paperboard mills, paperboard containers and boxes, and converted paper and paperboard products.
Printing and Publishing	Newspapers, periodicals, books, miscellaneous publishing, commercial printing, manifold business forms, greeting cards, blankbooks, looseleaf binders, and bookbinding and related work, and service industries for the printing trade.
Chemicals and Allied Products	Industrial inorganic chemicals, plastics materials and synthetic resins, synthetic rubber and cellulosic manmade fibers, drugs, soap, detergents, and cleaning preparations, perfumes cosmetics, paints, varnishes, lacquers, enamels, and allied products, industrial organic chemicals, agricultural chemicals, and miscellaneous chemical products.
Petroleum and Coal Products	Petroleum refining, asphalt paving and roofing materials, and miscellaneous products of petroleum and coal.
Rubber and Miscellaneous Plastic Products	Tires and inner tubes, rubber and plastics footwear, gaskets, packing, and sealing devices and rubber and plastics hose, fabricated rubber products, and miscellaneous plastics products.
Leather and Leather Products	Leather tanning and finishing, boot and shoe cut stock and findings, footwear, leather gloves and mittens, luggage, handbags and other personal leather goods, and leather goods not

Category	Description	
<u> </u>	elsewhere classified.	
Transportation and Public Utilities		
Railroad	Railroads	
Transportation		
Trucking and	Trucking and courier services, public warehousing and storage, terminal and joint terminal	
Warehousing	maintenance facilities for motor freight.	
United States Postal	United States Postal Service	
Service		
Water	Deep sea foreign transportation of freight, deep sea domestic transportation of freight, freight	
Transportation	transportation on the Great Lakes, water transportation of freight not elsewhere classified,	
	water transportation of passengers, and services incidental to water transportation.	
Local and	Local and suburban passenger transportation, taxicabs, intercity and rural bus transportation,	
Interurban	bus charter service, school buses, and terminal and service facilities for motor vehicle	
Passenger Transit	passenger transportation.	
Transportation by	Air transportation, scheduled and air courier services, air transportation nonscheduled,	
Air	airports, flying fields, and airport terminal services.	
Pipelines, except	Pipelines, except natural gas.	
Natural Gas	A	
Transportation Services	Arrangement of passenger transportation, arrangement of transportation of freight and cargo, rental of railroad cars, and miscellaneous services incidental to transportation.	
Communications	Telephone communications, telegraph and other message communications, radio and	
Communications	television broadcasting stations, cable and other pay television services, and communications	
	services not elsewhere classified.	
Electric, Gas, and	Electric services, gas production and distribution, combination electric and gas, and other	
Sanitary Services	utility services, water supply, sanitary services, steam and air-conditioning supply, and	
Summing Survivus	irrigation systems.	
Wholesale	Motor vehicles and motor vehicle parts and supplies, furniture and homefurnishings, lumber	
Trade	and other construction materials, professional and commercial equipment and supplies,	
Trauc	metals and minerals, except petroleum, electrical goods, hardware and plumbing and heating	
	equipment and supplies, machinery, equipment and supplies, miscellaneous durable goods,	
	paper and paper products, drugs, drug proprietaries and druggists' sundries, apparel, piece	
	goods and notions, groceries and related products, farm-product raw materials, chemicals and	
	allied products, petroleum and petroleum products, beer, wine and distilled alcoholic	
D 4 1 T 1	beverages, and miscellaneous nondurable goods.	
Retail Trade		
Building Materials	Lumber and other building material dealers, paint, glass, and wallpaper stores, hardware	
and Garden	stores, retail nurseries, lawn and garden supply stores, and mobile home dealers.	
Equipment	Department stores visitely stores and miscelles	
General Merchandise Stores	Department stores, variety stores, and miscellaneous general merchandise stores.	
Food Stores	Grocery stores, meat and fish (seafood markets), fruit and vegetable markets, candy, nut and	
TOOU SIDIES	confectionery stores, dairy products stores, retail bakeries, and miscellaneous food stores.	
Automotive Dealers	Motor vehicle dealers (new and used), motor vehicle dealers (used only), auto and home	
and Service Stations	supply stores, gasoline service stations, boat dealers, recreational vehicle dealers, motorcycle	
and service stations	dealers, automotive dealers not elsewhere classified.	
Apparel and	Men's and boy's clothing and accessory stores, women's clothing stores, women's accessory	
Accessory Stores	and specialty stores, children's and infants' wear stores, family clothing stores, shoe stores,	
,	and miscellaneous apparel and accessory stores.	
Home Furniture and	Home furniture and furnishings stores, household appliance stores, and radio, television,	
Furnishings Stores	consumer electronics, and music stores.	
Eating and Drinking	Eating and drinking places.	
Places		

Category	Description
Miscellaneous Retail	Drug stores and proprietary stores, liquor stores, used merchandise stores, miscellaneous shopping goods stores, nonstore retailers, fuel dealers, and retail stores not elsewhere classified.
Finance, Insuran	ice, and Real Estate
Depository and Nondepository Institutions	Central reserve depository institutions, commercial banks, savings institutions, credit unions, foreign banking and branches and agencies of foreign banks, functions related to depository banking, federal and federally-sponsored credit agencies, personal credit institutions, business credit institutions, and mortgage bankers and brokers.
Security and Commodity Brokers	Security brokers, dealers, and flotation companies, commodity contracts brokers and dealers, security and commodity exchanges, and services allied with the exchange of securities or commodities.
Insurance Carriers	Life insurance, accident and health insurance and medical service plans, fire, marine, and casualty insurance, surety insurance, title insurance, pension, health and welfare funds, and insurance carriers not elsewhere mentioned.
Insurance Agents, Brokers and Services	Insurance agents, brokers and service.
Real Estate	Real estate operators and lessors, rest estate agents and managers, title abstract offices, and land subdividers and developers.
Holding and Other Investment Offices	Holding offices, investment offices, trusts, and miscellaneous investing.
Services	
Hotels and Other Lodging Places	Hotels and motels, rooming and boarding houses, camps and recreational vehicle parks, and organization hotels and lodging houses on membership basis.
Personal Services	Laundry, cleaning, and garment services, portrait photographic studios, beauty shops, barber shops, shoes repair shops and shoeshine parlors, funeral service and crematories, and miscellaneous personal services.
Business Services	Advertising, consumer credit reporting agencies, mercantile reporting agencies, mailing, reproduction, commercial art and photography, services to dwellings and other buildings, miscellaneous equipment rental and leasing, personnel supply services, computer programming, data processing, and other computer related, and miscellaneous business services.
Auto Repair, Services, and Parking	Automotive rental and leasing (without drivers), automobile parking, automotive repair shops, and automotive services (except repair).
Miscellaneous Repair Services	Electrical repair shops, watch, clock, and jewelry repair, reupholstery and furniture repair, and miscellaneous repair shops and related services.
Amusement and Recreation Services	Dance studios, schools, and halls, theatrical producers (except motion picture), bands, orchestras, bowling centers, commercial sports, and miscellaneous amusement and recreation services.
Motion Pictures	Motion picture production and allied services, motion picture distribution and allied services, motion picture theaters, and video tape rental.
Health Services	Offices and clinics of doctors and medicine, offices and clinics of dentists, offices and clinics of doctors of osteopathy, offices and clinics of other health practitioners, nursing and personal care facilities, hospitals, medical and dental laboratories, home health care services, and miscellaneous health and allied services, not elsewhere classified.
Legal Services	Legal services.
Educational Services	Elementary and secondary schools, colleges, universities, professional schools, and junior colleges, libraries, vocational schools, and school and educational services, not elsewhere classified.
Social Services	Individual and family social services, job training and vocational rehabilitation services, child day care services, residential care, and social services, not elsewhere classified.

Category	Description
Museums, Botanical, Zoological Gardens	Museums and art galleries, and arboreta and botanical or zoological gardens.
Membership Organizations	Business associations, professional membership organizations, labor unions and similar labor organizations, civic, social, and fraternal associations, political organizations, religious organizations, and membership organizations, not elsewhere classified.
Engineering and Management Services	Engineering, architectural, and surveying services, accounting, auditing, and bookkeeping services, research, development, and testing services, and management and public relations services.
Government and	Government Enterprises
Executive, Legislative, and General Government, Except Finance	Executive offices, legislative bodies, executive and legislative offices combined, and general government, not elsewhere classified.
Justice, Public Order, and Safety	Counts, and public order and safety.
Public Finance, Taxation, and Monetary Policy	Public finance, taxation, and monetary policy.
Administration of Human Resource Programs	Administration of educational programs, administration of public health programs, administration of social, human resource and income maintenance pr, and administration of veterans' affairs, except health and insurance.
Administration of Environmental Quality and Housing Programs	Administration of environmental quality programs, administration of housing and urban development programs.
Administration of Economic Programs	Administration of general economic programs, regulation and administration of transportation programs, regulation and administration of communications, electric, gas, regulation of agricultural marketing and commodities, regulation, licensing, and inspection of miscellaneous commercial, and space research and technology.
National Security and International Affairs	National security and international affairs.

(Source: Window on State Government, available at http://window.state.tx.us/ecodata/sic1987.html#division%20A)

Appendix B: Results from TxDOT District Interviews in Northern Texas

TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) DISTRICT OFFICE: CHILDRESS

Current industries in the area include agriculture, oil-well servicing, and a Georgia Pacific Sheetrock plant. The Georgia Pacific plant is located in Acme, Texas, and is the largest shipper by volume in the area.

Use of Farm-to-Market Roads to Circumvent Weigh Station on Highway 287

Highway 287 is a four-lane, east-west route with no controlled access. A large number of trucks use Highway 287 as an alternative to I-40 or as a route to intersect I-40. A weigh station is located outside the city of Childress to monitor truck traffic along Highway 287 through Childress. However, truckers are able to communicate with each other and use FM roads near Childress to avoid the weigh station on days it is open. Thus, the FM roads are now enduring truck loadings far above their design loads. Farmers in the area declare they can tell the days when the weigh station is open by the increased truck traffic on the FM roads. An interesting twist to the problem is that revenues from fines imposed by the weigh station average approximately \$70,000 per month. Revenues from the weigh station go to Childress County. A truck repair shop near the weigh station has greatly expanded business since the weigh station opened.

Agricultural Equipment

An issue connected to the agricultural industry in the area is the movement of farm implements on the roadways. By legislation, instruments of husbandry are not under the same restrictions as other truck traffic. Oversized loadings from harvester equipment and other agricultural implements overstress the FM pavements. Such oversized loads are also detrimental to bridges in the area.

Location of Temporary Material Handling Sites

Another issue is the development of temporary material handling sites during construction or rehabilitation projects. Materials are usually stored or mixed (asphalt plants) at a site placed near the construction project. Trucks with heavy loadings of materials are brought into and out of the site over roads (typically FM roads) not designed for heavy loads. The oversized loads lead to rapid deterioration of the FM roads.

Location of Sanitary Landfill Sites

One local issue is the transport of garbage to the local sanitary landfill. The garbage trucks are consistently overloaded and create rutting in lanes leading to the landfill. TxDOT personnel have observed that the rutting exists only in the lanes leading to the landfill (trucks are full) and not in lanes coming from the landfill (trucks are empty).

Vaulting of Concrete Pavement

Concrete pavements with a 12-inch thickness have heaved as much as six inches in places. Heaving is thought to result from a chemical reaction of the soils containing gypsum and sulfates in the area.

Truck Parking

Occasionally truck parking areas are a problem during snow events. Closure or delays of traffic on I-40 during snow storms creates the need for large parking areas for stranded trucks.

TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) DISTRICT OFFICE: LUBBOCK

Location of Large Distribution Centers

Wal-Mart operates a large distribution center in Plainview, located near I-27. The Wal-Mart distribution center is the largest shipper in the area but does not create any significant transportation problems.

Truck-Rail Conflicts

Two large meat packing plants located at Plainview and Friona create unique transportation issues. One specific issue near the meat packing plant in Friona is caused by a two-track railroad that runs parallel to Highway 60. Trucks entering the meat packing plant from Highway 60 must cross the railroad to enter the plant. The railroad is a main corridor running from Los Angeles to Chicago and is very busy. Trucks are sometimes required to wait for long periods of time before crossing the railroad tracks. These trucks waiting to turn create long queues resulting in a safety hazard at the intersection.

Agricultural Equipment

Agricultural industries are a dominant factor in rural transportation in the Lubbock District. Heavy farm equipment is operated near TxDOT roadways, and sometimes wheel loads on the edge of the roadway cause significant damage to the pavements. Also, farm tractors turning near the roadways during plowing operations can cause damage as the plow blades on the roadway gouge the pavement surface.

Weather-Related Concerns

A weather-related issue is the use of alternative routes for interstate truck traffic during snow storms. To avoid delays, trucks use highways and FM roads near the main routes.

Super-Heavy loads

Super-heavy loads present occasional challenges in rural transportation. One current example is the movement of an electrical transformer through the Lubbock District. The

total weight of the load will be 608,000 pounds and will impose 5,000 pounds-per-tire loadings on the pavement surfaces. A 216-ft. trailer will carry the transformer.

Texas-New Mexico Truck Flows

The Lubbock District recently conducted a study of traffic crossing the Texas – New Mexico border. The study identified high volumes of traffic on Highways 180 and 380.

TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) DISTRICT OFFICE: WICHITA FALLS

In recent years there has been a significant increase in the movement of cotton modules through the district. Other agricultural contributors include an egg producer near Joshua, milk trucks servicing dairies, and a meatpacking plant (Wright Brand Foods) in Wilbarger. Several industries and distribution centers in the area generate truck traffic. A major mobile home manufacturer is located in Wichita Falls.

Development of New Aggregate Pits

Areas within the Wichita Falls District are near enough to the metroplex to experience several transportation issues associated with the movement of people into the rural area. As people move into the rural areas, the number of residential areas and schools increases significantly. Traffic volumes have increased for both passenger cars and school buses, creating road capacity problems in an area with large volumes of truck traffic. New housing developments are springing up in areas with previously very low traffic volumes. Supporting new construction in the metroplex and the changing rural areas has required the development of new sources of sand and gravel. A number of new aggregate pits have been developed, and heavily loaded trucks now travel on the previously low-volume roads carrying the aggregate to construction sites. Furthermore, aggregates are being shipped in from Oklahoma to meet construction needs, and the trucks from Oklahoma are adding to the truck volumes on the Texas FM roadways.

Oil and Gas Production

The Wichita Falls area has been an oil and gas producing area for a number of years. Recently, major efforts have begun to open new wells and reopen previous production wells. The goal of local gas well producers is to have at least one gas well on every twenty acres of land. Several transportation issues have resulted. First, a gravel road is required to access each well. Currently the roadways are constructed using aggregate from the local pits. Constructing roads to the wells causes increases in the number of aggregate trucks moving through the district. The aggregate producers prefer to sell their product to contractors building the well-site roadways rather than to TxDOT, because the specifications for the well-site roadways are much easier to satisfy. Also, production from the wells involves the use of water to fracture the oil and gas formations. Hundreds of trucks bring water to the well sites.

Agricultural Produce/Equipment

The Wichita Falls District experiences seasonal increases in truck and farm equipment loads during the harvesting season. In addition to problems associated with local harvesting, many trucks carry wheat produced in Kansas through the Wichita Falls District. Trucks typically use the FM road system to avoid weigh stations on the interstate. It is not unusual to find a trailer broken down beside an FM road because it was so heavily overloaded with produce.

Oversized Loads

Movement of fully constructed mobile homes to their delivery sites requires transportation by truck, and the loads are typically oversized. Wichita Falls is also the home of the largest Pittsburgh Plate and Glass (PPG) plant in North America. Certainteed Fiberglass, a producer of fiberglass insulation, is also located in Wichita Falls. NAPCO, in Electra, specializes in painting large pressure vessels and other large pieces of equipment. The large pressure vessels and equipment are transported to the plant for painting and create an increase in oversize truck traffic. The increase in wind power generators has also affected truck traffic through the district. More than 1,200 wind turbines have been transported through the district. Another local industry is Weber Aircraft in Gainesville. Increased construction within the area has increased the need for lumber to support the construction. All lumber is trucked into the area.

Location of Large Distribution Centers

There is also a Wal-Mart distribution center near Gainesville. The distribution center generates approximately 1,000 trucks per day.

Use of District Roads to Circumvent Weigh Stations on Interstates

Truck traffic in the Wichita Falls District was 18–22 percent of the total traffic volume in 1986. In 2003 the truck traffic volume was 28–32 percent. Many of the trucks pass through the Wichita Falls area to avoid congestion or weigh stations on the interstate system.

Truck Stops

The increase in truck traffic has resulted in a greater number of truck stops in the district. Special problems arise from truck stops on roadways without controlled access. There are no exit ramps or acceleration lanes leading to or from the truck stops; therefore trucks enter and leave the truck stops at slow speeds and are often required to execute turns in a limited distance. The slow-moving trucks create a safety problem for other vehicles moving along the roadways at normal speeds. A case in point is that one truck stop in a location of high accident rate was closed for repairs over an extended time. During the closure there were no accidents at the location. Once the truck stop was reopened, the number of accidents returned to previous levels. Measures taken to improve safety near the truck stops include construction of acceleration lanes, construction of wider turning lanes, construction of frontage lanes (requires special permission from the state), and in one case the setting up of barricades to prevent trucks from crossing a four-lane divided highway.

Rural truck traffic on Highway 287 exceeds the rural truck traffic on I-10 and I-20 and is carrying the fourth largest truck volume in rural Texas. A truck stop corporation (Flying J) that selects two sites per year for new facilities has selected Wichita Falls for a future truck stop location. Rest areas within the district each have a capacity of 22 trucks. On any given night, trucks completely fill the rest areas and park on the exit ramps leading to the rest areas. TxDOT has recently begun placing concrete pavement in the rest area to avoid pavement damage.

Need for Stronger Pavements

Within the district, pavement engineers are using a new strategy in pavement design. They are using concrete pavements and stronger asphalt pavement designs to avoid large future maintenance costs. A recent incident illustrates the need for stronger pavements. An accident on I-35 required the diverting of truck traffic onto a frontage road for between 3 and 4 hours while the accident was being cleared. The increased truck traffic on the frontage road created rutting that cost \$50,000 to repair. The improved asphalt pavement designs require stronger aggregates at an increase in costs. Aggregate costs have gone from \$32 per ton to \$40–45 per ton.

Truck Tire Pressure

Increases in truck tire pressure present additional problems in pavement design, especially for pavements designed for lower-pressure tires. A new problem has been created by special illegal devices now employed by trucks to achieve better fuel mileage. Specifically, truckers have learned that they get better fuel mileage by lifting axles to reduce the number of tires contacting the pavement. Lifting the axle increases the loads on individual tires in contact with the pavement. These new devices are mounted so that they can be activated from inside the tractor while the truck is in motion.

Need for Rail

Engineers and planners in the Wichita Falls District are advocates of double tracking railroads. They believe the development of rail systems in their district would greatly relieve many of their transportation issues.

Agricultural Produce

The Amarillo District is experiencing an influx of dairies and hog farms. There are two new dairies in Hartley County and two dairies have developed in Gray County, although one has closed but is expected to reopen. TxDOT assisted one county by providing 6,500 tons of RAP to upgrade a county road serving the dairy. TxDOT does not usually maintain county roads. Upgrading the road was used by the county as an enticement to have the dairy locate in the county. A second dairy paid for roadway upgrades needed to service the dairy. TxDOT does not anticipate significant pavement problems resulting from truck traffic to and from the dairies or hog farms. Feed is delivered to central points in the area, and shuttle trucks are used to move the feed to the dairies or pig farms. Although the trucks delivering feed to the central locations are large, they are within legal load limits and have not significantly increase the truck traffic count. An interesting point is that even though the local area is a major producer of corn and

sorghum used to feed the animals, both commodities are imported into the area to supply the needs. Economic issues arise regarding costs, including freight costs, of the imported feeds and market price for the locally produce feeds. Local grain cooperatives want to control development of grain loading/off-loading facilities while such facilities threaten prices they receive for their products. Furthermore, there seems to be an initiative to develop a plant in the area to produce ethanol fuel from locally grown corn, but corn is currently imported from other states.

Cattle feed lots present a transportation challenge. The problems are caused not so much by the heavy loads from the trucks but rather by the acceleration or deceleration of the large trucks as they exit or enter the feed lots. The trucks create a traffic problem more than a pavement design problem.

Another issue related to agriculture is the movement of goods along the FM roads. Receivers of the agricultural goods are willing to accept up to 100,000 lbs. of product even though the truck weight limit is 80,000 lbs. Receivers use scales that measure a maximum of 100,000 lbs. and will accept product up to the limits of their measuring device. Shippers see the overloads as a means to increase their profits. During the harvest season, there simply are not enough license and weight personnel in the area to police all the roads. The overloads create significant damage to the FM pavements. Damage is observed as brittle fracture of the pavement surface instead of rutting. Most of the FM pavements have received multiple seal coats which become brittle with time. The overloads cause the pavement surface to "shatter."

Agricultural Equipment

Agricultural equipment is not restricted to a maximum weight limit. The example was given that anhydrous ammonia used in farming can be delivered by a truck well within the weight limit of the truck, but when loaded onto farm equipment the total load is well beyond the limits imposed on the truck. Tractors operating near and on the FM pavement surfaces create failures of the pavement edges. Tractors turning near or on the roads can also gouge pavement surfaces when plow blades impact the surface. In some cases, the tractor hydraulics have failed while on the pavement, and moving the tractor from the pavement essentially plows the pavement surface. Additionally, there have even been incidents where crop duster airplanes have landed on FM roads.

Composition of Rural Traffic

The composition of traffic on rural roads can be a problem. The example was given that several of the two-lane roads in the district routinely experience a mix of truck traffic, agricultural equipment, tourists towing large campers (often the vehicles are underpowered for the towing), and passenger cars. Difficulties in passing slower vehicles causes driver frustration leading to more aggressive driving. The aggressive driving is a safety issue.

Truck-Rail Conflicts

Problems relate to truck traffic crossing railroad tracks to enter facilities. Highway 60 parallels a double-track railroad through both the Amarillo District and the Lubbock District. Long truck queues develop as the trucks wait for trains to clear the track before

the trucks can turn off of Highway 60 onto the road leading into plants. TxDOT has been informed that the railroad traffic could increase to 80 trains per day.

Truck Stops

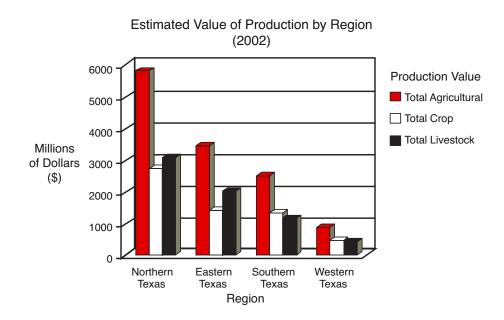
There seems to be insufficient parking for trucks in rest areas. Trucks are forced to park at the edge of ramps leading into the rest areas and cause damage to the edges of the ramps.

Appendix C: Agricultural Production by Texas Region

Texas is the leading producer of cattle, sheep, goats, horses, wool, mohair, and cotton in the U.S. The state is also an important producer of vegetables, citrus, peanuts, pecans, grain sorghum, rice, sugar cane, and wheat (Office of Rural Community Affairs, 2002). More than 80 percent of Texas-fed cattle are raised in the Texas Panhandle, while cotton is predominantly produced south of Houston but also in some parts of western Texas, the southern plains, and the rolling plains (personal communication with Carl Anderson, June 2003). The objective of this Appendix is to discuss agricultural production by Texas region and to highlight the sector's increased reliance on trucking.

Agricultural Production by region

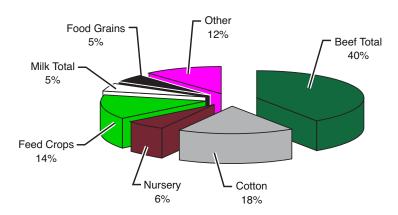
Approximately 70 percent of all agricultural output is produced in northern and eastern Texas. Southern Texas produces approximately 20 percent of the agricultural output, with western Texas contributing only about 7 percent of the estimated agricultural production of the state (Anderson, 2003). The figure below displays the value of agricultural production by region in 2002.



Northern Texas

Northern Texas is a large producer of livestock, especially beef, cotton, grain, and wheat. As is evident from the figure, approximately 40 percent of the value of agricultural production in the region is beef. According to Carl Anderson, this area of the state has a good highway system that is well signed compared to other states. The current challenge is to maintain the existing system (personal communication, June 2003).

Northern Texas Agricultural Commodities (2002)



The Texas Panhandle is one of the leading producing areas of fed cattle in the U.S. All fed cattle in the Texas Panhandle are transported by truck. Calves bred in other regions in Texas are transported by truck to feedlots in the Panhandle. Between 80 and 85 percent of the animals are bred outside the region. Summer stock (accounts for 40 percent of all stock) is purchased from March to May and then either transported to winter pasture or to area feedlots. Winter stock is purchased between September and October, comes off pasture in March/May, and is shipped to area feedlots (personal communication with Amosson, June 2003). Once fed and ready for the market, the animals are transported by truck to nearby slaughter houses and packing plants. From there, the prepared meat is transported by refrigerated trucks to points of demand in the state, out-of-state, and to ports for export (personal communication with Stephen Fuller, June 2003).

The largely cultivated and irrigated Texas Panhandle facilitates the growing of corn, wheat, and grain sorghum for use as feed for the cattle raised in the Panhandle. According to Steve Fuller (personal communication, June 2003), crop agriculture is best served by trucking during assembly, which requires a good arterial transport network to move the crops to county elevators within approximately 100 miles of the production location. From September to December the crops harvested in the area satisfy the feed demand of area feed lots, but in general more cattle are fed in northern Texas than grain produced. Grain is thus transported by long-distance shuttle trains from out-of-state origins, such as Nebraska, eastern Kansas, and western Iowa into the region (personal communication with S. Fuller, June 2003). Trucks are used to distribute the grain to the feedlots over relatively short distances — approximately 100 miles.

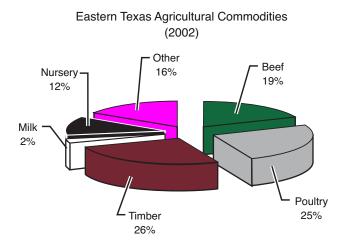
Wheat produced in the region is also normally trucked to county elevators from which point shipments are moved in unit trains over longer distances to destinations such as California (personal communication with Steve Fuller, June 2003). Grain flow data show large quantities of rail-transported grain are received in Texas for export via Texas Gulf of Mexico ports — (Houston and Corpus Christi) — and overland border crossings into Mexico, as well as for consumption by Texas livestock, poultry, and diary populations. Trains transport about 60 percent of grain from July to October (personal communication with Amosson, June 2003). Overall, however, the role of rail in the transportation of grain is diminishing (personal communication with Carl Anderson, June 2003).

Cotton is the second most important commodity produced in the region in terms of the value of agricultural production. Most of the cotton from this region is produced in the South Plains close to Lubbock. Approximately 30 percent of the cotton produced in this region is destined for U.S. mills (personal communication with Smith, June 2003). The transportation of the cotton from field to gin, and then from gin to manufacture facility, is seasonal. Cotton is harvested in late summer, and the transporting of cotton to the gin occurs in the months of October, November, and December by truck. Typically, four acres of irrigated land can produce 10 bales of cotton (approximately 10 tons including both the lint and seed), which is hauled predominantly by a single truck within 20 to 30 miles to a gin. From the gin to the warehouse, the cotton bales are again moved by truck over relatively short distances. Approximately 40 percent of the cotton produced in Texas is destined for Mexico. Most of these shipments are moved by truck. Rail is not considered to be convenient, partly because of chronic rail car shortages during the harvesting season. However, cotton shipments with out-of-state destinations, for example to California, are moved by rail (personal communication with Anderson, June 2003). Since northern Texas has experienced the greatest rail abandonment in the state, most suppliers of cotton do not have the option of using rail anymore. Therefore, cotton is heavily dependent on trucking.

Finally, in recent years a number of dairy farms have moved from Stephenville to the Panhandle. As these dairies have become larger in size, concerns about effluent polluting water resources in Stephenville have resulted in some of these dairies relocating to the Texas Panhandle (personal communication with Steve Fuller, June 2003).

Eastern Texas

The timber and poultry industries are important to the eastern Texas economy. In 1999 the Texas forest sector contributed \$12.9 billion to the state's economy in industry outputs (Office of Rural Community Affairs, 2002).



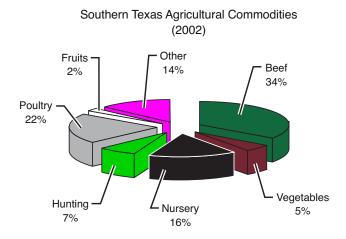
Eastern Texas has a large number of industrialized farms producing cattle (cow and calf operations), hogs, and poultry. Grain is railed into the region from Illinois to feed the poultry. Broiler farmers in this region normally contract with a central processing plant, such as the "Pilgrim's Pride" company, to cut up and process the chicken. Pilgrim's Pride

is located near Beaumont and is becoming the leading supplier of broilers in Texas. From these processing plants, the chicken legs and backs are exported to Mexico and Russia. Texas is the third largest broiler producing state in the U.S. (personal communication with Steve Fuller, June 2003).

Timber production is cyclical. When most of the foliage has been cleared, the area will be left unattended until the newly planted seeds regrow (personal communication with Carl Anderson, June 2003). The figure shows that 26 percent of the region's produced agricultural value is timber. Most of the timber in this area is transported by truck.

Southern Texas

While beef and poultry are relatively significant commodities produced in southern Texas, the region is better known for its production of fruits and vegetables. This is largely attributable to the fact that this is the only region in the state where fruits and vegetables are produced.

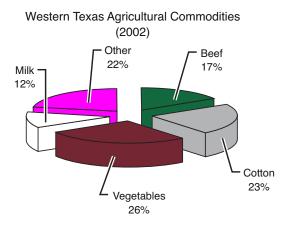


Fruit and vegetable production is significantly influenced by the weather. Weather shifts can vary the production of most crops from this region by 10 percent from year to year. An ice freeze could effectively eliminate a year's production of sugar cane and selected vegetables (personal communication with Robinson, June 2003). In recent years, water shortages have resulted in many fruit and vegetable farmers going out of business. The Office of Rural Community Affairs reported that the amount of farmland and the number of jobs in the Rio Grande Valley decreased by more than 100,000 acres and 30,000 jobs (Office of Rural Community Affairs, 2002).

The transportation of fruits and vegetables requires an extensive transportation system. Citrus, onions, melons, and other vegetables are shipped from southern Texas mainly by truck. The citrus transported out of state is sold in urban markets in California and the Midwest. Southern Texas vegetables are sold in major U.S. urban markets (via retail grocery companies and food service companies). Most of this produce is transported long distances to out-of-state destinations by truck, because of its perishable nature (personal communication with Robinson, June 2003).

Western Texas

West Texas is a relatively minor contributor of agricultural produce in terms of the estimated value of agricultural production in Texas. Most of the beef production involves cow and calf operations with the purpose of raising one calf per cow a year. These calves are eventually shipped to the Panhandle to be fed. During the winter months and in times of drought, when hay produced in the area is inadequate, there is a need to move hay into the area (in some instances from out of state). The crops produced in the west are generally not irrigated (personal communication with Steve Fuller, June 2003).



The demands on the infrastructure in terms of agricultural truck shipments are thus perceived to be relatively modest given the agricultural demand and supply (personal communication with Steve Fuller, June 2003). Cows and calf operations are usually moved in pickup trucks and gooseneck trailers (personal communication with Carl Anderson, June 2003).

Concluding Remarks

A number of factors have resulted in an increasing reliance of rural agriculture on trucking. Economic development, structural change, and technological innovation have impacted and will continue to impact the agricultural sector's requirement for transportation in the future (U.S. Department of Agriculture, 1993).

Appendix D: PMIS Utility Equations

Distress Score Calculation

$$DS = 100 \prod_{i=1}^{n} U_{i}$$

where:

DS = distress score

U = utility value

i = a PMIS distress type (e.g., deep rutting or punchouts) or ride quality

n =total number of pavement type distresses

Distress and Ride Utility Calculation

$$U_{i} = \begin{cases} 1, & when l_{i} = 0 \\ 1 - \alpha e^{-\left[\left(\frac{\rho}{l_{i}}\right)^{\beta}\right]}, & when l_{i} > 0 \end{cases}$$

where:

U = utility value

i = a PMIS distress type (e.g., deep rutting or punchouts) or ride quality

e = base of the natural logarithms ($e \approx 2.7182818...$)

 α = alpha, a horizontal asymptote factor that controls the maximum amount of utility that can be lost

 β = beta, a slope factor that controls how steeply utility is lost in the middle of the curve

 ρ = rho, a prolongation factor that controls "how long" the utility curve will "last" above a certain value

level of distress (some distress types must be "normalized") or ride quality lost

Condition Score Calculation

$$CS = DS \times U_R$$

where:

CS = condition score

DS = distress score

 U_R = ride utility value

Ride Quality Lost (li) Calculation

"Low" Traffic Class (ADT X Speed Limit ≤ 27,500) pavements

$$l = \begin{cases} 0, & when SI \ge 2.5\\ 100 \left(\frac{2.5 - SI}{2.5} \right), & when SI < 2.5 \end{cases}$$

"Medium" Traffic Class (ADT X Speed Limit between 27,501 and 165,000) pavements

$$l = \begin{cases} 0, & when SI \ge 3.0\\ 100 \left(\frac{3.0 - SI}{3.0} \right), & when SI < 3.0 \end{cases}$$

"High" Traffic Class (ADT X Speed Limit > 165,000) pavements

$$l = \begin{cases} 0, & when SI \ge 3.5\\ 100 \left(\frac{3.5 - SI}{3.5} \right), & when SI < 3.5 \end{cases}$$

where:

l = level of ride quality lost

SI = ride score

Weighted Utility Score Average

$$WU_{i} = 100 \left(\frac{\sum_{j=1}^{n} U_{i_{j}} \times len_{j} \times lns_{j}}{\sum_{j=1}^{n} len_{j} \times lns_{j}} \right)$$

where:

WU = weighted average utility

i = a PMIS distress type (e.g., deep rutting or punchouts) or ride quality

U = utility value

len = length of PMIS section

lns = number of lanes

j = PMIS section (approx. 0.5 miles in length)

n =total number of PMIS sections

Appendix E: ARCMAPS of PMIS Data (2001 and 2002)

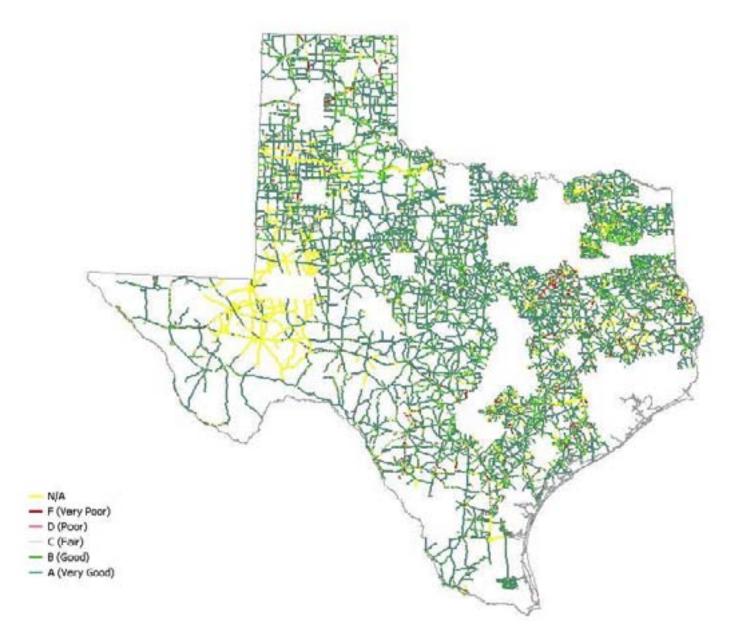


Figure E1 Overall Condition Scores (2001)

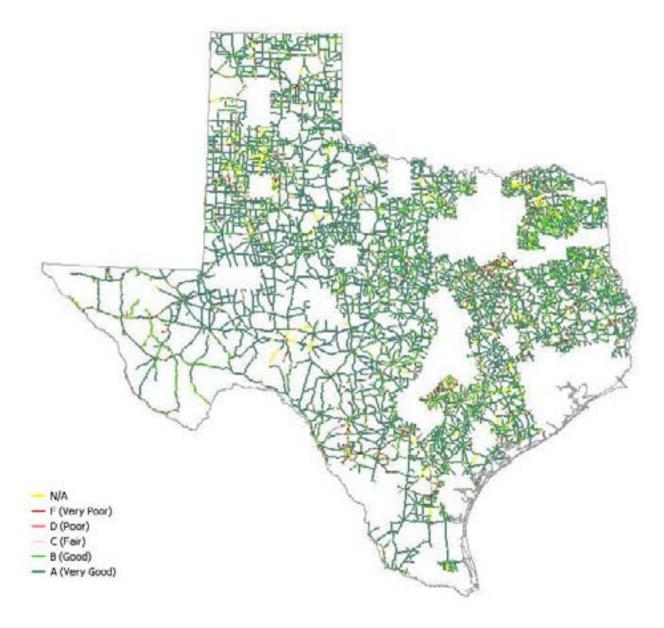


Figure E2 Overall Condition Scores (2002)

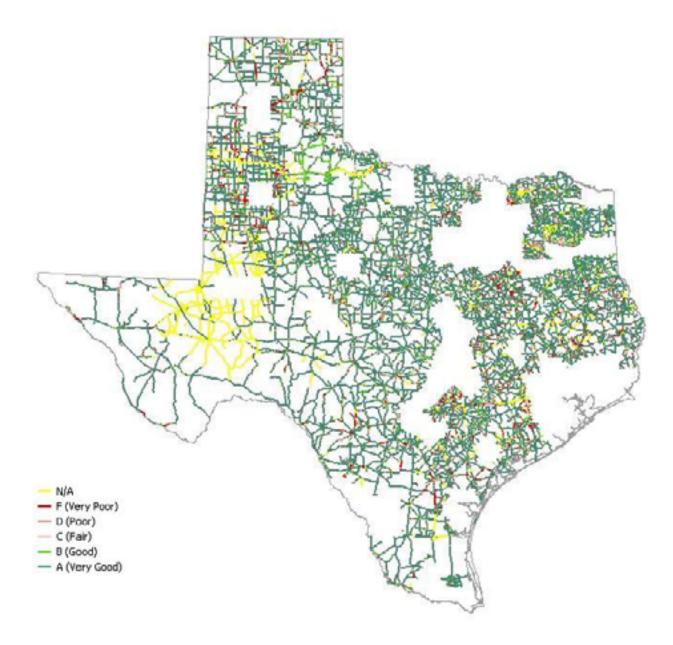


Figure E3 Distress Scores (2001)

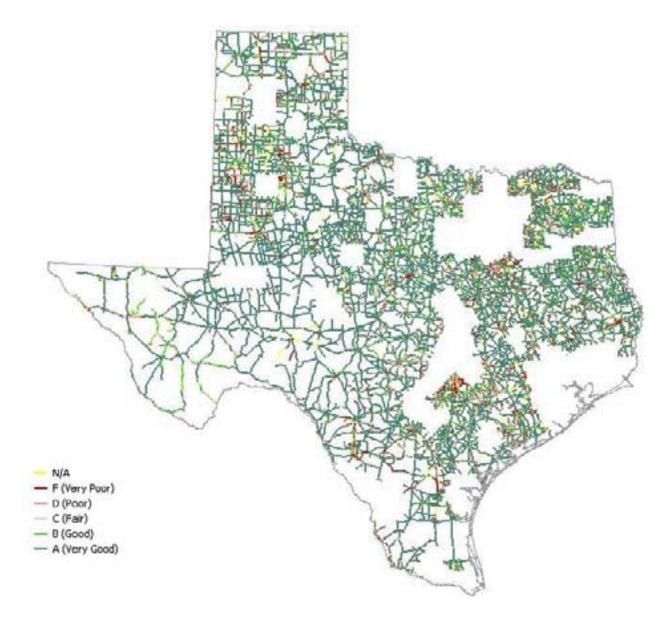


Figure E4 Distress Scores (2002)

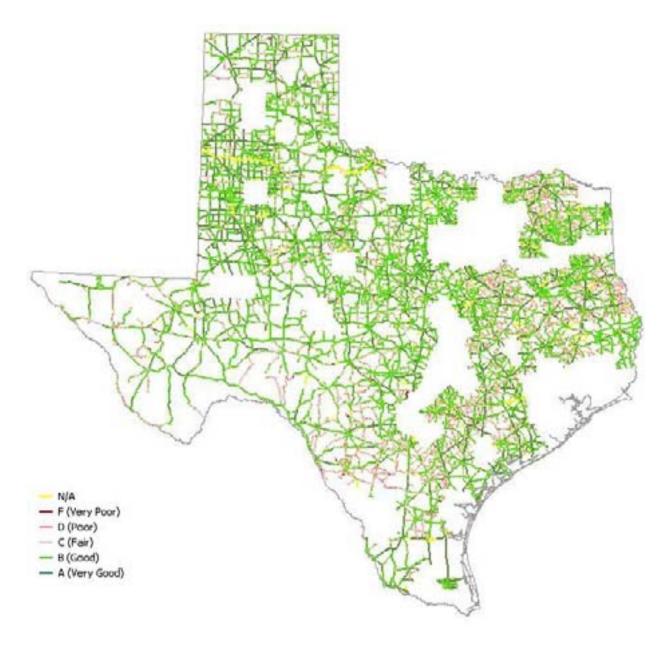


Figure E5 Ride Scores (2001)

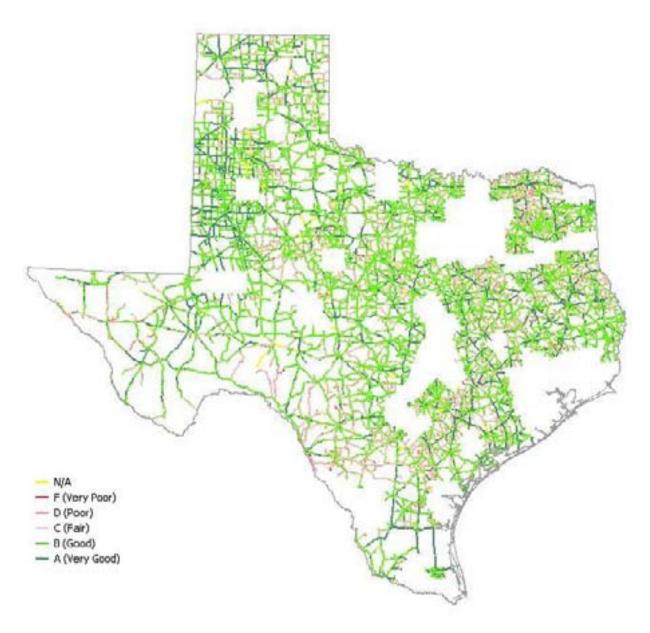
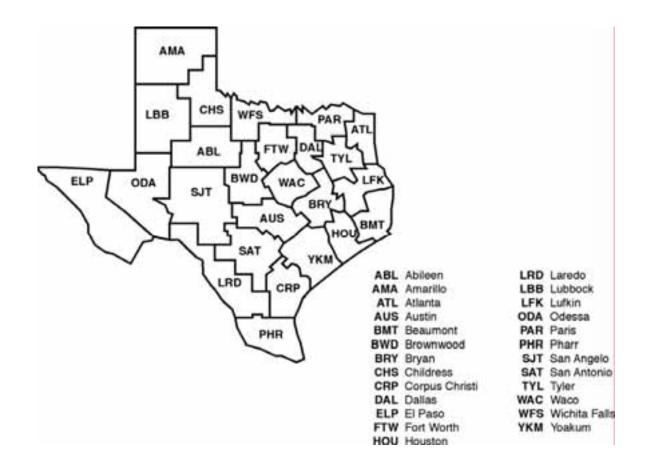
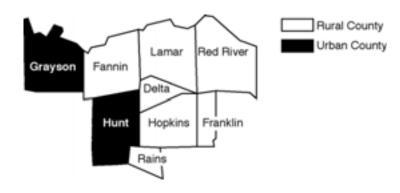


Figure E6 Ride Scores (2002)

Appendix F: TxDOT Rural County PMIS Scores by TxDOT District (2001, 2002, and 2003)



1. Paris District Rural County Summary Scores for 2001, 2002, and 2003

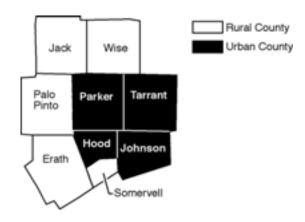


<u>DIS_1</u>	Summary Scores for 2001							
Cwada	Distress	Score	Condition	Condition Score		core		
Grade	Length	%	Length	%	Length	%		
A	1,671.50	75.65	1,431.50	65.02	305.30	13.50		
В	155.00	7.02	374.10	16.99	820.70	36.29		
С	149.70	6.78	256.10	11.63	971.40	42.96		
D	149.80	6.78	85.50	3.88	163.00	7.21		
F	83.40	3.77	54.40	2.47	0.90	0.04		
\sum	2,209.40	100.00	2,201.60	100.00	2,261.30	100.00		

<u>DIS 1</u>	Summary Scores for 2002							
Grade	Distress Score		Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	1,545.20	71.49	1,334.00	61.89	319.50	14.16		
В	150.20	6.95	366.90	17.02	845.50	37.48		
С	146.80	6.79	280.00	12.99	945.40	41.91		
D	168.90	7.81	96.90	4.50	144.90	6.42		
F	150.30	6.95	77.80	3.61	0.70	0.03		
Σ	2,161.40	100.00	2,155.60	100.00	2,256.00	100.00		

DIS_1	Summary Scores for 2003							
Cuada	Distress	Score	Condition	Condition Score		core		
Grade	Length	%	Length	%	Length	%		
A	1,565.10	73.18	1,386.60	64.99	338.70	15.16		
В	180.30	8.43	370.40	17.36	910.30	40.74		
С	135.30	6.33	240.70	11.28	866.50	38.78		
D	134.30	6.28	79.90	3.75	117.40	5.25		
F	123.70	5.78	55.80	2.62	1.30	0.06		
\sum	2,138.70	100.00	2,133.40	100.00	2,234.20	100.00		

2. Fort Worth District Rural County Summary Scores for 2001, 2002, and 2003

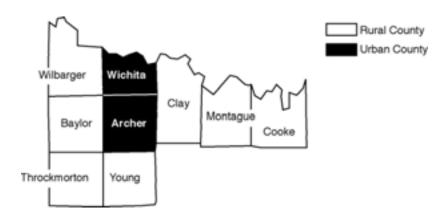


DIS 2	Summary Scores for 2001							
Cwada	Distress	Score	Condition	Condition Score		core		
Grade	Length	%	Length	%	Length	%		
A	1,326.60	86.09	1,300.40	84.41	374.30	19.39		
В	62.60	4.06	149.10	9.68	1,339.20	69.38		
C	73.50	4.77	56.20	3.65	212.60	11.01		
D	34.90	2.26	20.40	1.32	4.10	0.21		
F	43.40	2.82	14.40	0.93	0.00	0.00		
Σ	1,541.00	100.00	1,540.50	100.00	1,930.20	100.00		

<u>DIS_2</u>	Summary Scores for 2002						
Cuada	Distress	Score	Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	1,221.70	78.71	1,171.20	75.87	141.30	7.89	
В	175.20	11.29	262.20	16.99	1,219.70	68.08	
С	70.30	4.53	71.90	4.66	423.30	23.63	
D	39.00	2.51	19.00	1.23	7.40	0.41	
F	46.00	2.96	19.30	1.25	0.00	0.00	
Σ	1,552.20	100.00	1,543.60	100.00	1,791.70	100.00	

DIS_2	Summary Scores for 2003						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	1,285.90	84.13	1,227.40	80.62	132.50	8.56	
В	88.50	5.79	165.50	10.87	1,074.20	69.36	
С	57.90	3.79	82.10	5.39	330.10	21.31	
D	45.70	2.99	18.00	1.18	9.70	0.63	
F	50.50	3.30	29.40	1.93	2.20	0.14	
Σ	1,528.50	100.00	1,522.40	100.00	1,548.70	100.00	

3. Wichita Falls District Rural County Summary Scores for 2001, 2002, and 2003

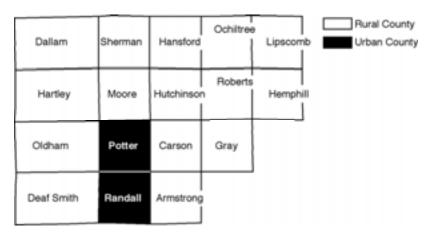


DIS 3	Summary Scores for 2001							
Grade	Distress Score		Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	1,936.70	85.03	1,849.50	81.85	389.50	17.11		
В	106.60	4.68	243.20	10.76	1,298.00	57.03		
С	110.80	4.86	133.00	5.89	553.20	24.30		
D	95.50	4.19	19.00	0.84	34.00	1.49		
F	28.20	1.24	14.90	0.66	1.40	0.06		
Σ	2,277.80	100.00	2,259.60	100.00	2,276.10	100.00		

<u>DIS 3</u>	Summary Scores for 2002						
Grade	Distress	Score	Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	1,738.50	76.93	1,687.50	75.01	434.50	19.00	
В	144.50	6.39	297.70	13.23	1,296.50	56.69	
С	134.00	5.93	221.80	9.86	542.40	23.72	
D	171.70	7.60	23.20	1.03	13.60	0.59	
F	71.20	3.15	19.50	0.87	0.00	0.00	
Σ	2,259.90	100.00	2,249.70	100.00	2,287.00	100.00	

DIS 3	Summary Scores for 2003							
Grade	Distress Score		Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	1,861.60	81.84	1,799.70	79.27	366.30	15.92		
В	135.30	5.95	269.50	11.87	1,322.70	57.50		
С	106.10	4.66	158.20	6.97	591.00	25.69		
D	122.10	5.37	21.90	0.96	19.60	0.85		
F	49.70	2.18	20.90	0.92	0.60	0.03		
Σ	2,274.80	100.00	2,270.20	100.00	2,300.20	100.00		

4. Amarillo District Rural County Summary Scores for 2001, 2002, and 2003

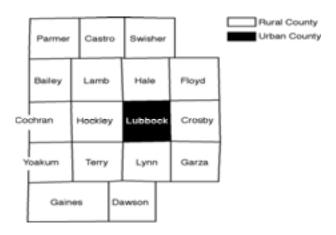


DIS_4	Summary Scores for 2001							
	Distress	Score	Condition Score		Ride Score			
Grade	Length	%	Length	%	Length	%		
A	2,258.30	63.67	2,162.90	61.01	881.80	24.57		
В	420.70	11.86	740.40	20.88	1,689.10	47.06		
С	292.40	8.24	379.90	10.72	950.00	26.47		
D	200.70	5.66	151.60	4.28	67.40	1.88		
F	375.00	10.57	110.40	3.11	0.60	0.02		
${\sum}$	3,547.10	100.00	3545.20	100.00	3,588.90	100.00		

DIS_4	Summary Scores for 2002							
Grade	Distress	Score	Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	2,551.00	72.43	2,420.90	68.90	819.30	23.23		
В	326.60	9.27	569.30	16.20	1,631.50	46.25		
С	204.30	5.80	355.60	10.12	973.40	27.60		
D	212.50	6.03	105.00	2.99	100.50	2.85		
F	227.80	6.47	62.60	1.78	2.70	0.08		
Σ	3,522.20	100.00	3,513.40	100.00	3,527.40	100.00		

DIS 4	Summary Scores for 2003							
Grade	Distress	Score	Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	2,308.30	65.09	2,213.10	62.76	846.90	23.97		
В	401.90	11.33	633.90	17.98	1,676.10	47.44		
С	230.20	6.49	440.70	12.50	921.80	26.09		
D	238.50	6.72	149.60	4.24	84.70	2.40		
F	367.60	10.37	89.00	2.52	3.50	0.10		
Σ	3,546.50	100.00	3,526.30	100.00	3,533.00	100.00		

5. Lubbock District Rural County Summary Scores for 2001, 2002, and 2003

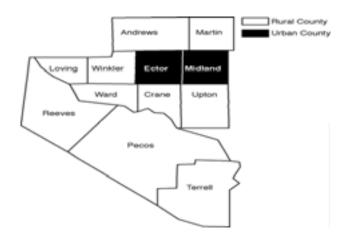


DIS 5	Summary Scores for 2001							
	Distress	ess Score Condition Score		Ride Score				
Grade	Length	%	Length	%	Length	%		
A	3,328.70	61.46	3,271.80	60.41	1,816.50	33.54		
В	364.60	6.73	590.60	10.90	2,444.10	45.13		
С	218.90	4.04	475.30	8.78	718.60	13.27		
D	227.20	4.20	111.50	2.06	22.60	0.42		
F	1,276.50	23.57	966.70	17.85	414.10	7.65		
Σ	5,415.90	100.00	5,415.90	100.00	5,415.90	100.00		

<u>DIS_5</u>	Summary Scores for 2002						
Cuada	Distress	Score	Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	3,382.20	71.98	3,305.60	70.46	1,528.10	31.80	
В	375.40	7.99	647.10	13.79	2,389.20	49.72	
С	254.20	5.41	539.80	11.51	853.10	17.75	
D	306.30	6.52	146.70	3.13	33.70	0.70	
F	380.80	8.10	52.50	1.12	0.80	0.02	
Σ	4,698.90	100.00	4,691.70	100.00	4,804.90	100.00	

DIS 5	Summary Scores for 2003						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	3,839.80	78.18	3,788.40	77.23	1,493.60	29.96	
В	218.10	4.44	461.90	9.42	2,553.10	51.21	
С	226.50	4.61	445.00	9.07	912.70	18.31	
D	246.20	5.01	150.80	3.07	26.00	0.52	
F	381.20	7.76	59.40	1.21	0.50	0.01	
Σ	4,911.80	100.00	4,905.50	100.00	4,985.90	100.00	

6. Odessa District Rural County Summary Scores for 2001, 2002, and 2003

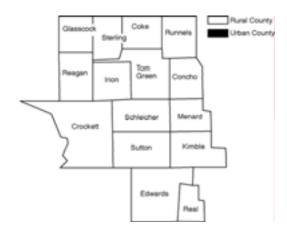


DIS 6	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	979.20	87.94	936.50	86.35	811.00	27.90	
В	90.00	8.08	115.90	10.69	1,639.70	56.41	
C	22.70	2.04	28.40	2.62	407.90	14.03	
D	13.90	1.25	1.90	0.18	44.60	1.53	
F	7.70	0.69	1.80	0.17	3.30	0.11	
Σ	1,113.50	100.00	1,084.50	100.00	2,906.50	100.00	

DIS 6	Summary Scores for 2002							
Grade	Distress	Score	Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	2,701.90	91.90	2,661.10	90.60	820.20	27.88		
В	93.20	3.17	162.20	5.52	1,648.50	56.03		
С	61.50	2.09	80.30	2.73	431.50	14.67		
D	51.40	1.75	25.20	0.86	41.40	1.41		
F	32.10	1.09	8.40	0.29	0.60	0.02		
Σ	2,940.10	100.00	2,937.20	100.00	2,942.20	100.00		

<u>DIS_6</u>	Summary Scores for 2003						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	2,718.60	94.13	2,683.80	92.98	829.50	28.36	
В	68.30	2.36	120.20	4.16	1,681.90	57.51	
С	40.00	1.39	62.90	2.18	381.40	13.04	
D	33.30	1.15	14.40	0.50	30.60	1.05	
F	27.80	0.96	5.10	0.18	1.30	0.04	
Σ	2,888.00	100.00	2,886.40	100.00	2,924.70	100.00	

7. San Angelo District Rural County Summary Scores for 2001, 2002, and 2003

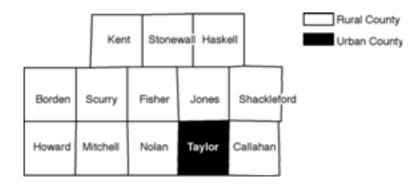


<u>DIS_7</u>	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	2,363.20	84.07	2,330.00	82.89	592.60	19.80	
В	157.10	5.59	292.80	10.42	1,723.30	57.57	
С	119.60	4.25	139.10	4.95	650.20	21.72	
D	96.90	3.45	27.20	0.97	26.40	0.88	
F	74.30	2.64	22.00	0.78	1.10	0.04	
Σ	2,811.10	100.00	2,811.10	100.00	2,993.60	100.00	

<u>DIS_7</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	2,460.60	85.89	2,409.40	84.35	1,006.90	17.22	
В	145.00	5.06	266.30	9.32	3,357.00	57.40	
C	103.40	3.61	132.30	4.63	1,413.40	24.17	
D	90.70	3.17	28.10	0.98	68.30	1.17	
F	65.20	2.28	20.30	0.71	2.80	0.05	
Σ	2,864.90	100.00	2,856.40	100.00	5,848.40	100.00	

<u>DIS_7</u>		Summary Scores for 2003						
Grade	Distress	Score	Condition	Condition Score		core		
Grade	Length	%	Length	%	Length	%		
A	2,488.90	86.03	2,443.70	84.73	500.50	17.22		
В	171.20	5.92	282.60	9.80	1,794.90	61.76		
С	97.60	3.37	105.80	3.67	580.20	19.96		
D	70.50	2.44	24.70	0.86	29.90	1.03		
F	64.80	2.24	27.20	0.94	0.90	0.03		
Σ	2,893.00	100.00	2,884.00	100.00	2,906.40	100.00		

8. Abilene District Rural County Summary Scores for 2001, 2002, and 2003

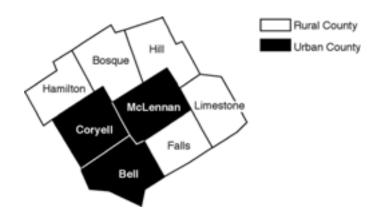


<u>DIS_8</u>	Summary Scores for 2001						
	Distress	Score	Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	2,911.90	79.00	2,774.90	75.29	628.60	17.05	
В	191.90	5.21	386.90	10.50	1,803.50	48.93	
C	129.50	3.51	194.30	5.27	927.30	25.16	
D	107.20	2.91	47.70	1.29	82.20	2.23	
F	345.30	9.37	282.00	7.65	244.20	6.63	
Σ	3,685.80	100.00	3,685.80	100.00	3,685.80	100.00	

DIS 8	Summary Scores for 2002						
Cwada	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	3,043.90	89.09	2,884.10	84.53	507.80	14.73	
В	121.80	3.56	299.60	8.78	1,765.10	51.21	
С	94.40	2.76	174.10	5.10	1,073.20	31.13	
D	80.30	2.35	38.90	1.14	97.40	2.83	
F	76.40	2.24	15.30	0.45	3.50	0.10	
\sum	3,416.80	100.00	3,412.00	100.00	3,447.00	100.00	

<u>DIS_8</u>	Summary Scores for 2003						
Cwada	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	3,066.60	88.43	2,912.00	84.04	479.10	13.78	
В	118.10	3.41	292.80	8.45	1,857.20	53.42	
С	96.70	2.79	196.30	5.66	1,044.10	30.03	
D	118.00	3.40	35.60	1.03	94.00	2.70	
F	68.30	1.97	28.50	0.82	1.90	0.05	
Σ	3,467.70	100.00	3,465.20	100.00	3,476.30	100.00	

9. Waco District Rural County Summary Scores for 2001, 2002, and 2003

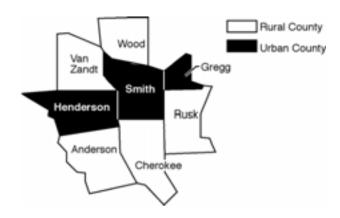


DIS 9	Summary Scores for 2001						
Grade	Distress Score		Condition	Condition Score		core	
	Length	%	Length	%	Length	%	
A	1,457.90	80.96	1,389.70	77.19	299.50	16.51	
В	133.60	7.42	262.40	14.58	892.70	49.22	
С	96.30	5.35	100.70	5.59	580.40	32.00	
D	67.40	3.74	27.80	1.54	40.90	2.26	
F	45.60	2.53	19.70	1.09	0.20	0.01	
Σ	1,800.80	100.00	1,800.30	100.00	1,813.70	100.00	

DIS 9	Summary Scores for 2002							
Grade	Distress Score		Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	1,462.50	79.88	1,394.80	76.26	274.70	14.71		
В	113.80	6.22	221.20	12.09	924.40	49.52		
С	82.00	4.48	133.70	7.31	622.30	33.33		
D	95.10	5.19	38.20	2.09	45.00	2.41		
F	77.40	4.23	41.00	2.24	0.50	0.03		
Σ	1,830.80	100.00	1,828.90	100.00	1,866.90	100.00		

DIS_9	Summary Scores for 2003							
Grade	Distress Score		Condition Score		Ride Score			
	Length	%	Length	%	Length	%		
A	1,415.60	78.57	1,357.00	75.42	312.10	17.19		
В	131.10	7.28	238.80	13.27	980.70	54.01		
С	82.30	4.57	123.30	6.85	478.00	26.32		
D	74.80	4.15	42.70	2.37	43.90	2.42		
F	98.00	5.44	37.40	2.08	1.20	0.07		
Σ	1,801.80	100.00	1,799.20	100.00	1,815.90	100.00		

10. Tyler District Rural County Summary Scores for 2001, 2002 and 2003

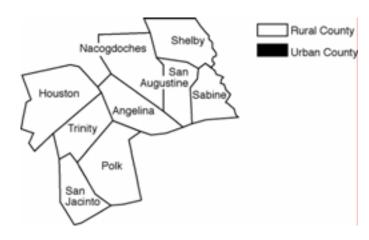


<u>DIS_10</u>	Summary Scores for 2001							
	Distress Score		Condition	n Score	Ride Score			
Grade	Length	%	Length	%	Length	%		
A	1,687.60	71.09	1,573.40	66.30	380.60	15.51		
В	241.90	10.19	560.90	23.64	1,392.20	56.73		
С	279.10	11.76	189.20	7.97	665.70	27.12		
D	106.80	4.50	34.50	1.45	15.60	0.64		
F	58.60	2.47	15.00	0.63	0.10	0.00		
Σ	2,374.00	100.00	2,373.00	100.00	2,454.20	100.00		

<u>DIS_10</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	1,734.20	69.32	1,550.80	62.07	319.70	12.78	
В	244.30	9.76	629.60	25.20	1,241.40	49.63	
С	320.20	12.80	233.60	9.35	900.40	36.00	
D	108.90	4.35	55.30	2.21	39.70	1.59	
F	94.30	3.77	29.20	1.17	0.20	0.01	
Σ	2,501.90	100.00	2,498.50	100.00	2,501.40	100.00	

DIS_10	Summary Scores for 2003							
Grade	Distress	Score	Condition	Condition Score		core		
	Length	%	Length	%	Length	%		
A	1,447.20	58.66	1,312.50	53.26	336.10	13.40		
В	317.10	12.85	669.80	27.18	1,240.40	49.45		
С	358.00	14.51	318.60	12.93	897.20	35.77		
D	162.50	6.59	101.10	4.10	34.00	1.36		
F	182.10	7.38	62.30	2.53	0.70	0.03		
${\sum}$	2,466.90	100.00	2,464.30	100.00	2,508.40	100.00		

11. Lufkin District Rural County Summary Scores for 2001, 2002, and 2003



<u>DIS 11</u>	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	2,124.90	74.49	1,592.60	58.22	359.70	12.64	
В	198.40	6.96	460.60	16.84	974.90	34.26	
С	163.40	5.73	384.80	14.07	1,166.80	41.00	
D	190.70	6.69	172.30	6.30	340.80	11.98	
F	175.20	6.14	125.40	4.58	3.50	0.12	
Σ	2,852.60	100.00	2,735.70	100.00	2,845.70	100.00	

<u>DIS_11</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	2,229.20	77.44	1,963.40	68.24	589.10	19.95	
В	153.20	5.32	422.40	14.68	1,184.00	40.10	
С	152.40	5.29	296.60	10.31	1,040.90	35.25	
D	181.70	6.31	114.10	3.97	134.70	4.56	
F	162.30	5.64	80.80	2.81	3.80	0.13	
Σ	2,878.80	100.00	2,877.30	100.00	2,952.50	100.00	

DIS_11		Summary Scores for 2003							
Cuada	Distress	Score	Condition	Condition Score		core			
Grade	Length	%	Length	%	Length	%			
A	2,239.60	77.68	2,029.20	70.42	514.10	17.54			
В	186.90	6.48	439.30	15.25	1,296.60	44.23			
С	158.40	5.49	287.40	9.97	1,034.60	35.29			
D	180.50	6.26	69.60	2.42	86.00	2.93			
F	117.70	4.08	56.00	1.94	0.40	0.01			
Σ	2,883.10	100.00	2,881.50	100.00	2,931.70	100.00			

13. Yoakum District Rural County Summary Scores for 2001, 2002, and 2003

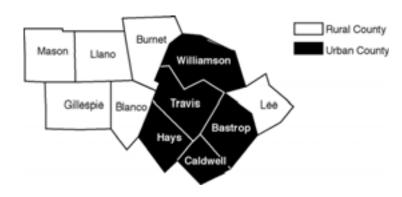


DIS_13	Summary Scores for 2001						
Grade	Distress	Score	Condition	Condition Score		core	
	Length	%	Length	%	Length	%	
A	2,206.60	68.92	2,015.80	63.04	816.80	24.58	
В	323.40	10.10	613.40	19.18	1,266.60	38.12	
C	234.60	7.33	364.20	11.39	1,105.40	33.26	
D	199.90	6.24	109.50	3.42	133.00	4.00	
F	237.10	7.41	94.60	2.96	1.30	0.04	
Σ	3,201.60	100.00	3,197.50	100.00	3,323.10	100.00	

<u>DIS_13</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	2,323.90	70.26	2,122.50	64.25	896.50	25.79	
В	304.90	9.22	629.60	19.06	1,358.50	39.08	
С	266.00	8.04	397.30	12.03	1,109.80	31.93	
D	241.80	7.31	90.20	2.73	109.80	3.16	
F	170.80	5.16	63.90	1.93	1.50	0.04	
Σ	3,307.40	100.00	3,303.50	100.00	3,476.10	100.00	

<u>DIS 13</u>	Summary Scores for 2003						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	2,520.50	74.72	2,338.20	69.34	863.30	24.95	
В	265.90	7.88	540.40	16.03	1,385.30	40.03	
С	210.10	6.23	336.90	9.99	1,099.00	31.76	
D	232.70	6.90	86.10	2.55	110.90	3.20	
F	144.20	4.27	70.50	2.09	2.10	0.06	
Σ	3,373.40	100.00	3,372.10	100.00	3,460.60	100.00	

14. Austin District Rural County Summary Scores for 2001, 2002, and 2003



DIS_14	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	1,003.30	75.69	985.00	74.34	235.60	17.44	
В	104.50	7.88	234.00	17.66	845.80	62.62	
С	121.80	9.19	94.00	7.09	268.20	19.86	
D	67.90	5.12	9.70	0.73	1.00	0.07	
F	28.10	2.12	2.30	0.17	0.00	0.00	
\sum	1,325.60	100.00	1,325.00	100.00	1,350.60	100.00	

<u>DIS 14</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	949.60	69.71	930.60	68.34	227.20	16.64	
В	127.20	9.34	281.10	20.64	856.50	62.73	
С	143.80	10.56	131.30	9.64	280.20	20.52	
D	104.30	7.66	15.20	1.12	1.40	0.10	
F	37.30	2.74	3.50	0.26	0.00	0.00	
Σ	1,362.20	100.00	1,361.70	100.00	1,365.30	100.00	

DIS 14	Summary Scores for 2003						
Grade	Distress	Score	Condition	Condition Score		core	
	Length	%	Length	%	Length	%	
A	982.70	73.11	962.90	71.66	230.00	16.92	
В	117.40	8.73	256.90	19.12	877.90	64.59	
С	131.50	9.78	106.50	7.93	249.70	18.37	
D	78.20	5.82	10.50	0.78	1.50	0.11	
F	34.40	2.56	6.90	0.51	0.10	0.01	
${\sum}$	1,344.20	100.00	1,343.70	100.00	1,359.20	100.00	

15. San Antonio District Rural County Summary Scores for 2001, 2002, and 2003

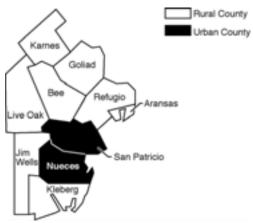


<u>DIS_15</u>	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	1,876.80	78.34	1,671.50	69.77	401.80	16.67	
В	192.10	8.02	400.50	16.72	1,036.20	42.98	
С	130.60	5.45	202.20	8.44	850.70	35.29	
D	93.30	3.89	71.00	2.96	118.90	4.93	
F	103.00	4.30	50.60	2.11	3.30	0.14	
Σ	2,395.80	100.00	2,395.80	100.00	2,410.90	100.00	

<u>DIS 15</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	1,939.70	80.26	1,769.90	73.35	426.50	17.33	
В	146.70	6.07	329.40	13.65	1,156.60	46.99	
С	117.70	4.87	191.00	7.92	782.70	31.80	
D	101.20	4.19	71.90	2.98	87.90	3.57	
F	111.50	4.61	50.80	2.11	7.50	0.30	
Σ	2,416.80	100.00	2,413.00	100.00	2,461.20	100.00	

DIS 15	Summary Scores for 2003						
Cuada	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	1,977.50	80.79	1,819.10	74.35	420.80	17.12	
В	145.90	5.96	332.70	13.60	1,149.00	46.76	
С	125.50	5.13	187.00	7.64	783.40	31.88	
D	103.80	4.24	68.90	2.82	100.40	4.09	
F	94.90	3.88	38.90	1.59	3.70	0.15	
Σ	2,447.60	100.00	2,446.60	100.00	2,457.30	100.00	

16. Corpus Christi District Rural County Summary Scores for 2001, 2002, and 2003



DIS_16	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	3,125.00	76.34	2,809.00	68.63	742.50	16.75	
В	249.40	6.09	573.60	14.01	1,925.10	43.43	
С	190.20	4.65	506.40	12.37	1,552.60	35.02	
D	231.80	5.66	131.30	3.21	210.50	4.75	
F	297.30	7.26	72.50	1.77	2.30	0.05	
Σ	4,093.70	100.00	4,092.80	100.00	4,433.00	100.00	

<u>DIS_16</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	1,646.40	77.90	1,488.30	70.46	363.70	16.44	
В	131.70	6.23	303.50	14.37	933.60	42.19	
С	104.50	4.94	223.30	10.57	817.40	36.94	
D	112.30	5.31	64.90	3.07	96.40	4.36	
F	118.70	5.62	32.30	1.53	1.60	0.07	
Σ	2,113.60	100.00	2,112.30	100.00	2,212.70	100.00	

<u>DIS_16</u>	Summary Scores for 2003						
Grade	Distress	Score	Conditio	Condition Score		core	
	Length	%	Length	%	Length	%	
A	1,706.00	77.24	1,527.50	69.19	424.10	19.10	
В	155.30	7.03	345.00	15.63	862.00	38.82	
С	116.90	5.29	216.10	9.79	824.40	37.13	
D	110.30	4.99	75.20	3.41	107.20	4.83	
F	120.10	5.44	43.90	1.99	2.60	0.12	
Σ	2,208.60	100.00	2,207.70	100.00	2,220.30	100.00	

17. Bryan District Rural County Summary Scores for 2001, 2002, and 2003

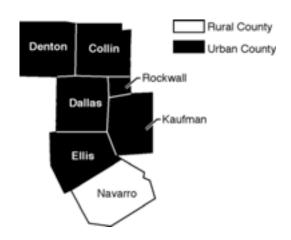


<u>DIS_17</u>	Summary Scores for 2001						
	Distress	Score	Condition	Condition Score		core	
Grade	Length	%	Length	%	Length	%	
A	2,233.50	77.70	1,950.80	67.88	554.50	18.61	
В	148.20	5.16	378.80	13.18	1,184.90	39.76	
С	119.20	4.15	285.80	9.94	1,073.50	36.02	
D	151.60	5.27	127.50	4.44	164.30	5.51	
F	222.00	7.72	131.10	4.56	2.90	0.10	
Σ	2,874.50	100.00	2,874.00	100.00	2,980.10	100.00	

<u>DIS 17</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	2,234.50	78.52	1,997.90	70.27	621.10	21.10	
В	139.00	4.88	352.70	12.41	1,196.90	40.65	
С	120.60	4.24	268.10	9.43	1,017.10	34.55	
D	155.90	5.48	121.40	4.27	105.60	3.59	
F	195.70	6.88	103.10	3.63	3.40	0.12	
Σ	2,845.70	100.00	2,843.20	100.00	2,944.10	100.00	

<u>DIS 17</u>	Summary Scores for 2003						
Grade	Distress	Score	Condition	Condition Score		core	
	Length	%	Length	%	Length	%	
A	2,347.70	79.83	2,118.50	72.16	729.00	24.55	
В	159.20	5.41	383.80	13.07	1,078.30	36.31	
С	164.70	5.60	254.90	8.68	1,056.00	35.56	
D	140.30	4.77	105.40	3.59	104.20	3.51	
F	129.10	4.39	73.30	2.50	2.20	0.07	
Σ	2,941.00	100.00	2,935.90	100.00	2,969.70	100.00	

18. Dallas District Rural County Summary Scores for 2001, 2002, and 2003

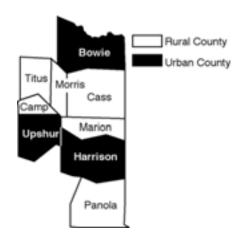


DIS 18	Summary Scores for 2001						
	Distress Score		Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	343.90	65.18	299.70	56.97	73.20	12.65	
В	35.30	6.69	67.10	12.75	209.30	36.17	
С	20.60	3.90	60.20	11.44	252.40	43.61	
D	26.90	5.10	34.80	6.61	43.30	7.48	
F	100.90	19.12	64.30	12.22	0.50	0.09	
Σ	527.60	100.00	526.10	100.00	578.70	100.00	

<u>DIS_18</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	301.30	56.14	265.10	49.44	41.00	7.26	
В	36.90	6.88	74.00	13.80	217.10	38.46	
С	33.10	6.17	84.50	15.76	266.90	47.28	
D	64.90	12.09	42.90	8.00	38.50	6.82	
F	100.50	18.73	69.70	13.00	1.00	0.18	
Σ	536.70	100.00	536.20	100.00	564.50	100.00	

DIS 18	Summary Scores for 2003						
Grade	Distress Score		Condition Score		Ride Score		
	Length	%	Length	%	Length	%	
A	313.40	66.01	262.90	55.58	49.00	8.97	
В	46.90	9.88	92.20	19.49	211.90	38.80	
С	21.40	4.51	52.30	11.06	246.50	45.14	
D	27.00	5.69	29.30	6.19	37.60	6.89	
F	66.10	13.92	36.30	7.67	1.10	0.20	
Σ	474.80	100.00	473.00	100.00	546.10	100.00	

19. Atlanta District Rural County Summary Scores for 2001, 2002, and 2003



DIS_19	Summary Scores for 2001							
	Distress Score		Condition Score		Ride Score			
Grade	Length	%	Length	%	Length	%		
A	1,214.20	88.51	1,061.90	77.47	218.00	15.50		
В	93.40	6.81	219.10	15.98	639.00	45.45		
C	37.60	2.74	66.20	4.83	534.20	37.99		
D	16.20	1.18	14.10	1.03	14.50	1.03		
F	10.40	0.76	9.50	0.69	0.30	0.02		
Σ	1,371.80	100.00	1,370.80	100.00	1,406.00	100.00		

<u>DIS_19</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	1,032.80	76.22	931.30	68.88	282.60	20.10	
В	173.80	12.83	291.60	21.57	648.80	46.15	
С	75.00	5.54	101.40	7.50	465.00	33.07	
D	55.00	4.06	18.30	1.35	9.20	0.65	
F	18.40	1.36	9.40	0.70	0.40	0.03	
Σ	1,355.00	100.00	1,352.00	100.00	1,406.00	100.00	

DIS 19	Summary Scores for 2003							
- C 1	Distress	Score	Condition	n Score	Ride S	core		
Grade	Length	%	Length	%	Length	%		
A	1,179.30	85.23	1,083.10	78.47	316.50	22.34		
В	95.20	6.88	193.10	13.99	654.40	46.19		
C	49.10	3.55	75.40	5.46	436.20	30.79		
D	33.60	2.43	18.20	1.32	9.00	0.64		
F	26.40	1.91	10.50	0.76	0.70	0.05		
Σ	1,383.60	100.00	1,380.30	100.00	1,416.80	100.00		

20. Beaumont District Rural County Summary Scores for 2001, 2002, and 2003



DIS 20						
	Distre	ess Score	Condit	Condition Score		Score
Grade	Length	%	Length	%	Length	%
A	693.20	79.96	660.20	77.68	81.30	9.49
В	45.80	5.28	91.60	10.78	627.70	73.24
С	44.00	5.08	66.20	7.79	144.60	16.87
D	42.90	4.95	17.30	2.04	3.30	0.39
F	41.00	4.73	14.60	1.72	0.20	0.02
Σ	866.90	100.00	849.90	100.00	857.10	100.00

<u>DIS_20</u>	Summary Scores for 2002							
Grade	Distress Score		Condition Score		Ride Score			
Grade	Length	%	Length	%	Length	%		
A	628.30	73.03	610.10	70.97	79.00	9.16		
В	69.70	8.10	123.80	14.40	634.00	73.50		
С	48.40	5.63	78.10	9.09	149.00	17.27		
D	44.10	5.13	29.00	3.37	0.60	0.07		
F	69.80	8.11	18.60	2.16	0.00	0.00		
Σ	860.30	100.00	859.60	100.00	862.60	100.00		

DIS 20	Summary Scores for 2003							
Grade	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length	%	Length	%	Length	%		
A	488.40	59.36	476.10	57.94	80.40	9.34		
В	80.00	9.72	163.80	19.93	644.70	74.87		
С	82.20	9.99	132.80	16.16	134.50	15.62		
D	74.80	9.09	30.90	3.76	1.50	0.17		
F	97.40	11.84	18.10	2.20	0.00	0.00		
Σ	822.80	100.00	821.70	100.00	861.10	100.00		

21. Pharr District Rural County Summary Scores for 2001, 2002, and 2003

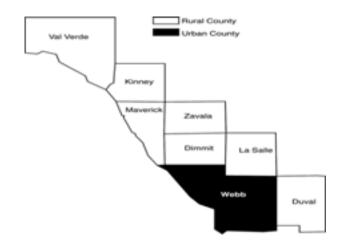


DIS_21	Summary Scores for 2001							
	Distres	s Score	Condition Score		Ride Score			
Grade	Length	%	Length	%	Length	%		
A	830.80	89.57	814.00	87.77	412.20	44.42		
В	47.10	5.08	79.60	8.58	405.20	43.67		
С	23.50	2.53	29.50	3.18	105.00	11.32		
D	13.30	1.43	3.30	0.36	5.50	0.59		
F	12.80	1.38	1.00	0.11	0.00	0.00		
${\sum}$	927.50	100.00	927.40	100.00	927.90	100.00		

<u>DIS 21</u>	Summary Scores for 2002							
Grade	Distres	s Score	Condition	Condition Score		Score		
Grade	Length	%	Length	%	Length	%		
A	763.10	84.60	740.90	82.14	405.50	44.14		
В	51.20	5.68	87.80	9.73	391.40	42.61		
С	25.40	2.82	54.40	6.03	114.70	12.49		
D	29.90	3.31	11.40	1.26	6.00	0.65		
F	32.40	3.59	7.50	0.83	1.00	0.11		
Σ	902.00	100.00	902.00	100.00	918.60	100.00		

<u>DIS 21</u>	Summary Scores for 2003							
<u> </u>	Distres	s Score	Condition	Condition Score		Score		
Grade	Length	%	Length	%	Length	%		
A	780.50	82.53	765.70	80.97	455.90	47.99		
В	71.90	7.60	106.40	11.25	385.20	40.55		
С	26.40	2.79	69.70	7.37	105.40	11.09		
D	33.40	3.53	3.90	0.41	3.50	0.37		
F	33.50	3.54	0.00	0.00	0.00	0.00		
Σ	945.70	100.00	945.70	100.00	950.00	100.00		

22. Laredo District Rural County Summary Scores for 2001, 2002, and 2003

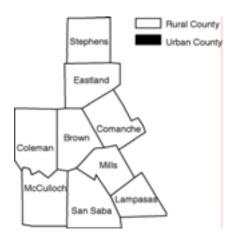


DIS_22	Summary Scores for 2001							
Grade	Distress	Score	Condition	Condition Score		core		
Grade	Length	%	Length	%	Length	%		
A	1,497.80	82.01	1,180.20	64.86	114.10	6.21		
В	142.00	7.77	294.80	16.20	684.00	37.22		
С	65.80	3.60	189.00	10.39	751.30	40.88		
D	49.50	2.71	73.50	4.04	268.80	14.63		
F	71.30	3.90	82.10	4.51	19.70	1.07		
${\sum}$	1,826.40	100.00	1,819.60	100.00	1,837.90	100.00		

<u>DIS 22</u>	Summary Scores for 2002						
Grade	Distress Score		Condition Score		Ride Score		
Grade	Length	%	Length	%	Length	%	
A	1,474.80	79.84	1,251.40	67.86	185.60	9.86	
В	106.00	5.74	260.50	14.13	726.50	38.58	
С	56.00	3.03	185.80	10.07	766.40	40.69	
D	77.10	4.17	75.60	4.10	195.20	10.36	
F	133.40	7.22	70.90	3.84	9.60	0.51	
Σ	1,847.30	100.00	1,844.20	100.00	1,883.30	100.00	

DIS_22	Summary Scores for 2003							
Grade	Distress	Score	Condition	Condition Score		core		
	Length	%	Length	%	Length	%		
A	1,396.50	75.23	1,211.00	65.39	167.00	8.88		
В	116.60	6.28	279.90	15.11	770.00	40.95		
С	79.40	4.28	214.80	11.60	766.00	40.74		
D	88.00	4.74	83.70	4.52	170.00	9.04		
F	175.80	9.47	62.70	3.39	7.30	0.39		
Σ	1,856.30	100.00	1,852.10	100.00	1,880.30	100.00		

23. Brownwood District Rural County Summary Scores for 2001, 2002, and 2003

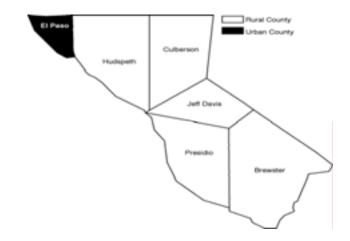


DIS 23	Summary Scores for 2001									
	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	2,265.50	82.22	2,208.90	80.55	313.50	11.42				
В	186.60	6.77	359.90	13.12	1,636.40	59.61				
C	165.00	5.99	150.10	5.47	770.40	28.06				
D	108.90	3.95	14.20	0.52	24.70	0.90				
F	29.30	1.06	9.10	0.33	0.10	0.00				
Σ	2,755.30	100.00	2,742.20	100.00	2,745.10	100.00				

DIS_23	Summary Scores for 2002								
C 1-	Distress	Score	Condition	n Score	Ride S	core			
Grade	Length	%	Length	%	Length	%			
A	2,155.10	78.65	2,096.20	76.53	245.50	8.95			
В	211.30	7.71	412.30	15.05	1,597.70	58.27			
С	190.30	6.95	188.00	6.86	862.00	31.44			
D	133.00	4.85	23.70	0.87	36.70	1.34			
F	50.40	1.84	19.00	0.69	0.20	0.01			
\sum	2,740.10	100.00	2,739.20	100.00	2,742.10	100.00			

DIS 23	Summary Scores for 2003								
Grade	Distress	Score	Condition	n Score	Ride S	core			
Grade	Length	%	Length	%	Length	%			
A	2,248.10	83.64	2,204.30	82.02	412.20	15.32			
В	156.00	5.80	343.10	12.77	1,593.70	59.24			
С	163.90	6.10	117.60	4.38	665.50	24.74			
D	92.90	3.46	13.40	0.50	18.50	0.69			
F	26.90	1.00	9.10	0.34	0.20	0.01			
Σ	2,687.80	100.00	2,687.50	100.00	2,690.10	100.00			

24. El Paso District Rural County Summary Scores for 2001, 2002, and 2003

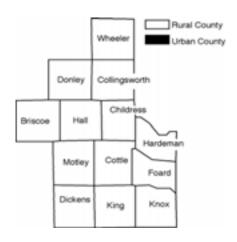


<u>DIS_24</u>	Summary Scores for 2001									
	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	1,219.20	78.99	1,087.00	70.68	198.50	12.81				
В	83.40	5.40	194.10	12.62	824.90	53.24				
С	76.00	4.92	160.30	10.42	376.20	24.28				
D	78.90	5.11	65.00	4.23	143.20	9.24				
F	86.00	5.57	31.50	2.05	6.50	0.42				
Σ	1,543.50	100.00	1,537.90	100.00	1,549.30	100.00				

DIS 24	Summary Scores for 2002									
Grade	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	868.20	59.37	786.50	53.87	227.90	15.51				
В	364.00	24.89	472.30	32.35	733.50	49.93				
С	146.40	10.01	117.50	8.05	372.10	25.33				
D	40.30	2.76	46.60	3.19	129.20	8.79				
F	43.50	2.97	37.20	2.55	6.50	0.44				
Σ	1,462.40	100.00	1,460.10	100.00	1,469.20	100.00				

<u>DIS 24</u>	Summary Scores for 2003									
Grade	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	1,299.90	86.54	1,118.50	75.04	181.10	12.13				
В	80.60	5.37	194.10	13.02	769.50	51.54				
С	64.80	4.31	98.90	6.64	376.50	25.22				
D	29.70	1.98	47.50	3.19	152.50	10.21				
F	27.00	1.80	31.50	2.11	13.50	0.90				
Σ	1,502.00	100.00	1,490.50	100.00	1,493.10	100.00				

25. Childress District Rural County Summary Scores for 2001, 2002, and 2003



DIS 25	Summary Scores for 2001									
	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	1,816.10	69.77	1,790.40	68.96	511.70	19.42				
В	430.00	16.52	608.40	23.43	1,574.30	59.75				
С	170.90	6.57	173.80	6.69	538.80	20.45				
D	131.10	5.04	13.80	0.53	9.30	0.35				
F	54.80	2.11	9.80	0.38	0.80	0.03				
${\sum}$	2,602.90	100.00	2,596.20	100.00	2,634.90	100.00				

DIS_25	Summary Scores for 2002									
Grade	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	2,141.90	82.33	2,110.40	81.32	463.30	17.58				
В	141.00	5.42	310.90	11.98	1,544.10	58.59				
С	159.30	6.12	149.40	5.76	612.80	23.25				
D	115.50	4.44	10.60	0.41	14.60	0.55				
F	43.90	1.69	13.90	0.54	0.60	0.02				
Σ	2,601.60	100.00	2,595.20	100.00	2,635.40	100.00				

DIS 25	Summary Scores for 2003									
Grade	Distress	Score	Condition	n Score	Ride S	core				
Grade	Length	%	Length	%	Length	%				
A	1,937.10	74.47	1,911.80	73.64	491.00	18.88				
В	276.30	10.62	447.00	17.22	1,513.40	58.18				
С	166.60	6.40	221.00	8.51	582.20	22.38				
D	164.60	6.33	10.60	0.41	13.60	0.52				
F	56.60	2.18	5.80	0.22	1.00	0.04				
$\frac{\sum}{\sum}$	2,601.20	100.00	2,596.20	100.00	2,601.20	100.00				

DISTRICT AND COUNTY NUMBER (RURAL)

COUNTY NAME	CNT	DST	COUNTY NAME	CNT	DST	COUNTY NAME	CNT	DST
Anderson	1	10	Gillespie	87	14	Morris	172	19
Andrews	2	6	Glasscock	88	7	Motley	173	25
Angelina	3	11	Goliad	89	16	Nacogdoches	174	11
Aransas	4	16	Gonzales	90	13	Navarro	175	18
Armstrong	6	4	Gray	91	4	Newton	176	20
Atascosa	7	15	Grimes	94	17	Nolan	177	8
Austin	8	13	Hale	96	5	Ochiltree	179	4
Bailey	9	5	Hall	97	25	Oldham	180	4
Bandera	10	15	Hamilton	98	9	Palo Pinto	182	2
Baylor	12	3	Hansford	99	4	Panola	183	19
Bee	13	16	Hardeman	100	25	Parmer	185	5
Blanco	16	14	Hartley	104	4	Pecos	186	6
Borden	17	8	Haskell	105	8	Polk	187	11
Bosque	18	9	Hemphill	107	4	Presidio	189	24
Brewster	22	24	Hill	110	9	Rains	190	1
Briscoe	23	25	Hockley	111	5	Reagan	192	7
Brooks	24	21	Hopkins	113	1	Real	193	7
Brown	25	23	Houston	113	11	Red River	194	1
Burleson	26	17	Howard	115	8	Reeves	194	6
Burnet	27	14	Hudspeth	116	24	Refugio	196	16
Calhoun			Hudspein Hutchinson					
Callahan	29	13 8	Irion	118	7	Roberts Robertson	197	4
	30			119			198	17
Camp	32	19	Jack	120	2	Runnels	200	7
Carson	33	4	Jackson	121	13	Rusk	201	10
Cass	34	19	Jasper	122	20	Sabine	202	11
Castro	35	5	Jeff Davis	123	24	San Augustine	203	11
Cherokee	37	10	Jim Hogg	125	21	San Jacinto	204	11
Childress	38	25	Jim Wells	126	16	San Saba	206	23
Clay	39	3	Jones	128	8	Schleicher	207	7
Cochran	40	5	Karnes	129	16	Scurry	208	8
Coke	41	7	Kendall	131	15	Shackelford	209	8
Coleman	42	23	Kent	132	8	Shelby	210	11
Collingsworth	44	25	Kerr	133	15	Sherman	211	4
Colorado	45	13	Kimble	134	7	Somervell	213	2
Comanche	47	23	King	135	25	Starr	214	21
Concho	48	7	Kinney	136	22	Stephens	215	23
Cooke	49	3	Kleberg	137	16	Sterling	216	7
Cottle	51	25	Knox	138	25	Stonewall	217	8
Crane	52	6	Lamar	139	1	Sutton	218	7
Crockett	53	7	Lamb	140	5	Swisher	219	5
Crosby	54	5	Lampasas	141	23	Terrell	222	6
Culberson	55	24	La Salle	142	22	Terry	223	5
Dallam	56	4	Lavaca	143	13	Throckmorton	224	3
Dawson	58	5	Lee	144	14	Titus	225	19
Deaf smith	59	4	Leon	145	17	Trinity	228	11
Delta	60	1	Limestone	147	9	Tyler	229	20
	62	13	Lipscomb	148	4	Upton	231	6
DeWitt	02	1 13						
DeWitt Dickens	63	25	Live Oak	149	16	Uvalde	232	15

COUNTY NAME	CNT	DST	COUNTY NAME	CNT	DST	COUNTY NAME	CNT	DST
Donley	65	25	Loving	151	6	Van Zandt	234	10
Kenedy	66	21	Lynn	153	5	Walker	236	17
Duval	67	22	Madison 154 17 Ward		238	6		
Eastland	68	23	Marion	155	19	Washington	239	17
Edwards	70	7	Martin	156	6	Wharton	241	13
Erath	73	2	Mason	157	14	Wheeler	242	25
Falls	74	9	Matagorda	158	13	Wilbarger	244	3
Fannin	75	1	Maverick	159	22	Willacy	245	21
Fayette	76	13	McCulloch	160	23	Winkler	248	6
Fisher	77	8	McMullen	162	15	Wise	249	2
Floyd	78	5	Medina	163	15	Wood	250	10
Foard	79	25	Menard	164	7	Yoakum	251	5
Franklin	81	1	Milam	166	17	Young	252	3
Freestone	82	17	Mills	167	23	Zapata	253	21
Frio	83	15	Mitchell	168	8	Zavala	254	3
Gaines	84	5	Montague	169	3			
Garza	86	5	Moore	171	4			

Appendix G: TxDOT Rural Highway System Summary Scores (2001, 2002, and 2003)

		Sumn	nary Scores for	r 2001						
<u>PMIS</u>	Distres	ss Score	Condition	on Score	Ride	Score				
Grade	Length	Percentage	Length	Percentage	Length	Percentage				
A	42372.4	75.7	39147.6	70.3	11513.1	19.4				
В	4203.6	7.5	8291.8	14.9	28876.8	48.8				
С	3055.7	5.5	4684.9	8.4	16127.4	27.2				
D	2503.2	4.5	1384.4	2.5	1981.9	3.3				
F	3807.2	6.8	2199.7	3.9	707.3	1.2				
Σ	55942.1	100.0	55708.4	100.0	59206.5	100.0				
Summary Scores for 2002										
<u>PMIS</u>	Distres	ss Score	Condition	on Score	Ride	Score				
Grade	Length	Percentage	Length	Percentage	Length	Percentage				
A	42530.5	77.4	39883.9	72.7	11226.5	19.0				
В	4046.6	7.4	8074.0	14.7	29498.0	49.9				
С	3110.0	5.7	4689.8	8.5	16835.4	28.5				
D	2781.8	5.1	1312.3	2.4	1557.7	2.6				
F	2510.1	4.6	926.5	1.7	48.9	0.1				
Σ	54979.0	100.0	54886.5	100.0	59166.5	100.0				
	•	Sumn	nary Scores for	r 2003		•				
<u>PMIS</u>	Distres	ss Score	Condition	on Score	Ride	Score				
Grade	Length	Percentage	Length	Percentage	Length	Percentage				
A	43414.8	78.4	40953.0	74.1	10969.7	19.6				
В	3784.0	6.8	7623.1	13.8	28283.4	50.4				
С	2991.5	5.4	4544.9	8.2	15362.9	27.4				
D	2635.7	4.8	1291.9	2.3	1406.2	2.5				
F	2563.8	4.6	878.5	1.6	49.0	0.1				
Σ	55389.8	100.0	55291.4	100.0	56071.2	100.0				

		Sumn	nary Scores for	r 2001				
BR	Distre	ss Score	Condition	on Score	Ride	Score		
Grade	Length	Percentage	Length	Percentage	Length	Percentage		
A	202.1	53.9	151.5	40.7	48.5	11.6		
В	41.7	11.1	75.0	20.1	223.3	53.6		
С	31.3	8.3	58.5	15.7	115.5	27.7		
D	27.8	7.4	31.9	8.6	13.7	3.3		
F	72.4	19.3	55.6	14.9	15.6	3.7		
Σ	375.3	100.0	372.5	100.0	416.6	100.0		
Summary Scores for 2002								
BR	Distre	ss Score	Condition	Condition Score		Score		
Grade	Length	Percentage	Length	Percentage	Length	Percentage		
A	223.0	62.0	178.3	50.3	46.6	12.5		
В	45.7	12.7	83.0	23.4	200.7	53.8		
С	33.5	9.3	50.9	14.3	113.9	30.5		
D	23.5	6.5	24.6	6.9	11.6	3.1		
F	33.7	9.4	18.0	5.1	0.2	0.1		
Σ	359.4	100.0	354.8	100.0	373.0	100.0		
		Sumn	nary Scores for	r 2003		•		
BR	Distre	ss Score	Condition	on Score	Ride	Score		
Grade	Length	Percentage	Length	Percentage	Length	Percentage		
A	234.5	67.0	188.8	54.5	53.7	15.2		
В	39.4	11.3	71.4	20.6	192.4	54.3		
С	22.7	6.5	36.4	10.5	94.2	26.6		
D	15.5	4.4	25.0	7.2	12.6	3.6		
F	37.7	10.8	24.7	7.1	1.5	0.4		
Σ	349.8	100.0	346.3	100.0	354.4	100.0		

		Sumn	nary Scores fo	or 2001		
<u>FM</u>	Distre	ss Score	Conditi	on Score	Ride Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	22112.2	74.7	19940.4	67.5	1890.3	6.1
В	2311.8	7.8	4852.8	16.4	14402.2	46.5
С	1796.4	6.1	2750.9	9.3	12716.5	41.0
D	1469.6	5.0	807.8	2.7	1594.2	5.1
F	1920.4	6.5	1172.0	4.0	402.3	1.3
Σ	29610.4	100.0	29523.9	100.0	31005.5	100.0
	1	Sumn	nary Scores fo	or 2002		
<u>FM</u>	Distre	ss Score	Conditi	on Score	Ride	Score
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	22124.1	76.1	20317.0	70.0	1642.4	5.3
В	2216.3	7.6	4689.2	16.2	14566.1	47.2
С	1798.1	6.2	2682.5	9.2	13359.7	43.3
D	1613.6	5.6	785.2	2.7	1247.2	4.0
F	1318.8	4.5	561.1	1.9	31.6	0.1
Σ	29070.9	100.0	29035.0	100.0	30847.0	100.0
	ı	Sumn	nary Scores fo	or 2003		
<u>FM</u>	Distre	ss Score	Conditi	on Score	Ride	Score
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	22413.7	76.8	20789.2	71.3	1551.5	5.3
В	2070.7	7.1	4452.0	15.3	14363.0	48.9
С	1820.8	6.2	2657.4	9.1	12339.3	42.0
D	1605.9	5.5	745.0	2.6	1108.3	3.8
F	1271.1	4.4	511.7	1.8	31.8	0.1
Σ	29182.2	100.0	29155.3	100.0	29393.9	100.0

		Sumn	nary Scores fo	r 2001			
<u>IH</u>	Distre	ss Score	Conditi	on Score	Ride	Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage	
A	3527.8	78.3	3351.2	74.8	2201.6	43.3	
В	314.5	7.0	563.8	12.6	1861.2	36.6	
С	197.6	4.4	304.5	6.8	854.6	16.8	
D	161.8	3.6	117.8	2.6	133.2	2.6	
F	305.2	6.8	141.3	3.2	37.5	0.7	
Σ	4506.9	100.0	4478.6	100.0	5088.1	100.0	
	I	Sumn	nary Scores fo	r 2002			
<u>IH</u>	Distre	ss Score	Conditi	Condition Score		Ride Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage	
A	3613.8	79.4	3485.3	76.9	2330.8	45.9	
В	294.2	6.5	533.3	11.8	1747.2	34.4	
С	205.6	4.5	320.5	7.1	871.1	17.2	
D	193.0	4.2	95.1	2.1	119.7	2.4	
F	244.8	5.4	95.8	2.1	7.7	0.2	
Σ	4551.4	100.0	4530.0	100.0	5076.5	100.0	
	•	Sumn	nary Scores fo	r 2003			
<u>IH</u>	Distre	ss Score	Conditi	on Score	Ride	Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage	
A	3906.2	82.5	3754.1	80.0	2141.3	44.6	
В	289.3	6.1	489.5	10.4	1732.0	36.1	
С	156.1	3.3	262.2	5.6	819.5	17.1	
D	139.4	2.9	91.6	2.0	103.9	2.2	
F	244.0	5.2	92.7	2.0	7.4	0.2	
Σ	4735.0	100.0	4690.1	100.0	4804.1	100.0	

		Sumn	nary Scores fo	r 2001		
PR	Distre	ss Score	Conditi	on Score	Ride	Score
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	162.7	82.1	141.6	71.4	4.0	2.0
В	10.5	5.3	29.1	14.7	99.5	49.6
С	12.4	6.3	15.7	7.9	76.4	38.0
D	6.4	3.2	5.4	2.7	19.3	9.6
F	6.2	3.1	6.4	3.2	1.6	0.8
Σ	198.2	100.0	198.2	100.0	200.8	100.0
	1	Summ	nary Scores fo	r 2002		<u>I</u>
PR	Distre	ss Score	Conditi	on Score	Ride Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	163.3	80.5	136.2	69.1	3.2	1.5
В	13.2	6.5	24.8	12.6	104.5	50.0
С	7.0	3.4	15.8	8.0	72.8	34.8
D	6.6	3.3	6.6	3.3	24.1	11.5
F	12.8	6.3	13.8	7.0	4.4	2.1
Σ	202.9	100.0	197.2	100.0	209.0	100.0
	ı	Summ	nary Scores fo	r 2003		1
PR	Distre	ss Score	Conditi	on Score	Ride	Score
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	129.0	62.3	97.9	48.5	2.5	1.2
В	16.8	8.1	36.9	18.3	97.2	46.4
С	13.1	6.3	45.7	22.7	75.9	36.2
D	22.5	10.9	11.1	5.5	30.7	14.6
F	25.7	12.4	10.1	5.0	3.3	1.6
Σ	207.1	100.0	201.7	100.0	209.6	100.0

		Sumn	nary Scores for	r 2001				
SH	Distres	ss Score	Condition	on Score	Ride	Score		
Grade	Length	Percentage	Length	Percentage	Length	Percentage		
A	7985.0	78.7	7510.0	74.4	2793.6	25.8		
В	755.6	7.4	1439.1	14.2	6263.3	57.7		
С	532.5	5.2	666.7	6.6	1532.4	14.1		
D	380.0	3.7	172.3	1.7	179.7	1.7		
F	494.3	4.9	310.9	3.1	79.0	0.7		
Σ	10147.4	100.0	10099.0	100.0	10848.0	100.0		
Summary Scores for 2002								
SH	Distres	ss Score	Condition	Condition Score		Score		
Grade	Length	Percentage	Length	Percentage	Length	Percentage		
A	8246.1	81.2	7873.5	77.6	2704.0	24.8		
В	724.5	7.1	1334.1	13.1	6550.2	60.0		
С	489.7	4.8	667.2	6.6	1535.4	14.1		
D	410.4	4.0	167.4	1.6	126.1	1.2		
F	285.5	2.8	104.8	1.0	4.2	0.0		
Σ	10156.2	100.0	10147.0	100.0	10919.9	100.0		
	1	Sumn	nary Scores for	r 2003				
SH	Distres	ss Score	Condition	on Score	Ride	Score		
Grade	Length	Percentage	Length	Percentage	Length	Percentage		
A	8308.7	81.5	7957.9	78.1	2786.3	26.8		
В	683.1	6.7	1312.7	12.9	6152.7	59.2		
С	492.5	4.8	669.1	6.6	1330.1	12.8		
D	395.3	3.9	162.2	1.6	117.2	1.1		
F	316.7	3.1	86.0	0.8	3.5	0.0		
Σ	10196.3	100.0	10187.9	100.0	10389.8	100.0		

		Sumn	nary Scores fo	or 2001		
<u>U.S.</u>	Distre	ss Score	Condit	ion Score	Ride Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	8382.6	75.5	8052.9	73.0	4575.1	39.3
В	769.5	6.9	1332.0	12.1	6027.3	51.7
С	485.5	4.4	888.6	8.1	832.0	7.1
D	457.6	4.1	249.2	2.3	41.8	0.4
F	1008.7	9.1	513.5	4.7	171.3	1.5
Σ	11103.9	100.0	11036.2	100.0	11647.5	100.0
	1	Sumn	nary Scores fo	or 2002		
<u>U.S.</u>	Distre	ss Score	Condition Score		Ride Score	
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	8160.2	76.7	7893.6	74.3	4499.5	38.3
В	752.7	7.1	1409.6	13.3	6329.3	53.9
С	576.1	5.4	952.9	9.0	882.5	7.5
D	534.7	5.0	233.4	2.2	29.0	0.2
F	614.5	5.8	133.0	1.3	0.8	0.0
Σ	10638.2	100.0	10622.5	100.0	11741.1	100.0
	I	Sumn	nary Scores fo	or 2003		-1
<u>U.S.</u>	Distre	ss Score	Condit	ion Score	Ride	Score
Grade	Length	Percentage	Length	Percentage	Length	Percentage
A	8422.7	78.6	8165.1	76.2	4434.4	40.6
В	684.7	6.4	1260.6	11.8	5746.1	52.6
С	486.3	4.5	874.1	8.2	703.9	6.4
D	457.1	4.3	257.0	2.4	33.5	0.3
F	668.6	6.2	153.3	1.4	1.5	0.0
Σ	10719.4	100.0	10710.1	100.0	10919.4	100.0

Appendix H: TxDOT Rural Highway System Summary Scores by TxDOT District (2001, 2002, and 2003)

		Sum	nmary Scores for Distric	et 01(2001)		
IH	Distres		1	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	110.70	66.57	98.20	60.69	48.40	29.91
В	13.30	8.00	28.30	17.49	47.50	29.36
С	13.50	8.12	24.30	15.02	57.40	35.48
D	16.70	10.04	8.00	4.94	8.50	5.25
F	12.10	7.28	3.00	1.85	0.00	0.00
Σ	166.30	100.00	161.80	100.00	161.80	100.00
		Sum	mary Scores for Distri	et 01(2001)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	160.00	81.59	144.80	73.84	111.40	49.93
В	9.80	5.00	20.50	10.45	82.30	36.89
С	6.50	3.31	16.50	8.41	24.20	10.85
D	4.30	2.19	9.90	5.05	5.20	2.33
F	15.50	7.90	4.40	2.24	0.00	0.00
Σ	196.10	100.00	196.10	100.00	223.10	100.00
	•	Sur	mary Scores for Distri	et 01(2001)	•	
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	295.60	80.20	270.50	73.39	105.30	27.44
В	22.80	6.19	52.80	14.32	208.90	54.44
С	21.40	5.81	35.70	9.69	66.40	17.31
D	25.40	6.89	5.60	1.52	3.10	0.81
F	3.40	0.92	4.00	1.09	0.00	0.00
Σ	368.60	100.00	368.60	100.00	383.70	100.00
		Sum	nmary Scores for Distri	et 01(2001)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	16.80	62.92	14.70	56.32	2.20	8.43
В	2.90	10.86	3.00	11.49	13.00	49.81
С	1.50	5.62	4.10	15.71	8.40	32.18
D	1.80	6.74	2.00	7.66	2.40	9.20
F	3.70	13.86	2.30	8.81	0.10	0.38
Σ	26.70	100.00	26.10	100.00	26.10	100.00
		Sun	mary Scores for Distri			
<u>FM</u>	Distres		Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1088.00	75.05	902.90	62.40	38.00	2.59
В	105.70	7.29	269.00	18.59	469.00	32.02
С	106.80	7.37	175.50	12.13	814.00	55.58
D	101.60	7.01	59.40	4.11	142.80	9.75
F	47.60	3.28	40.20	2.78	0.80	0.05
Σ	1449.70	100.00	1447.00	100.00	1464.60	100.00

Summary Scores for District 01(2001)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	0.40	20.00	0.40	20.00	0.00	0.00		
В	0.50	25.00	0.50	25.00	0.00	0.00		
С	0.00	0.00	0.00	0.00	1.00	50.00		
D	0.00	0.00	0.60	30.00	1.00	50.00		
F	1.10	55.00	0.50	25.00	0.00	0.00		
Σ	2.00	100.00	2.00	100.00	2.00	100.00		

		Sum	mary Scores for Distric	et 01(2002)				
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	96.70	65.34	90.70	61.28	49.20	29.85		
В	9.50	6.42	24.00	16.22	64.60	39.20		
С	11.50	7.77	21.30	14.39	46.00	27.91		
D	10.80	7.30	9.50	6.42	5.00	3.03		
F	19.50	13.18	2.50	1.69	0.00	0.00		
Σ	148.00	100.00	148.00	100.00	164.80	100.00		
		Sum	mary Scores for Distric	et 01(2002)				
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	164.30	78.54	145.90	69.74	110.40	47.98		
В	14.60	6.98	30.90	14.77	87.10	37.85		
С	11.20	5.35	19.20	9.18	31.50	13.69		
D	5.50	2.63	7.00	3.35	1.10	0.48		
F	13.60	6.50	6.20	2.96	0.00	0.00		
Σ	209.20	100.00	209.20	100.00	230.10	100.00		
		Sum	mary Scores for Distric	et 01(2002)				
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	259.80	72.35	231.90	64.72	109.70	28.75		
В	35.10	9.77	64.90	18.11	192.40	50.43		
C	24.00	6.68	46.70	13.03	73.80	19.34		
D	35.10	9.77	9.70	2.71	5.60	1.47		
F	5.10	1.42	5.10	1.42	0.00	0.00		
Σ	359.10	100.00	358.30	100.00	381.50	100.00		
		Sum	mary Scores for Distric	et 01(2002)				
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	20.00	73.26	15.20	57.14	1.40	5.26		
В	3.40	12.45	7.60	28.57	14.00	52.63		
С	3.40	12.45	2.40	9.02	8.80	33.08		
D	0.50	1.83	0.30	1.13	2.40	9.02		
F	0.00	0.00	1.10	4.14	0.00	0.00		
Σ	27.30	100.00	26.60	100.00	26.60	100.00		

	Summary Scores for District 01(2002)								
<u>FM</u>	Distres	s Score	Condition	on Score	Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	1004.30	70.86	850.30	60.18	48.80	3.36			
В	87.60	6.18	239.50	16.95	487.40	33.56			
С	96.70	6.82	190.40	13.47	785.30	54.07			
D	117.00	8.26	70.30	4.98	130.30	8.97			
F	111.70	7.88	62.50	4.42	0.70	0.05			
Σ	1417.30	100.00	1413.00	100.00	1452.50	100.00			
		Sum	mary Scores for Distric	et 01(2002)					
<u>PR</u>	Distres	s Score	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	0.10	20.00	0.00	0.00	0.00	0.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
С	0.00	0.00	0.00	0.00	0.00	0.00			
D	0.00	0.00	0.10	20.00	0.50	100.00			
F	0.40	80.00	0.40	80.00	0.00	0.00			
Σ	0.50	100.00	0.50	100.00	0.50	100.00			

		Sum	mary Scores for Distric	et 01(2003)				
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	111.50	70.04	106.50	67.11	47.60	29.17		
В	11.60	7.29	23.10	14.56	76.40	46.81		
C	9.00	5.65	19.60	12.35	34.70	21.26		
D	13.30	8.35	5.50	3.47	4.50	2.76		
F	13.80	8.67	4.00	2.52	0.00	0.00		
Σ	159.20	100.00	158.70	100.00	163.20	100.00		
Summary Scores for District 01(2003)								
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	186.90	86.29	170.70	78.92	107.60	49.52		
В	11.40	5.26	27.20	12.58	80.20	36.91		
С	10.50	4.85	12.50	5.78	28.00	12.89		
D	4.10	1.89	4.10	1.90	1.50	0.69		
F	3.70	1.71	1.80	0.83	0.00	0.00		
Σ	216.60	100.00	216.30	100.00	217.30	100.00		
		Sum	mary Scores for Distric	et 01(2003)				
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	262.70	75.08	244.60	70.39	124.40	32.14		
В	25.30	7.23	54.80	15.77	194.60	50.28		
С	26.00	7.43	32.70	9.41	66.50	17.18		
D	19.60	5.60	9.90	2.85	1.50	0.39		
F	16.30	4.66	5.50	1.58	0.00	0.00		
Σ	349.90	100.00	347.50	100.00	387.00	100.00		

Summary Scores for District 01(2003)									
BR	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	18.50	76.13	15.00	61.98	3.30	12.69			
В	1.20	4.94	3.20	13.22	11.30	43.46			
С	2.90	11.93	3.00	12.40	9.30	35.77			
D	1.00	4.12	0.90	3.72	2.10	8.08			
F	0.70	2.88	2.10	8.68	0.00	0.00			
Σ	24.30	100.00	24.20	100.00	26.00	100.00			
	Summary Scores for District 01(2003)								
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	982.60	70.98	848.20	61.35	55.80	3.88			
В	130.40	9.42	261.70	18.93	546.40	38.03			
С	86.90	6.28	172.40	12.47	727.40	50.63			
D	95.80	6.92	58.50	4.23	105.70	7.36			
F	88.70	6.41	41.80	3.02	1.30	0.09			
Σ	1384.40	100.00	1382.60	100.00	1436.60	100.00			
		Sum	mary Scores for Distric	et 01(2003)					
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	2.90	67.44	1.60	39.02	0.00	0.00			
В	0.40	9.30	0.40	9.76	1.40	34.15			
С	0.00	0.00	0.50	12.20	0.60	14.63			
D	0.50	11.63	1.00	24.39	2.10	51.22			
F	0.50	11.63	0.60	14.63	0.00	0.00			
Σ	4.30	100.00	4.10	100.00	4.10	100.00			

		Sum	mary Scores for Distric	et 02(2001)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	101.50	95.39	101.50	95.39	29.10	27.35
В	3.50	3.29	4.40	4.14	69.20	65.04
С	0.90	0.85	0.50	0.47	8.10	7.61
D	0.50	0.47	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	106.40	100.00	106.40	100.00	106.40	100.00
		Sum	mary Scores for Distric	et 02(2001)		
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	307.30	82.25	294.70	78.92	108.50	22.24
В	11.60	3.10	35.20	9.43	349.30	71.61
С	16.40	4.39	27.20	7.28	29.80	6.11
D	16.20	4.34	9.60	2.57	0.20	0.04
F	22.10	5.92	6.70	1.79	0.00	0.00
Σ	373.60	100.00	373.40	100.00	487.80	100.00

		Sum	mary Scores for Distric	et 02(2001)		
SH	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	231.70	86.68	228.10	85.37	90.80	28.43
В	8.80	3.29	27.80	10.40	208.70	65.34
С	16.80	6.29	4.80	1.80	18.50	5.79
D	4.60	1.72	1.90	0.71	1.40	0.44
F	5.40	2.02	4.60	1.72	0.00	0.00
Σ	267.30	100.00	267.20	100.00	319.40	100.00
		Sum	mary Scores for Distric	et 02(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	9.40	53.41	7.70	43.75	1.50	5.77
В	2.10	11.93	2.70	15.34	13.60	52.31
С	2.10	11.93	4.80	27.27	10.90	41.92
D	1.60	9.09	0.90	5.11	0.00	0.00
F	2.40	13.64	1.50	8.52	0.00	0.00
Σ	17.60	100.00	17.60	100.00	26.00	100.00
	_	Sum	mary Scores for Distric	et 02(2001)		
<u>FM</u>	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	667.30	87.09	660.90	86.28	143.30	14.61
В	36.10	4.71	77.10	10.07	694.50	70.82
С	37.30	4.87	18.90	2.47	142.30	14.51
D	12.00	1.57	7.50	0.98	0.60	0.06
F	13.50	1.76	1.60	0.21	0.00	0.00
Σ	766.20	100.00	766.00	100.00	980.70	100.00
		Sum	mary Scores for Distric	et 02(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	9.40	94.95	7.50	75.76	1.10	11.11
В	0.50	5.05	1.90	19.19	3.90	39.39
С	0.00	0.00	0.00	0.00	3.00	30.30
D	0.00	0.00	0.50	5.05	1.90	19.19
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	9.90	100.00	9.90	100.00	9.90	100.00

Summary Scores for District 02(2002)								
<u>IH</u>	Distress Score		Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
Α	82.60	78.59	82.60	78.59	18.30	17.41		
В	17.80	16.94	19.80	18.84	75.90	72.22		
С	2.00	1.90	2.50	2.38	10.90	10.37		
D	2.00	1.90	0.20	0.19	0.00	0.00		
F	0.70	0.67	0.00	0.00	0.00	0.00		
Σ	105.10	100.00	105.10	100.00	105.10	100.00		

		Sum	mary Scores for Distric	et 02(2002)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	307.20	80.08	281.40	74.33	48.40	11.69
В	26.10	6.80	51.70	13.66	320.20	77.36
С	17.30	4.51	26.60	7.03	45.30	10.94
D	9.50	2.48	9.00	2.38	0.00	0.00
F	23.50	6.13	9.90	2.61	0.00	0.00
Σ	383.60	100.00	378.60	100.00	413.90	100.00
		Sur	mary Scores for Distric	et 02(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	205.10	77.81	200.80	76.29	35.60	12.26
В	31.80	12.06	46.40	17.63	212.60	73.23
С	12.80	4.86	8.70	3.31	41.10	14.16
D	7.10	2.69	2.90	1.10	1.00	0.34
F	6.80	2.58	4.40	1.67	0.00	0.00
Σ	263.60	100.00	263.20	100.00	290.30	100.00
	•	Sum	mary Scores for Distric	et 02(2002)		
BR	Distress Score		Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	10.50	64.02	8.40	51.53	2.00	9.43
В	2.10	12.80	3.50	21.47	10.10	47.64
С	1.70	10.37	1.50	9.20	9.00	42.45
D	0.50	3.05	1.60	9.82	0.10	0.47
F	1.60	9.76	1.30	7.98	0.00	0.00
Σ	16.40	100.00	16.30	100.00	21.20	100.00
	•	Sum	mary Scores for Distric	et 02(2002)		
FM	Distres		1	on Score	Ride Score	
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	607.60	78.47	590.90	76.60	37.00	3.89
В	97.40	12.58	140.40	18.20	597.30	62.73
С	36.50	4.71	31.60	4.10	313.50	32.92
D	19.90	2.57	5.30	0.69	4.40	0.46
F	12.90	1.67	3.20	0.41	0.00	0.00
Σ	774.30	100.00	771.40	100.00	952.20	100.00
		Sum	mary Scores for Distric	et 02(2002)		
PR	Distres		, , , , , , , , , , , , , , , , , , , 	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	8.70	94.57	7.10	78.89	0.00	0.00
В	0.00	0.00	0.40	4.44	3.60	40.00
C	0.00	0.00	1.00	11.11	3.50	38.89
D	0.00	0.00	0.00	0.00	1.90	21.11
F	0.50	5.43	0.50	5.56	0.00	0.00
Σ	9.20	100.00	9.00	100.00	9.00	100.00

		Sun	mary Scores for Distric	et 02(2003)			
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	94.70	95.85	94.20	95.34	15.80	15.11	
В	1.90	1.92	2.40	2.43	75.70	72.37	
С	0.50	0.51	1.70	1.72	12.60	12.05	
D	1.20	1.21	0.50	0.51	0.50	0.48	
F	0.50	0.51	0.00	0.00	0.00	0.00	
Σ	98.80	100.00	98.80	100.00	104.60	100.00	
		Sum	mary Scores for Distric	et 02(2003)			
U.S.	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	278.00	76.84	253.10	70.13	38.00	10.24	
В	25.40	7.02	50.70	14.05	290.60	78.33	
С	15.50	4.28	38.70	10.72	41.20	11.11	
D	20.50	5.67	8.30	2.30	1.20	0.32	
F	22.40	6.19	10.10	2.80	0.00	0.00	
Σ	361.80	100.00	360.90	100.00	371.00	100.00	
		Sun	mary Scores for Distric	et 02(2003)	•		
<u>SH</u>	Distress Score		Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	217.80	80.67	211.80	78.59	45.50	16.40	
В	15.00	5.56	31.80	11.80	191.40	69.00	
С	15.40	5.70	17.20	6.38	39.50	14.24	
D	12.50	4.63	3.00	1.11	0.50	0.18	
F	9.30	3.44	5.70	2.12	0.50	0.18	
Σ	270.00	100.00	269.50	100.00	277.40	100.00	
	•	Sum	mary Scores for Distric	et 02(2003)			
BR	Distres		Condition Score		Ride Score		
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	8.90	60.96	4.10	30.37	1.50	11.11	
В	3.00	20.55	3.50	25.93	4.10	30.37	
С	0.50	3.42	2.10	15.56	5.60	41.48	
D	0.00	0.00	1.50	11.11	1.60	11.85	
F	2.20	15.07	2.30	17.04	0.70	5.19	
Σ	14.60	100.00	13.50	100.00	13.50	100.00	
		Sun	mary Scores for Distric	et 02(2003)			
FM	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	
A	679.00	87.64	658.60	85.40	31.70	4.10	
В	42.20	5.45	75.20	9.75	508.80	65.76	
C	26.00	3.36	22.40	2.90	228.20	29.49	
D	11.50	1.48	4.20	0.54	4.50	0.58	
F	16.10	2.08	10.80	1.40	0.50	0.06	
	774.80	100.00	771.20	100.00	773.70	0.00	

Summary Scores for District 02(2003)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	7.50	88.24	5.60	65.88	0.00	0.00		
В	1.00	11.76	1.90	22.35	3.60	42.35		
С	0.00	0.00	0.00	0.00	3.00	35.29		
D	0.00	0.00	0.50	5.88	1.40	16.47		
F	0.00	0.00	0.50	5.88	0.50	5.88		
Σ	8.50	100.00	8.50	100.00	8.50	100.00		

		Sum	mary Scores for Distric	et 03(2001)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	68.30	77.97	61.90	73.43	3.50	4.15
В	4.50	5.14	13.50	16.01	71.80	85.17
С	6.80	7.76	6.00	7.12	7.70	9.13
D	2.40	2.74	0.80	0.95	1.30	1.54
F	5.60	6.39	2.10	2.49	0.00	0.00
Σ	87.60	100.00	84.30	100.00	84.30	100.00
		Sum	mary Scores for Distric	et 03(2001)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	570.10	90.35	533.60	86.27	234.50	37.85
В	22.90	3.63	50.80	8.21	308.50	49.80
С	18.40	2.92	17.70	2.86	73.60	11.88
D	6.50	1.03	7.40	1.20	2.90	0.47
F	13.10	2.08	9.00	1.46	0.00	0.00
Σ	631.00	100.00	618.50	100.00	619.50	100.00
		Sum	mary Scores for Distric	et 03(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	253.90	91.69	249.90	90.31	117.10	40.52
В	10.60	3.83	19.90	7.19	154.50	53.46
С	7.70	2.78	6.60	2.39	17.30	5.99
D	4.10	1.48	0.30	0.11	0.10	0.03
F	0.60	0.22	0.00	0.00	0.00	0.00
Σ	276.90	100.00	276.70	100.00	289.00	100.00
		Sum	mary Scores for Distric	et 03(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.00	49.38	2.00	31.75	0.00	0.00
В	3.10	38.27	3.30	52.38	3.80	48.72
С	0.50	6.17	0.50	7.94	4.00	51.28
D	0.50	6.17	0.50	7.94	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	8.10	100.00	6.30	100.00	7.80	100.00

		Sum	mary Scores for Distric	et 03(2001)		
<u>FM</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1040.40	81.71	1002.10	78.73	34.40	2.70
В	65.50	5.14	155.70	12.23	759.40	59.58
С	77.40	6.08	101.80	8.00	449.70	35.28
D	81.60	6.41	9.50	0.75	29.70	2.33
F	8.40	0.66	3.80	0.30	1.40	0.11
Σ	1273.30	100.00	1272.90	100.00	1274.60	100.00
		Sum	mary Scores for Distric	et 03(2001)		
<u>PR</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.40	44.44	0.90	100.00
D	0.40	44.44	0.50	55.56	0.00	0.00
F	0.50	55.56	0.00	0.00	0.00	0.00
Σ	0.90	100.00	0.90	100.00	0.90	100.00

		Sum	mary Scores for Distric	et 03(2002)		
<u>IH</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	65.50	76.25	63.50	75.60	11.40	13.51
В	5.10	5.94	7.70	9.17	66.50	78.79
С	2.60	3.03	7.50	8.93	5.00	5.92
D	2.90	3.38	2.80	3.33	1.50	1.78
F	9.80	11.41	2.50	2.98	0.00	0.00
Σ	85.90	100.00	84.00	100.00	84.40	100.00
		Sum	mary Scores for Distric	et 03(2002)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	490.10	80.73	466.00	77.61	257.50	41.25
В	46.50	7.66	82.70	13.77	302.10	48.39
С	31.70	5.22	36.80	6.13	63.20	10.12
D	15.70	2.59	5.60	0.93	1.50	0.24
F	23.10	3.80	9.30	1.55	0.00	0.00
Σ	607.10	100.00	600.40	100.00	624.30	100.00
		Sum	mary Scores for Distric	et 03(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	238.20	86.34	236.10	85.61	112.20	40.68
В	18.90	6.85	27.70	10.04	144.20	52.28
С	7.50	2.72	9.50	3.44	18.30	6.64
D	6.90	2.50	1.60	0.58	1.10	0.40
F	4.40	1.59	0.90	0.33	0.00	0.00
Σ	275.90	100.00	275.80	100.00	275.80	100.00

		Sum	mary Scores for Distric	et 03(2002)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.70	45.68	3.20	39.51	0.00	0.00
В	3.50	43.21	3.90	48.15	5.50	67.90
С	0.40	4.94	0.50	6.17	2.60	32.10
D	0.00	0.00	0.50	6.17	0.00	0.00
F	0.50	6.17	0.00	0.00	0.00	0.00
Σ	8.10	100.00	8.10	100.00	8.10	100.00
		Sum	mary Scores for Distric	et 03(2002)	,	
<u>FM</u>	Distress Score		Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	940.50	73.36	918.20	71.71	53.40	4.13
В	70.50	5.50	175.30	13.69	778.20	60.16
С	91.40	7.13	167.50	13.08	452.40	34.97
D	146.20	11.40	12.70	0.99	9.50	0.73
F	33.40	2.61	6.80	0.53	0.00	0.00
Σ	1282.00	100.00	1280.50	100.00	1293.50	100.00
		Sum	mary Scores for Distric	et 03(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.50	55.56	0.50	55.56	0.00	0.00
В	0.00	0.00	0.40	44.44	0.00	0.00
С	0.40	44.44	0.00	0.00	0.90	100.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.90	100.00	0.90	100.00	0.90	100.00

		Sum	mary Scores for Distric	et 03(2003)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	68.40	82.11	65.10	78.62	9.00	10.75
В	3.30	3.96	7.70	9.30	64.30	76.82
С	2.80	3.36	5.90	7.13	8.70	10.39
D	4.60	5.52	1.00	1.21	1.70	2.03
F	4.20	5.04	3.10	3.74	0.00	0.00
Σ	83.30	100.00	82.80	100.00	83.70	100.00
		Sum	mary Scores for Distric	et 03(2003)		
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	454.60	75.30	431.50	71.92	219.40	35.06
В	72.40	11.99	112.80	18.80	341.00	54.50
С	37.40	6.20	33.20	5.53	58.90	9.41
D	21.20	3.51	9.90	1.65	5.90	0.94
F	18.10	3.00	12.60	2.10	0.50	0.08
Σ	603.70	100.00	600.00	100.00	625.70	100.00

		Sum	mary Scores for Distric	et 03(2003)		
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	239.80	83.93	237.40	83.15	109.90	38.11
В	19.00	6.65	36.00	12.61	159.10	55.17
С	16.30	5.71	9.70	3.40	18.40	6.38
D	7.80	2.73	1.50	0.53	1.00	0.35
F	2.80	0.98	0.90	0.32	0.00	0.00
Σ	285.70	100.00	285.50	100.00	288.40	100.00
	•	Sum	mary Scores for Distric	et 03(2003)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2.70	31.40	1.20	13.95	0.00	0.00
В	3.60	41.86	4.60	53.49	4.10	47.67
С	0.50	5.81	2.30	26.74	4.50	52.33
D	0.80	9.30	0.00	0.00	0.00	0.00
F	1.00	11.63	0.50	5.81	0.00	0.00
Σ	8.60	100.00	8.60	100.00	8.60	100.00
		Sum	mary Scores for Distric	et 03(2003)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1096.10	84.80	1064.50	82.37	28.00	2.17
В	37.00	2.86	108.40	8.39	754.20	58.33
C	49.10	3.80	107.10	8.29	500.10	38.68
D	87.70	6.78	9.50	0.74	10.50	0.81
F	22.70	1.76	2.90	0.22	0.10	0.01
Σ	1292.60	100.00	1292.40	100.00	1292.90	100.00
		Sum	mary Scores for Distric	et 03(2003)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.40	44.44
D	0.00	0.00	0.00	0.00	0.50	55.56
F	0.90	100.00	0.90	100.00	0.00	0.00
Σ	0.90	100.00	0.90	100.00	0.90	100.00

	Summary Scores for District 04(2001)								
<u>IH</u>	Distress Score		Condition	on Score	Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	175.80	48.16	171.40	47.01	114.70	31.37			
В	48.00	13.15	85.50	23.45	161.30	44.12			
С	34.70	9.51	51.00	13.99	88.00	24.07			
D	21.70	5.95	34.30	9.41	1.60	0.44			
F	84.80	23.23	22.40	6.14	0.00	0.00			
Σ	365.00	100.00	364.60	100.00	365.60	100.00			

		Sun	mary Scores for Distric	et 04(2001)	1	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	310.00	45.24	303.30	44.32	356.30	50.89
В	90.90	13.26	160.70	23.48	301.20	43.02
С	70.80	10.33	98.10	14.33	41.60	5.94
D	52.30	7.63	56.80	8.30	1.00	0.14
F	161.30	23.54	65.50	9.57	0.00	0.00
Σ	685.30	100.00	684.40	100.00	700.10	100.00
		Sum	mary Scores for Distric	et 04(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	444.50	63.76	432.50	62.06	209.50	29.15
В	83.00	11.91	149.80	21.50	354.30	49.30
С	64.60	9.27	84.50	12.13	149.00	20.73
D	47.30	6.79	21.80	3.13	5.90	0.82
F	57.70	8.28	8.30	1.19	0.00	0.00
Σ	697.10	100.00	696.90	100.00	718.70	100.00
		Sur	mary Scores for Distric	et 04(2001)		
BR	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	11.70	46.06	11.50	45.28	2.60	10.16
В	4.10	16.14	7.50	29.53	18.80	73.44
С	3.30	12.99	3.70	14.57	4.20	16.41
D	2.10	8.27	2.00	7.87	0.00	0.00
F	4.20	16.54	0.70	2.76	0.00	0.00
Σ	25.40	100.00	25.40	100.00	25.60	100.00
	•	Sum	mary Scores for Distric	et 04(2001)		
FM	Distres			on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	1316.30	74.19	1244.20	70.14	198.70	11.17
В	194.70	10.97	336.90	18.99	853.50	47.98
С	119.00	6.71	142.60	8.04	667.20	37.51
D	77.30	4.36	36.70	2.07	58.90	3.31
F	67.00	3.78	13.50	0.76	0.60	0.03
Σ	1774.30	100.00	1773.90	100.00	1778.90	100.00
	•	Sum	mary Scores for Distric	et 04(2001)		
PR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

		Sum	mary Scores for Distric	et 04(2002)		
IH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	191.90	61.11	175.40	57.19	62.40	20.30
В	36.00	11.46	66.20	21.58	139.00	45.22
С	24.40	7.77	46.30	15.10	102.50	33.34
D	27.40	8.73	9.70	3.16	3.50	1.14
F	34.30	10.92	9.10	2.97	0.00	0.00
Σ	314.00	100.00	306.70	100.00	307.40	100.00
		Sum	mary Scores for Distric	et 04(2002)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	369.40	52.64	363.00	51.73	340.50	47.98
В	79.70	11.36	131.30	18.71	327.80	46.19
С	54.50	7.77	121.90	17.37	37.70	5.31
D	68.70	9.79	53.20	7.58	3.20	0.45
F	129.50	18.45	32.30	4.60	0.50	0.07
Σ	701.80	100.00	701.70	100.00	709.70	100.00
		Sum	mary Scores for Distric	et 04(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	529.00	75.29	515.10	73.31	251.00	35.54
В	70.10	9.98	110.00	15.66	331.90	47.00
С	37.50	5.34	55.80	7.94	112.30	15.90
D	35.20	5.01	12.20	1.74	10.40	1.47
F	30.80	4.38	9.50	1.35	0.60	0.08
Σ	702.60	100.00	702.60	100.00	706.20	100.00
		Sum	mary Scores for Distric	et 04(2002)		
BR	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	12.30	49.80	12.30	49.80	0.40	1.53
В	4.40	17.81	7.80	31.58	14.10	54.02
С	3.40	13.77	3.20	12.96	11.20	42.91
D	1.70	6.88	1.00	4.05	0.40	1.53
F	2.90	11.74	0.40	1.62	0.00	0.00
Σ	24.70	100.00	24.70	100.00	26.10	100.00
		Sum	mary Scores for Distric	et 04(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1448.40	81.41	1355.10	76.23	165.00	9.28
В	136.40	7.67	254.00	14.29	818.70	46.05
С	84.50	4.75	128.40	7.22	709.70	39.92
D	79.50	4.47	28.90	1.63	83.00	4.67
F	30.30	1.70	11.30	0.64	1.60	0.09
Σ	1779.10	100.00	1777.70	100.00	1778.00	100.00

Summary Scores for District 04(2002)								
<u>PR</u>	Distress Score		Condition	on Score	Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed Percentage (%)		Length_Roadbed	Percentage (%)		
A	0.00	0.00	0.00	0.00	0.00	0.00		
В	0.00	0.00	0.00	0.00	0.00	0.00		
C	0.00	0.00	0.00	0.00	0.00	0.00		
D	0.00	0.00	0.00	0.00	0.00	0.00		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	0.00	0.00	0.00	0.00	0.00	0.00		

		Sum	mary Scores for Distric	et 04(2003)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	168.10	51.53	148.80	47.94	84.50	27.11
В	54.30	16.65	76.90	24.77	133.00	42.67
С	22.40	6.87	44.40	14.30	91.60	29.39
D	20.40	6.25	25.50	8.22	2.60	0.83
F	61.00	18.70	14.80	4.77	0.00	0.00
Σ	326.20	100.00	310.40	100.00	311.70	100.00
		Sum	mary Scores for Distric	et 04(2003)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	270.80	38.22	265.30	37.50	350.40	49.30
В	73.20	10.33	133.80	18.91	329.60	46.37
С	60.30	8.51	188.20	26.60	28.10	3.95
D	92.30	13.03	75.80	10.71	1.70	0.24
F	211.90	29.91	44.40	6.28	1.00	0.14
Σ	708.50	100.00	707.50	100.00	710.80	100.00
		Sum	mary Scores for Distric	et 04(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	499.10	68.18	494.00	67.52	274.60	37.48
В	89.50	12.23	133.80	18.29	337.50	46.07
С	47.70	6.52	75.20	10.28	113.30	15.47
D	48.80	6.67	19.90	2.72	6.90	0.94
F	46.90	6.41	8.70	1.19	0.30	0.04
Σ	732.00	100.00	731.60	100.00	732.60	100.00
		Sum	mary Scores for Distric	et 04(2003)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.20	25.93	3.30	22.60	0.00	0.00
В	4.70	29.01	6.40	43.84	8.90	60.96
С	2.60	16.05	3.20	21.92	4.50	30.82
D	2.70	16.67	1.00	6.85	0.50	3.42
F	2.00	12.35	0.70	4.79	0.70	4.79
Σ	16.20	100.00	14.60	100.00	14.60	100.00

		Sum	mary Scores for Distric	et 04(2003)			
<u>FM</u>	Distress Score		Condition	Condition Score		Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	1366.10	77.46	1301.70	73.87	137.40	7.79	
В	180.20	10.22	283.00	16.06	867.10	49.17	
С	97.20	5.51	129.70	7.36	684.30	38.81	
D	74.30	4.21	27.40	1.55	73.00	4.14	
F	45.80	2.60	20.40	1.16	1.50	0.09	
Σ	1763.60	100.00	1762.20	100.00	1763.30	100.00	
		Sum	mary Scores for Distric	et 04(2003)			
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	0.00	0.00	0.00	0.00	0.00	0.00	
В	0.00	0.00	0.00	0.00	0.00	0.00	
С	0.00	0.00	0.00	0.00	0.00	0.00	
D	0.00	0.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
Σ	0.00	0.00	0.00	0.00	0.00	0.00	

		Sum	mary Scores for Distric	et 05(2001)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	253.30	87.68	241.90	83.73	132.40	45.83
В	21.00	7.27	29.90	10.35	140.80	48.74
С	10.00	3.46	4.00	1.38	2.70	0.93
D	2.70	0.93	0.00	0.00	0.00	0.00
F	1.90	0.66	13.10	4.53	13.00	4.50
Σ	288.90	100.00	288.90	100.00	288.90	100.00
		Sum	mary Scores for Distric	et 05(2001)		
<u>U.S.</u>	Distress Score		Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	787.10	62.13	773.30	61.04	774.50	61.13
В	95.80	7.56	124.10	9.80	335.70	26.50
С	31.30	2.47	70.20	5.54	39.30	3.10
D	36.60	2.89	14.70	1.16	2.30	0.18
F	316.10	24.95	284.60	22.46	115.10	9.09
Σ	1266.90	100.00	1266.90	100.00	1266.90	100.00
		Sum	mary Scores for Distric	et 05(2001)		
<u>SH</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	406.50	64.22	401.60	63.44	280.70	44.34
В	30.60	4.83	50.80	8.03	274.90	43.43
С	18.20	2.88	31.50	4.98	37.20	5.88
D	19.30	3.05	3.80	0.60	1.70	0.27
F	158.40	25.02	145.30	22.95	38.50	6.08
Σ	633.00	100.00	633.00	100.00	633.00	100.00

		Sum	mary Scores for Distric	et 05(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2.80	12.28	2.30	10.09	11.80	51.75
В	0.50	2.19	0.00	0.00	7.10	31.14
С	0.00	0.00	1.00	4.39	2.20	9.65
D	0.00	0.00	0.60	2.63	0.10	0.44
F	19.50	85.53	18.90	82.89	1.60	7.02
Σ	22.80	100.00	22.80	100.00	22.80	100.00
		Sum	mary Scores for Distric	et 05(2001)	,	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1879.00	58.64	1852.70	57.82	617.10	19.26
В	216.70	6.76	385.80	12.04	1685.60	52.60
С	159.40	4.97	368.60	11.50	637.20	19.89
D	168.60	5.26	92.40	2.88	18.50	0.58
F	780.60	24.36	504.80	15.75	245.90	7.67
Σ	3204.30	100.00	3204.30	100.00	3204.30	100.00
		Sum	mary Scores for Distric	et 05(2001)		
<u>PR</u>	Distres	s Score	Condition	ondition Score Ride Scor		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

		Sum	mary Scores for Distric	et 05(2002)		
<u>IH</u>	Distress Score		Condition	Condition Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	124.30	87.91	121.80	88.01	56.10	40.53
В	5.50	3.89	9.20	6.65	82.10	59.32
С	3.50	2.48	3.50	2.53	0.20	0.14
D	3.50	2.48	0.60	0.43	0.00	0.00
F	4.60	3.25	3.30	2.38	0.00	0.00
Σ	141.40	100.00	138.40	100.00	138.40	100.00
		Sum	mary Scores for Distric	et 05(2002)		
<u>U.S.</u>	Distres	s Score	Condition	tion Score Ride Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	760.70	70.21	742.50	68.56	731.90	64.85
В	78.00	7.20	148.60	13.72	342.90	30.38
С	67.00	6.18	169.50	15.65	49.00	4.34
D	94.80	8.75	17.30	1.60	4.80	0.43
F	83.00	7.66	5.10	0.47	0.00	0.00
Σ	1083.50	100.00	1083.00	100.00	1128.60	100.00

		Sum	mary Scores for Distric	et 05(2002)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	409.40	78.38	400.30	76.66	215.90	39.13
В	35.70	6.84	52.70	10.09	279.50	50.65
С	17.00	3.25	48.60	9.31	51.70	9.37
D	18.60	3.56	14.60	2.80	4.00	0.72
F	41.60	7.96	6.00	1.15	0.70	0.13
Σ	522.30	100.00	522.20	100.00	551.80	100.00
		Sum	mary Scores for Distric	et 05(2002)	,	
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	19.00	85.20	15.40	74.04	14.80	71.15
В	0.90	4.04	3.10	14.90	3.90	18.75
С	1.70	7.62	1.30	6.25	1.60	7.69
D	0.00	0.00	0.50	2.40	0.50	2.40
F	0.70	3.14	0.50	2.40	0.00	0.00
Σ	22.30	100.00	20.80	100.00	20.80	100.00
		Sum	mary Scores for Distric	et 05(2002)		
<u>FM</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2068.80	70.62	2025.60	69.20	509.40	17.18
В	255.30	8.72	433.50	14.81	1680.80	56.68
С	165.00	5.63	316.90	10.83	750.60	25.31
D	189.40	6.47	113.70	3.88	24.40	0.82
F	250.90	8.56	37.60	1.28	0.10	0.00
Σ	2929.40	100.00	2927.30	100.00	2965.30	100.00
		Sum	mary Scores for Distric	et 05(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

	Summary Scores for District 05(2003)								
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	257.50	92.10	252.70	92.19	102.00	37.21			
В	9.00	3.22	15.10	5.51	168.70	61.55			
С	6.30	2.25	4.50	1.64	3.40	1.24			
D	4.50	1.61	1.10	0.40	0.00	0.00			
F	2.30	0.82	0.70	0.26	0.00	0.00			
Σ	279.60	100.00	274.10	100.00	274.10	100.00			

		Sun	mary Scores for Distric	et 05(2003)	-	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	850.60	76.36	838.70	75.29	687.10	59.73
В	82.60	7.41	133.20	11.96	405.80	35.27
C	45.00	4.04	105.00	9.43	55.70	4.84
D	43.00	3.86	27.20	2.44	1.80	0.16
F	92.80	8.33	9.80	0.88	0.00	0.00
Σ	1114.00	100.00	1113.90	100.00	1150.40	100.00
		Sum	mary Scores for Distric	et 05(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	471.90	85.26	466.60	84.32	231.10	39.63
В	15.40	2.78	29.40	5.31	305.10	52.31
С	12.90	2.33	39.80	7.19	45.00	7.72
D	17.20	3.11	15.10	2.73	1.70	0.29
F	36.10	6.52	2.50	0.45	0.30	0.05
Σ	553.50	100.00	553.40	100.00	583.20	100.00
		Sum	mary Scores for Distric	et 05(2003)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	20.60	94.50	20.60	94.50	14.70	67.43
В	0.00	0.00	0.70	3.21	6.60	30.28
С	0.70	3.21	0.00	0.00	0.50	2.29
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.50	2.29	0.50	2.29	0.00	0.00
Σ	21.80	100.00	21.80	100.00	21.80	100.00
		Sum	mary Scores for Distric	et 05(2003)		
FM	Distres		1	on Score	Ride S	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	2239.20	76.09	2209.80	75.10	458.70	15.52
В	111.10	3.78	283.50	9.64	1666.90	56.38
С	161.60	5.49	295.70	10.05	808.10	27.33
D	181.50	6.17	107.40	3.65	22.50	0.76
F	249.50	8.48	45.90	1.56	0.20	0.01
Σ	2942.90	100.00	2942.30	100.00	2956.40	100.00
	1		mary Scores for Distric		ļ	
PR	Distres		· · · · · · · · · · · · · · · · · · ·	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
•	0.00	0.00	0.00	3.00	0.00	0.00

	1	Suii	mary Scores for Distric				
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	410.20	84.53	403.20	84.25	384.30	47.88	
В	56.00	11.54	63.70	13.31	297.50	37.07	
C	9.20	1.90	9.40	1.96	109.30	13.62	
D	7.40	1.52	0.50	0.10	10.60	1.32	
F	2.50	0.52	1.80	0.38	0.90	0.11	
Σ	485.30	100.00	478.60	100.00	802.60	100.00	
		Sum	mary Scores for Distric	et 06(2001)			
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%	
A	288.40	91.56	271.70	90.21	136.00	28.27	
В	20.10	6.38	20.00	6.64	319.30	66.38	
С	3.50	1.11	8.60	2.86	25.70	5.34	
D	1.50	0.48	0.90	0.30	0.00	0.00	
F	1.50	0.48	0.00	0.00	0.00	0.00	
Σ	315.00	100.00	301.20	100.00	481.00	100.00	
		Sum	mary Scores for Distric	et 06(2001)			
SH	Distres	s Score	Condition	on Score	Ride	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%	
A	181.40	85.97	178.80	84.94	167.80	25.63	
В	12.90	6.11	22.40	10.64	415.60	63.49	
С	8.50	4.03	8.80	4.18	68.10	10.40	
D	4.50	2.13	0.50	0.24	3.10	0.47	
F	3.70	1.75	0.00	0.00	0.00	0.00	
Σ	211.00	100.00	210.50	100.00	654.60	100.00	
		Sum	mary Scores for Distric	et 06(2001)			
BR	Distres	s Score	1	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%	
A	0.00	0.00	0.00	0.00	3.80	14.29	
В	0.00	0.00	0.00	0.00	21.70	81.58	
С	0.00	0.00	0.00	0.00	1.10	4.14	
D	0.00	0.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
Σ	0.00	0.00	0.00	0.00	26.60	100.00	
			mary Scores for Distric				
FM	Distres	s Score	· · · · · · · · · · · · · · · · · · ·	on Score	Ride	Score	
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%	
A	99.20	97.06	82.80	87.90	119.10	12.67	
В	1.00	0.98	9.80	10.40	585.60	62.28	
C	1.50	1.47	1.60	1.70	203.20	21.61	
D	0.50	0.49	0.00	0.00	30.00	3.19	
F	0.00	0.00	0.00	0.00	2.40	0.26	
	0.00	0.00	0.00	0.00			

Summary Scores for District 06(2001)									
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	0.00	0.00	0.00	0.00	0.00	0.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
C	0.00	0.00	0.00	0.00	0.50	35.71			
D	0.00	0.00	0.00	0.00	0.90	64.29			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	0.00	0.00	0.00	0.00	1.40	100.00			

		Sum	mary Scores for Distric	et 06(2002)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	739.90	91.98	727.00	90.48	390.40	48.38
В	25.60	3.18	45.10	5.61	297.60	36.88
С	13.00	1.62	19.00	2.36	107.60	13.33
D	12.30	1.53	9.20	1.14	11.40	1.41
F	13.60	1.69	3.20	0.40	0.00	0.00
Σ	804.40	100.00	803.50	100.00	807.00	100.00
		Sum	mary Scores for Distric	et 06(2002)		
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	431.70	86.29	428.30	85.64	134.30	26.85
В	24.80	4.96	43.70	8.74	321.10	64.21
С	22.90	4.58	20.10	4.02	43.20	8.64
D	14.20	2.84	6.80	1.36	1.50	0.30
F	6.70	1.34	1.20	0.24	0.00	0.00
Σ	500.30	100.00	500.10	100.00	500.10	100.00
		Sum	mary Scores for Distric	et 06(2002)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	622.20	94.50	617.80	93.89	160.90	24.44
В	19.30	2.93	26.60	4.04	422.50	64.18
C	6.40	0.97	11.40	1.73	71.50	10.86
D	6.90	1.05	1.30	0.20	3.40	0.52
F	3.60	0.55	0.90	0.14	0.00	0.00
Σ	658.40	100.00	658.00	100.00	658.30	100.00
		Sum	mary Scores for Distric	et 06(2002)		
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	23.00	85.50	22.80	85.07	3.00	10.79
В	1.50	5.58	2.00	7.46	22.30	80.22
С	0.40	1.49	1.50	5.60	2.50	8.99
D	1.50	5.58	0.00	0.00	0.00	0.00
F	0.50	1.86	0.50	1.87	0.00	0.00
Σ	26.90	100.00	26.80	100.00	27.80	100.00

Summary Scores for District 06(2002)								
<u>FM</u>	Distres	s Score	Condition	on Score	Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	883.60	93.15	864.60	91.27	131.60	13.89		
В	22.00	2.32	44.30	4.68	585.00	61.74		
С	18.80	1.98	28.30	2.99	206.10	21.75		
D	16.50	1.74	7.50	0.79	24.20	2.55		
F	7.70	0.81	2.60	0.27	0.60	0.06		
Σ	948.60	100.00	947.30	100.00	947.50	100.00		
		Sum	mary Scores for Distric	et 06(2002)				
<u>PR</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	1.50	100.00	0.60	40.00	0.00	0.00		
В	0.00	0.00	0.50	33.33	0.00	0.00		
С	0.00	0.00	0.00	0.00	0.60	40.00		
D	0.00	0.00	0.40	26.67	0.90	60.00		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	1.50	100.00	1.50	100.00	1.50	100.00		

		Sum	mary Scores for Distric	ct 06(2003)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	734.50	90.97	724.80	89.80	399.90	49.27
В	28.10	3.48	49.20	6.10	301.50	37.14
С	17.10	2.12	25.70	3.18	101.70	12.53
D	13.20	1.63	5.00	0.62	8.10	1.00
F	14.50	1.80	2.40	0.30	0.50	0.06
Σ	807.40	100.00	807.10	100.00	811.70	100.00
		Sum	mary Scores for Distric	et 06(2003)		
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	433.30	93.08	430.40	92.46	131.30	26.49
В	9.50	2.04	18.50	3.97	334.00	67.38
С	7.50	1.61	11.90	2.56	29.90	6.03
D	6.00	1.29	4.30	0.92	0.50	0.10
F	9.20	1.98	0.40	0.09	0.00	0.00
Σ	465.50	100.00	465.50	100.00	495.70	100.00
		Sum	mary Scores for Distric	et 06(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	624.00	98.01	620.00	97.41	151.00	23.66
В	7.80	1.23	11.80	1.85	424.60	66.53
С	1.10	0.17	4.20	0.66	59.90	9.39
D	2.80	0.44	0.00	0.00	2.70	0.42
F	1.00	0.16	0.50	0.08	0.00	0.00
Σ	636.70	100.00	636.50	100.00	638.20	100.00

		Sum	mary Scores for Distric	et 06(2003)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	23.00	83.64	22.40	81.75	4.70	16.21
В	2.00	7.27	4.00	14.60	22.20	76.55
С	1.50	5.45	1.00	3.65	2.10	7.24
D	0.50	1.82	0.00	0.00	0.00	0.00
F	0.50	1.82	0.00	0.00	0.00	0.00
Σ	27.50	100.00	27.40	100.00	29.00	100.00
		Sur	mary Scores for Distric	et 06(2003)		
<u>FM</u>	Distress Score		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	901.90	95.04	885.60	93.39	142.60	15.03
В	20.90	2.20	36.20	3.82	599.60	63.22
С	12.80	1.35	19.70	2.08	187.20	19.74
D	10.80	1.14	5.10	0.54	18.40	1.94
F	2.60	0.27	1.70	0.18	0.70	0.07
Σ	949.00	100.00	948.30	100.00	948.50	100.00
		Sur	mary Scores for Distric	et 06(2003)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.90	100.00	0.60	37.50	0.00	0.00
В	0.00	0.00	0.50	31.25	0.00	0.00
С	0.00	0.00	0.40	25.00	0.60	37.50
D	0.00	0.00	0.00	0.00	0.90	56.25
F	0.00	0.00	0.10	6.25	0.10	6.25
Σ	1.90	100.00	1.60	100.00	1.60	100.00

	Summary Scores for District 07(2001)									
<u>IH</u>	Distres	s Score	Condition	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	261.80	84.75	260.20	84.23	286.60	83.22				
В	12.70	4.11	26.70	8.64	37.10	10.77				
С	13.00	4.21	6.80	2.20	19.60	5.69				
D	5.80	1.88	4.20	1.36	1.00	0.29				
F	15.60	5.05	11.00	3.56	0.10	0.03				
Σ	308.90	100.00	308.90	100.00	344.40	100.00				
		Sum	mary Scores for Distric	et 07(2001)						
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score					
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	627.80	83.78	622.50	83.08	179.10	23.02				
В	33.30	4.44	72.10	9.62	529.10	68.01				
С	35.80	4.78	47.60	6.35	67.70	8.70				
D	34.20	4.56	5.00	0.67	1.90	0.24				
F	18.20	2.43	2.10	0.28	0.20	0.03				
Σ	749.30	100.00	749.30	100.00	778.00	100.00				

		Sum	mary Scores for Distric	et 07(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	484.20	89.06	482.20	88.69	79.60	14.07
В	27.00	4.97	41.20	7.58	438.40	77.48
С	15.60	2.87	16.40	3.02	47.40	8.38
D	10.60	1.95	2.50	0.46	0.40	0.07
F	6.30	1.16	1.40	0.26	0.00	0.00
Σ	543.70	100.00	543.70	100.00	565.80	100.00
		Sum	mary Scores for Distric	et 07(2001)	,	
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	et 07(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	989.40	81.82	965.10	79.81	47.30	3.62
В	84.10	6.96	152.80	12.64	718.70	55.06
С	55.20	4.57	68.30	5.65	515.50	39.49
D	46.30	3.83	15.50	1.28	23.10	1.77
F	34.20	2.83	7.50	0.62	0.80	0.06
Σ	1209.20	100.00	1209.20	100.00	1305.40	100.00
		Sum	mary Scores for Distric	et 07(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

	Summary Scores for District 07(2002)								
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	256.60	85.39	256.60	85.39	542.90	89.94			
В	12.20	4.06	27.60	9.18	60.60	10.04			
С	15.40	5.12	16.20	5.39	0.10	0.02			
D	13.10	4.36	0.10	0.03	0.00	0.00			
F	3.20	1.06	0.00	0.00	0.00	0.00			
Σ	300.50	100.00	300.50	100.00	603.60	100.00			

		Sum	mary Scores for Distric	et 07(2002)		
U.S.	Distres		1	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	663.10	88.10	656.70	87.26	303.80	19.64
В	30.20	4.01	58.60	7.79	1092.80	70.66
С	22.90	3.04	30.00	3.99	148.80	9.62
D	20.10	2.67	5.80	0.77	1.10	0.07
F	16.40	2.18	1.50	0.20	0.00	0.00
Σ	752.70	100.00	752.60	100.00	1546.50	100.00
		Sum	mary Scores for Distric	et 07(2002)	•	
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	501.90	91.37	499.50	91.00	75.40	6.78
В	23.90	4.35	37.50	6.83	904.10	81.25
С	14.00	2.55	7.50	1.37	131.50	11.82
D	6.10	1.11	3.00	0.55	1.80	0.16
F	3.40	0.62	1.40	0.26	0.00	0.00
Σ	549.30	100.00	548.90	100.00	1112.80	100.00
		Sum	mary Scores for Distric	et 07(2002)	•	
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	et 07(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1033.30	82.24	995.10	79.44	84.80	3.30
В	78.70	6.26	142.30	11.36	1291.00	50.17
С	50.80	4.04	78.60	6.27	1129.50	43.89
D	51.40	4.09	19.20	1.53	65.40	2.54
F	42.20	3.36	17.40	1.39	2.80	0.11
Σ	1256.40	100.00	1252.60	100.00	2573.50	100.00
		Sum	mary Scores for Distric	et 07(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	5.70	95.00	1.50	83.33	0.00	0.00
В	0.00	0.00	0.30	16.67	8.50	70.83
С	0.30	5.00	0.00	0.00	3.50	29.17
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	6.00	100.00	1.80	100.00	12.00	100.00

	<u></u>		mary Scores for Distric		1	
<u>IH</u>	Distres	s Score		on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	228.10	77.11	227.60	77.07	269.30	91.13
В	23.40	7.91	31.80	10.77	26.20	8.87
C	8.40	2.84	13.90	4.71	0.00	0.00
D	7.60	2.57	8.90	3.01	0.00	0.00
F	28.30	9.57	13.10	4.44	0.00	0.00
Σ	295.80	100.00	295.30	100.00	295.50	100.00
		Sur	mary Scores for Distric	et 07(2003)	-	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	690.70	92.06	687.70	91.66	139.40	18.31
В	27.90	3.72	47.00	6.26	567.60	74.56
C	17.10	2.28	13.50	1.80	53.70	7.05
D	11.60	1.55	1.50	0.20	0.60	0.08
F	3.00	0.40	0.60	0.08	0.00	0.00
Σ	750.30	100.00	750.30	100.00	761.30	100.00
		Sum	mary Scores for Distric	et 07(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	520.90	93.27	518.90	92.96	50.60	9.06
В	19.70	3.53	31.80	5.70	464.10	83.14
С	11.40	2.04	6.50	1.16	43.10	7.72
D	5.00	0.90	1.00	0.18	0.40	0.07
F	1.50	0.27	0.00	0.00	0.00	0.00
Σ	558.50	100.00	558.20	100.00	558.20	100.00
		Sur	mary Scores for Distric	et 07(2003)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	et 07(2003)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	1043.20	81.35	1007.70	78.83	41.20	3.21
В	100.20	7.81	172.00	13.45	732.50	56.99
С	60.70	4.73	71.90	5.62	481.90	37.49
D	46.30	3.61	13.30	1.04	28.90	2.25
F	32.00	2.50	13.50	1.06	0.90	0.07
Σ	1282.40	100.00	1278.40	100.00	1285.40	100.00

	Summary Scores for District 07(2003)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	6.00	100.00	1.80	100.00	0.00	0.00			
В	0.00	0.00	0.00	0.00	4.50	75.00			
С	0.00	0.00	0.00	0.00	1.50	25.00			
D	0.00	0.00	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	6.00	100.00	1.80	100.00	6.00	100.00			

		Sum	mary Scores for Distric	et 08(2001)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	400.30	77.52	371.50	71.94	167.00	32.34
В	27.30	5.29	62.40	12.08	181.50	35.15
С	22.20	4.30	47.20	9.14	128.10	24.81
D	20.20	3.91	11.80	2.29	25.30	4.90
F	46.40	8.99	23.50	4.55	14.50	2.81
Σ	516.40	100.00	516.40	100.00	516.40	100.00
		Sum	mary Scores for Distric	et 08(2001)		
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	596.70	80.08	584.80	78.49	246.20	33.04
В	20.50	2.75	41.80	5.61	376.70	50.56
С	17.40	2.34	37.70	5.06	55.10	7.39
D	20.10	2.70	13.90	1.87	11.20	1.50
F	90.40	12.13	66.90	8.98	55.90	7.50
Σ	745.10	100.00	745.10	100.00	745.10	100.00
		Sum	mary Scores for Distric	et 08(2001)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	419.80	83.11	406.40	80.46	138.30	27.38
В	20.90	4.14	44.80	8.87	269.30	53.32
С	16.90	3.35	10.90	2.16	60.40	11.96
D	5.40	1.07	3.30	0.65	1.10	0.22
F	42.10	8.33	39.70	7.86	36.00	7.13
Σ	505.10	100.00	505.10	100.00	505.10	100.00
		Sum	mary Scores for Distric	et 08(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	26.70	40.21	17.60	26.51	0.90	1.36
В	6.50	9.79	13.10	19.73	28.40	42.77
С	6.60	9.94	8.30	12.50	19.40	29.22
D	2.80	4.22	8.60	12.95	3.90	5.87
F	23.80	35.84	18.80	28.31	13.80	20.78
Σ	66.40	100.00	66.40	100.00	66.40	100.00

		Sum	mary Scores for Distric	et 08(2001)		
<u>FM</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1464.80	79.23	1393.70	75.38	75.80	4.10
В	116.30	6.29	223.40	12.08	947.10	51.23
С	66.40	3.59	89.10	4.82	663.90	35.91
D	58.70	3.18	9.60	0.52	38.10	2.06
F	142.60	7.71	133.00	7.19	123.90	6.70
Σ	1848.80	100.00	1848.80	100.00	1848.80	100.00
		Sum	mary Scores for Distric	et 08(2001)		
<u>PR</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.60	90.00	0.90	22.50	0.40	10.00
В	0.40	10.00	1.40	35.00	0.50	12.50
С	0.00	0.00	1.10	27.50	0.40	10.00
D	0.00	0.00	0.50	12.50	2.60	65.00
F	0.00	0.00	0.10	2.50	0.10	2.50
Σ	4.00	100.00	4.00	100.00	4.00	100.00

		Sum	mary Scores for Distric	ct 08(2002)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	435.80	89.93	398.40	82.26	149.60	30.38
В	12.40	2.56	44.60	9.21	165.00	33.51
С	16.00	3.30	30.70	6.34	144.90	29.43
D	8.90	1.84	7.20	1.49	30.40	6.17
F	11.50	2.37	3.40	0.70	2.50	0.51
Σ	484.60	100.00	484.30	100.00	492.40	100.00
		Sum	mary Scores for Distric	et 08(2002)		
<u>U.S.</u>	Distress Score		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	611.30	89.45	591.60	86.63	220.60	31.53
В	23.80	3.48	44.30	6.49	415.00	59.31
С	10.70	1.57	34.20	5.01	58.20	8.32
D	14.80	2.17	10.80	1.58	5.90	0.84
F	22.80	3.34	2.00	0.29	0.00	0.00
Σ	683.40	100.00	682.90	100.00	699.70	100.00
		Sum	mary Scores for Distric	et 08(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	404.10	88.02	389.30	84.83	86.10	18.69
В	18.80	4.09	40.20	8.76	297.00	64.47
С	14.50	3.16	25.50	5.56	75.50	16.39
D	17.70	3.86	2.70	0.59	2.10	0.46
F	4.00	0.87	1.20	0.26	0.00	0.00
Σ	459.10	100.00	458.90	100.00	460.70	100.00

		Sum	mary Scores for Distric	et 08(2002)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	27.00	53.15	20.00	39.53	1.00	1.98
В	3.30	6.50	9.00	17.79	23.40	46.25
C	4.90	9.65	10.30	20.36	23.40	46.25
D	4.10	8.07	7.60	15.02	2.60	5.14
F	11.50	22.64	3.70	7.31	0.20	0.40
Σ	50.80	100.00	50.60	100.00	50.60	100.00
		Sum	mary Scores for Distric	et 08(2002)		
<u>FM</u>	Distress Score		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1562.00	90.04	1484.30	85.74	50.50	2.90
В	63.50	3.66	161.00	9.30	864.70	49.71
C	47.90	2.76	71.00	4.10	770.70	44.31
D	34.80	2.01	10.10	0.58	52.90	3.04
F	26.60	1.53	4.80	0.28	0.70	0.04
Σ	1734.80	100.00	1731.20	100.00	1739.50	100.00
		Sum	mary Scores for Distric	et 08(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.70	90.24	0.50	12.20	0.00	0.00
В	0.00	0.00	0.50	12.20	0.00	0.00
С	0.40	9.76	2.40	58.54	0.50	12.20
D	0.00	0.00	0.50	12.20	3.50	85.37
F	0.00	0.00	0.20	4.88	0.10	2.44
Σ	4.10	100.00	4.10	100.00	4.10	100.00

		Sum	mary Scores for Distric	et 08(2003)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	474.20	95.47	438.30	88.24	130.80	26.13
В	6.00	1.21	26.40	5.32	188.80	37.72
С	5.80	1.17	23.50	4.73	152.60	30.49
D	4.70	0.95	5.10	1.03	26.90	5.37
F	6.00	1.21	3.40	0.68	1.40	0.28
Σ	496.70	100.00	496.70	100.00	500.50	100.00
		Sum	mary Scores for Distric	et 08(2003)		
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	636.40	92.27	618.40	89.66	231.00	33.39
В	20.10	2.91	41.40	6.00	407.00	58.83
С	11.60	1.68	22.20	3.22	46.70	6.75
D	14.40	2.09	5.70	0.83	7.10	1.03
F	7.20	1.04	2.00	0.29	0.00	0.00
Σ	689.70	100.00	689.70	100.00	691.80	100.00

		Sum	mary Scores for Distric	et 08(2003)		
SH	Distres	s Score	Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	419.20	88.83	407.30	86.33	78.20	16.51
В	16.20	3.43	37.00	7.84	329.00	69.47
С	14.40	3.05	18.70	3.96	64.30	13.58
D	10.30	2.18	3.60	0.76	2.10	0.44
F	11.80	2.50	5.20	1.10	0.00	0.00
Σ	471.90	100.00	471.80	100.00	473.60	100.00
	•	Sum	mary Scores for Distric	et 08(2003)	,	
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	26.90	54.02	18.30	36.82	0.00	0.00
В	3.40	6.83	7.90	15.90	25.50	48.85
С	3.00	6.02	5.20	10.46	22.00	42.15
D	1.60	3.21	9.80	19.72	4.70	9.00
F	14.90	29.92	8.50	17.10	0.00	0.00
Σ	49.80	100.00	49.70	100.00	52.20	100.00
		Sum	mary Scores for Distric	et 08(2003)		
<u>FM</u>	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1506.30	85.78	1429.60	81.51	39.10	2.23
В	72.40	4.12	179.70	10.25	906.80	51.69
С	61.90	3.53	124.20	7.08	758.50	43.24
D	87.00	4.95	10.90	0.62	49.30	2.81
F	28.40	1.62	9.40	0.54	0.50	0.03
Σ	1756.00	100.00	1753.80	100.00	1754.20	100.00
		Sum	mary Scores for Distric	et 08(2003)		
<u>PR</u>	Distres	s Score	Condition	on Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.60	100.00	0.10	2.86	0.00	0.00
В	0.00	0.00	0.40	11.43	0.10	2.50
С	0.00	0.00	2.50	71.43	0.00	0.00
D	0.00	0.00	0.50	14.29	3.90	97.50
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	3.60	100.00	3.50	100.00	4.00	100.00

	Summary Scores for District 09(2001)								
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	40.50	74.86	40.50	74.86	46.30	82.68			
В	9.00	16.64	11.80	21.81	6.90	12.32			
C	2.80	5.18	1.30	2.40	2.80	5.00			
D	1.30	2.40	0.50	0.92	0.00	0.00			
F	0.50	0.92	0.00	0.00	0.00	0.00			
Σ	54.10	100.00	54.10	100.00	56.00	100.00			

		Sum	mary Scores for Distri	ct 09(2001)		
U.S.	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	104.40	96.40	103.90	95.94	51.50	47.33
В	1.40	1.29	2.90	2.68	54.30	49.91
С	1.50	1.39	0.00	0.00	3.00	2.76
D	0.00	0.00	1.00	0.92	0.00	0.00
F	1.00	0.92	0.50	0.46	0.00	0.00
Σ	108.30	100.00	108.30	100.00	108.80	100.00
		Sum	mary Scores for Distri	ct 09(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	435.70	90.15	427.90	88.59	181.10	37.47
В	23.60	4.88	41.20	8.53	281.10	58.16
С	14.80	3.06	9.90	2.05	20.40	4.22
D	6.30	1.30	1.90	0.39	0.70	0.14
F	2.90	0.60	2.10	0.43	0.00	0.00
Σ	483.30	100.00	483.00	100.00	483.30	100.00
		Sum	mary Scores for Distri	ct 09(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.50	51.14	4.00	45.45	0.00	0.00
В	2.00	22.73	1.00	11.36	3.40	38.64
С	1.30	14.77	2.80	31.82	4.40	50.00
D	0.50	5.68	0.50	5.68	1.00	11.36
F	0.50	5.68	0.50	5.68	0.00	0.00
Σ	8.80	100.00	8.80	100.00	8.80	100.00
		Sum	mary Scores for Distri	ct 09(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	872.80	76.14	813.40	70.97	20.60	1.78
В	97.60	8.51	205.50	17.93	547.00	47.29
С	75.90	6.62	86.70	7.56	549.80	47.53
D	59.30	5.17	23.90	2.09	39.20	3.39
F	40.70	3.55	16.60	1.45	0.20	0.02
Σ	1146.30	100.00	1146.10	100.00	1156.80	100.00
		Sum	mary Scores for Distri	ct 09(2001)		
<u>PR</u>	Distres		Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
\sum	0.00	0.00	0.00	0.00	0.00	0.00

		Sum	mary Scores for Distri	et 09(2002)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	62.20	70.36	60.00	68.10	57.80	55.42
В	8.80	9.95	21.20	24.06	35.30	33.84
С	11.40	12.90	6.40	7.26	9.80	9.40
D	4.50	5.09	0.50	0.57	1.40	1.34
F	1.50	1.70	0.00	0.00	0.00	0.00
Σ	88.40	100.00	88.10	100.00	104.30	100.00
		Sum	mary Scores for Distri	et 09(2002)	•	
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	106.40	97.70	104.80	96.24	42.90	39.39
В	1.50	1.38	3.50	3.21	63.90	58.68
С	1.00	0.92	0.50	0.46	2.00	1.84
D	0.00	0.00	0.10	0.09	0.10	0.09
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	108.90	100.00	108.90	100.00	108.90	100.00
		Sum	mary Scores for Distri	et 09(2002)		
SH	Distress Score		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	424.90	89.45	417.80	87.96	153.20	31.49
В	19.70	4.15	35.60	7.49	311.40	64.01
С	12.70	2.67	17.70	3.73	20.90	4.30
D	14.30	3.01	3.00	0.63	1.00	0.21
F	3.40	0.72	0.90	0.19	0.00	0.00
Σ	475.00	100.00	475.00	100.00	486.50	100.00
		Sum	mary Scores for Distri	et 09(2002)		
BR	Distres			on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%
A	2.90	42.65	2.50	37.31	0.00	0.00
В	1.00	14.71	2.20	32.84	4.30	49.43
C	0.90	13.24	1.50	22.39	3.90	44.83
D	1.00	14.71	0.50	7.46	0.50	5.75
F	1.00	14.71	0.00	0.00	0.00	0.00
Σ	6.80	100.00	6.70	100.00	8.70	100.00
	1		mary Scores for Distri			
FM	Distres		· •	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%
A	866.10	75.33	809.70	70.52	20.80	1.80
В	82.80	7.20	158.70	13.82	509.50	44.06
C	55.50	4.83	107.10	9.33	585.20	50.60
D	74.30	6.46	34.10	2.97	41.00	3.55
F	71.00	6.18	38.60	3.36	0.00	0.00
-			1	50	1	0.00

	Summary Scores for District 09(2002)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	0.00	0.00	0.00	0.00	0.00	0.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
С	0.50	25.00	0.50	25.00	0.50	25.00			
D	1.00	50.00	0.00	0.00	1.00	50.00			
F	0.50	25.00	1.50	75.00	0.50	25.00			
Σ	2.00	100.00	2.00	100.00	2.00	100.00			

		Sum	mary Scores for Distric	ct 09(2003)		
<u>IH</u>	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	42.70	59.47	40.80	58.29	51.00	62.96
В	8.60	11.98	18.70	26.71	26.10	32.22
С	10.00	13.93	7.80	11.14	3.90	4.81
D	4.50	6.27	2.50	3.57	0.00	0.00
F	6.00	8.36	0.20	0.29	0.00	0.00
Σ	71.80	100.00	70.00	100.00	81.00	100.00
		Sum	mary Scores for Distric	ct 09(2003)		
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	100.00	91.74	98.40	90.28	56.30	51.65
В	3.00	2.75	8.00	7.34	48.70	44.68
С	4.50	4.13	2.60	2.39	4.00	3.67
D	1.00	0.92	0.00	0.00	0.00	0.00
F	0.50	0.46	0.00	0.00	0.00	0.00
Σ	109.00	100.00	109.00	100.00	109.00	100.00
		Sum	mary Scores for Distric	ct 09(2003)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	372.90	81.19	361.10	78.65	174.20	37.81
В	42.30	9.21	65.30	14.22	267.20	58.00
С	15.80	3.44	17.80	3.88	17.40	3.78
D	10.10	2.20	11.50	2.50	1.90	0.41
F	18.20	3.96	3.40	0.74	0.00	0.00
Σ	459.30	100.00	459.10	100.00	460.70	100.00
		Sum	mary Scores for Distric			
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.40	50.00	4.00	45.45	0.00	0.00
В	1.90	21.59	2.10	23.86	4.50	51.14
С	0.00	0.00	1.00	11.36	3.60	40.91
D	1.50	17.05	1.10	12.50	0.60	6.82
F	1.00	11.36	0.60	6.82	0.10	1.14
Σ	8.80	100.00	8.80	100.00	8.80	100.00

		Sum	mary Scores for Distric	ct 09(2003)			
<u>FM</u>	Distres	s Score	Condition	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	891.60	77.60	852.20	74.21	30.60	2.66	
В	75.30	6.55	144.20	12.56	634.20	55.03	
С	52.00	4.53	92.20	8.03	448.60	38.93	
D	57.70	5.02	27.00	2.35	38.40	3.33	
F	72.30	6.29	32.70	2.85	0.60	0.05	
Σ	1148.90	100.00	1148.30	100.00	1152.40	100.00	
		Sum	mary Scores for Distri	ct 09(2003)	,		
<u>PR</u>	Distres	s Score	Condition Score		Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	4.00	100.00	0.50	12.50	0.00	0.00	
В	0.00	0.00	0.50	12.50	0.00	0.00	
С	0.00	0.00	1.90	47.50	0.50	12.50	
D	0.00	0.00	0.60	15.00	3.00	75.00	
F	0.00	0.00	0.50	12.50	0.50	12.50	
Σ	4.00	100.00	4.00	100.00	4.00	100.00	

		Sum	mary Scores for Distric	et 10(2001)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	51.80	85.76	51.80	85.76	53.50	88.58
В	5.20	8.61	7.60	12.58	6.90	11.42
С	2.40	3.97	1.00	1.66	0.00	0.00
D	1.00	1.66	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	60.40	100.00	60.40	100.00	60.40	100.00
		Sum	mary Scores for Distric	et 10(2001)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	354.10	76.50	328.30	71.00	172.00	36.55
В	42.20	9.12	79.80	17.26	270.70	57.52
С	24.10	5.21	42.00	9.08	26.70	5.67
D	18.60	4.02	8.20	1.77	1.20	0.25
F	23.90	5.16	4.10	0.89	0.00	0.00
Σ	462.90	100.00	462.40	100.00	470.60	100.00
		Sum	mary Scores for Distric	et 10(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	349.10	79.43	327.40	74.49	121.00	25.51
В	36.00	8.19	77.00	17.52	294.00	61.97
С	30.00	6.83	24.60	5.60	57.60	12.14
D	13.70	3.12	6.60	1.50	1.80	0.38
F	10.70	2.43	3.90	0.89	0.00	0.00
Σ	439.50	100.00	439.50	100.00	474.40	100.00

		Sum	mary Scores for Distri	ct 10(2001)		
<u>BR</u>	Distres	s Score	Condition	Condition Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2.50	52.08	2.00	41.67	0.00	0.00
В	0.00	0.00	1.00	20.83	2.60	54.17
С	1.20	25.00	1.50	31.25	2.20	45.83
D	0.80	16.67	0.30	6.25	0.00	0.00
F	0.30	6.25	0.00	0.00	0.00	0.00
Σ	4.80	100.00	4.80	100.00	4.80	100.00
		Sum	mary Scores for Distri	ct 10(2001)	,	
<u>FM</u>	Distress Score		Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	929.20	66.14	863.20	61.46	34.10	2.36
В	158.50	11.28	395.50	28.16	817.70	56.68
C	221.40	15.76	119.60	8.52	578.30	40.09
D	72.20	5.14	19.20	1.37	12.40	0.86
F	23.70	1.69	7.00	0.50	0.10	0.01
Σ	1405.00	100.00	1404.50	100.00	1442.60	100.00
		Sum	mary Scores for Distri	ct 10(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.90	64.29	0.70	50.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.30	21.43
С	0.00	0.00	0.50	35.71	0.90	64.29
D	0.50	35.71	0.20	14.29	0.20	14.29
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	1.40	100.00	1.40	100.00	1.40	100.00

Summary Scores for District 10(2002)								
<u>IH</u>	Distres	s Score	Conditio	Condition Score		Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	71.80	67.04	71.30	66.57	48.90	45.66		
В	12.80	11.95	19.90	18.58	24.40	22.78		
С	8.10	7.56	12.30	11.48	32.50	30.35		
D	7.10	6.63	2.70	2.52	1.30	1.21		
F	7.30	6.82	0.90	0.84	0.00	0.00		
Σ	107.10	100.00	107.10	100.00	107.10	100.00		
		Sum	mary Scores for Distric	et 10(2002)				
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	386.10	81.08	361.10	75.89	139.50	29.27		
В	32.60	6.85	67.90	14.27	296.30	62.17		
С	19.30	4.05	36.10	7.59	39.50	8.29		
D	17.10	3.59	6.90	1.45	1.30	0.27		
F	21.10	4.43	3.80	0.80	0.00	0.00		
Σ	476.20	100.00	475.80	100.00	476.60	100.00		

		Sum	mary Scores for Distri	ct 10(2002)		
SH	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	385.20	81.15	348.80	73.54	98.10	20.59
В	24.30	5.12	71.30	15.03	289.50	60.77
С	31.60	6.66	40.70	8.58	84.70	17.78
D	15.60	3.29	10.30	2.17	4.10	0.86
F	18.00	3.79	3.20	0.67	0.00	0.00
Σ	474.70	100.00	474.30	100.00	476.40	100.00
		Sum	mary Scores for Distri	ct 10(2002)	,	
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.10	65.96	1.80	38.30	0.00	0.00
В	0.30	6.38	1.40	29.79	1.60	34.04
С	0.80	17.02	1.00	21.28	3.10	65.96
D	0.50	10.64	0.50	10.64	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	4.70	100.00	4.70	100.00	4.70	100.00
		Sum	mary Scores for Distri	ct 10(2002)		
<u>FM</u>	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	887.70	61.71	767.50	53.45	33.20	2.31
В	174.30	12.12	469.10	32.67	629.10	43.82
C	260.40	18.10	143.00	9.96	740.30	51.56
D	68.60	4.77	34.90	2.43	33.00	2.30
F	47.40	3.30	21.30	1.48	0.20	0.01
Σ	1438.40	100.00	1435.80	100.00	1435.80	100.00
		Sum	mary Scores for Distri	ct 10(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.30	37.50	0.30	37.50	0.00	0.00
В	0.00	0.00	0.00	0.00	0.50	62.50
C	0.00	0.00	0.50	62.50	0.30	37.50
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.50	62.50	0.00	0.00	0.00	0.00
Σ	0.80	100.00	0.80	100.00	0.80	100.00

Summary Scores for District 10(2003)								
<u>IH</u>	Distress Score		Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	48.60	69.83	48.20	69.25	52.60	64.78		
В	4.00	5.75	6.50	9.34	13.50	16.63		
С	2.10	3.02	9.30	13.36	12.90	15.89		
D	4.60	6.61	1.00	1.44	2.20	2.71		
F	10.30	14.80	4.60	6.61	0.00	0.00		
Σ	69.60	100.00	69.60	100.00	81.20	100.00		

		Sum	mary Scores for Distric	et 10(2003)		
U.S.	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	370.10	79.25	342.70	73.41	133.70	28.01
В	36.70	7.86	72.20	15.47	298.70	62.57
С	22.30	4.78	33.90	7.26	43.90	9.20
D	15.80	3.38	11.40	2.44	1.10	0.23
F	22.10	4.73	6.60	1.41	0.00	0.00
Σ	467.00	100.00	466.80	100.00	477.40	100.00
		Sum	mary Scores for Distric	et 10(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	377.50	78.97	342.60	71.79	117.80	23.83
В	35.30	7.38	76.40	16.01	292.80	59.22
С	27.00	5.65	43.50	9.12	80.90	16.36
D	22.10	4.62	10.80	2.26	2.80	0.57
F	16.10	3.37	3.90	0.82	0.10	0.02
Σ	478.00	100.00	477.20	100.00	494.40	100.00
		Sum	mary Scores for Distric	et 10(2003)		
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.40	70.83	1.90	39.58	0.00	0.00
В	0.80	16.67	1.20	25.00	0.90	18.75
C	0.50	10.42	0.40	8.33	3.40	70.83
D	0.10	2.08	0.00	0.00	0.50	10.42
F	0.00	0.00	1.30	27.08	0.00	0.00
Σ	4.80	100.00	4.80	100.00	4.80	100.00
		Sum	mary Scores for Distric	et 10(2003)		
<u>FM</u>	Distres	s Score	Conditio	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	646.40	44.71	575.90	39.87	32.00	2.21
В	240.30	16.62	513.50	35.55	634.50	43.79
C	306.10	21.17	231.50	16.03	754.60	52.08
D	119.90	8.29	77.60	5.37	27.40	1.89
F	133.20	9.21	45.80	3.17	0.50	0.03
Σ	1445.90	100.00	1444.30	100.00	1449.00	100.00
		Sum	mary Scores for Distric	et 10(2003)		
<u>PR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.20	75.00	1.20	75.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	1.50	93.75
D	0.00	0.00	0.30	18.75	0.00	0.00
F	0.40	25.00	0.10	6.25	0.10	6.25
Σ	1.60	100.00	1.60	100.00	1.60	100.00

		Sum	mary Scores for Distric	et 11(2001)		
IH	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distri	et 11(2001)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	396.50	78.70	350.80	74.53	165.30	34.73
В	20.70	4.11	45.00	9.56	253.40	53.24
С	18.50	3.67	44.00	9.35	55.60	11.68
D	26.30	5.22	20.20	4.29	1.70	0.36
F	41.80	8.30	10.70	2.27	0.00	0.00
Σ	503.80	100.00	470.70	100.00	476.00	100.00
		Sum	mary Scores for Distri	et 11(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	496.30	72.92	404.30	61.70	152.30	22.28
В	49.70	7.30	106.90	16.31	336.00	49.15
С	50.00	7.35	86.00	13.12	168.60	24.66
D	46.30	6.80	36.70	5.60	26.60	3.89
F	38.30	5.63	21.40	3.27	0.10	0.01
Σ	680.60	100.00	655.30	100.00	683.60	100.00
		Sum	mary Scores for Distri	et 11(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	11.40	53.77	8.10	38.21	4.90	20.25
В	3.90	18.40	7.30	34.43	15.50	64.05
C	1.60	7.55	5.30	25.00	3.80	15.70
D	2.70	12.74	0.50	2.36	0.00	0.00
F	1.60	7.55	0.00	0.00	0.00	0.00
Σ	21.20	100.00	21.20	100.00	24.20	100.00
		Sum	mary Scores for Distri	et 11(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1217.80	74.19	829.20	52.38	37.20	2.25
В	123.60	7.53	299.90	18.95	369.50	22.31
C	93.30	5.68	247.70	15.65	937.80	56.62
D	114.60	6.98	114.90	7.26	308.40	18.62
F	92.10	5.61	91.20	5.76	3.40	0.21
\sum	1641.40	100.00	1582.90	100.00	1656.30	100.00

	Summary Scores for District 11(2001)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	2.90	51.79	0.20	3.57	0.00	0.00			
В	0.50	8.93	1.50	26.79	0.50	8.93			
С	0.00	0.00	1.80	32.14	1.00	17.86			
D	0.80	14.29	0.00	0.00	4.10	73.21			
F	1.40	25.00	2.10	37.50	0.00	0.00			
Σ	5.60	100.00	5.60	100.00	5.60	100.00			

		Sum	mary Scores for Distric	ct 11(2002)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	ct 11(2002)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	415.60	85.08	403.80	82.66	267.10	52.50
В	25.70	5.26	50.40	10.32	218.40	42.92
C	17.40	3.56	23.40	4.79	23.30	4.58
D	12.80	2.62	7.20	1.47	0.00	0.00
F	17.00	3.48	3.70	0.76	0.00	0.00
Σ	488.50	100.00	488.50	100.00	508.80	100.00
		Sum	mary Scores for Distric	ct 11(2002)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	520.90	76.81	478.30	70.56	219.40	32.06
В	53.40	7.87	114.60	16.91	345.00	50.42
С	45.40	6.69	55.90	8.25	113.60	16.60
D	32.50	4.79	19.70	2.91	6.30	0.92
F	26.00	3.83	9.40	1.39	0.00	0.00
Σ	678.20	100.00	677.90	100.00	684.30	100.00
		Sum	mary Scores for Distric	ct 11(2002)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	11.20	46.28	9.30	38.43	6.60	27.27
В	4.40	18.18	8.60	35.54	15.80	65.29
С	4.40	18.18	5.70	23.55	1.80	7.44
D	2.60	10.74	0.20	0.83	0.00	0.00
F	1.60	6.61	0.40	1.65	0.00	0.00
Σ	24.20	100.00	24.20	100.00	24.20	100.00

Summary Scores for District 11(2002)								
<u>FM</u>	Distres	s Score	Condition	Condition Score		Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	1277.00	75.95	1071.00	63.73	96.00	5.55		
В	69.70	4.15	248.80	14.81	604.00	34.94		
С	85.20	5.07	210.60	12.53	902.00	52.17		
D	133.30	7.93	85.60	5.09	124.50	7.20		
F	116.20	6.91	64.40	3.83	2.40	0.14		
Σ	1681.40	100.00	1680.40	100.00	1728.90	100.00		
		Sum	mary Scores for Distri	ct 11(2002)				
<u>PR</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	4.50	69.23	1.00	15.87	0.00	0.00		
В	0.00	0.00	0.00	0.00	0.80	12.70		
С	0.00	0.00	1.00	15.87	0.20	3.17		
D	0.50	7.69	1.40	22.22	3.90	61.90		
F	1.50	23.08	2.90	46.03	1.40	22.22		
Σ	6.50	100.00	6.30	100.00	6.30	100.00		

Summary Scores for District 11(2003)								
<u>IH</u>	Distres	s Score	Condition	Condition Score		Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	0.00	0.00	0.00	0.00	0.00	0.00		
В	0.00	0.00	0.00	0.00	0.00	0.00		
C	0.00	0.00	0.00	0.00	0.00	0.00		
D	0.00	0.00	0.00	0.00	0.00	0.00		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	0.00	0.00	0.00	0.00	0.00	0.00		
Summary Scores for District 11(2003)								
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	439.80	87.98	425.70	85.16	241.10	48.23		
В	19.00	3.80	51.50	10.30	237.60	47.53		
С	22.60	4.52	16.10	3.22	20.70	4.14		
D	11.00	2.20	3.10	0.62	0.50	0.10		
F	7.50	1.50	3.50	0.70	0.00	0.00		
Σ	499.90	100.00	499.90	100.00	499.90	100.00		
		Sum	mary Scores for Distri	et 11(2003)				
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	521.60	80.53	483.40	74.69	192.60	28.71		
В	40.10	6.19	97.20	15.02	364.50	54.33		
С	41.40	6.39	50.70	7.83	109.90	16.38		
D	32.80	5.06	10.90	1.68	3.90	0.58		
F	11.80	1.82	5.00	0.77	0.00	0.00		
Σ	647.70	100.00	647.20	100.00	670.90	100.00		

		Sum	mary Scores for Distric	ct 11(2003)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	11.60	50.43	9.90	43.04	3.60	15.45
В	3.40	14.78	7.10	30.87	16.80	72.10
С	3.50	15.22	4.20	18.26	2.90	12.45
D	2.00	8.70	1.80	7.83	0.00	0.00
F	2.50	10.87	0.00	0.00	0.00	0.00
Σ	23.00	100.00	23.00	100.00	23.30	100.00
		Sum	mary Scores for Distri	ct 11(2003)		
<u>FM</u>	Distress Score		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1264.10	74.01	1109.40	64.99	76.80	4.44
В	124.40	7.28	282.50	16.55	676.90	39.10
С	90.90	5.32	215.90	12.65	900.40	52.01
D	134.20	7.86	53.60	3.14	76.60	4.42
F	94.50	5.53	45.60	2.67	0.40	0.02
Σ	1708.10	100.00	1707.00	100.00	1731.10	100.00
	•	Sum	mary Scores for Distri	ct 11(2003)		
PR	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2.50	56.82	0.80	18.18	0.00	0.00
В	0.00	0.00	1.00	22.73	0.80	12.31
С	0.00	0.00	0.50	11.36	0.70	10.77
D	0.50	11.36	0.20	4.55	5.00	76.92
F	1.40	31.82	1.90	43.18	0.00	0.00
Σ	4.40	100.00	4.40	100.00	6.50	100.00

	Summary Scores for District 13(2001)									
<u>IH</u>	Distres	s Score	Condition Score		Ride Score					
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	166.60	90.94	165.30	90.23	180.70	75.35				
В	11.20	6.11	16.40	8.95	52.90	22.06				
С	5.10	2.78	1.20	0.66	6.10	2.54				
D	0.00	0.00	0.00	0.00	0.10	0.04				
F	0.30	0.16	0.30	0.16	0.00	0.00				
Σ	183.20	100.00	183.20	100.00	239.80	100.00				
		Sum	mary Scores for Distri	et 13(2001)						
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score					
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	377.20	76.03	360.90	72.75	206.00	39.55				
В	44.90	9.05	81.20	16.37	258.60	49.65				
С	35.00	7.06	46.60	9.39	54.40	10.45				
D	18.00	3.63	6.00	1.21	1.80	0.35				
F	21.00	4.23	1.40	0.28	0.00	0.00				
Σ	496.10	100.00	496.10	100.00	520.80	100.00				

		Sum	mary Scores for Distric	ct 13(2001)		
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	541.40	73.61	511.60	69.92	306.40	39.85
В	88.10	11.98	149.20	20.39	351.10	45.66
С	47.90	6.51	51.80	7.08	109.90	14.29
D	28.60	3.89	12.70	1.74	1.50	0.20
F	29.50	4.01	6.40	0.87	0.00	0.00
Σ	735.50	100.00	731.70	100.00	768.90	100.00
		Sum	mary Scores for Distri	ct 13(2001)	,	
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	2.50	67.57
В	3.00	81.08	3.70	100.00	1.20	32.43
С	0.70	18.92	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	3.70	100.00	3.70	100.00	3.70	100.00
		Sum	mary Scores for Distri	et 13(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1121.40	62.89	978.00	54.86	121.20	6.77
В	176.20	9.88	362.90	20.36	602.80	33.68
C	145.90	8.18	264.60	14.84	935.00	52.24
D	153.30	8.60	90.80	5.09	129.60	7.24
F	186.30	10.45	86.50	4.85	1.30	0.07
Σ	1783.10	100.00	1782.80	100.00	1789.90	100.00
		Sum	mary Scores for Distri	et 13(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

	Summary Scores for District 13(2002)								
<u>IH</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	176.80	83.55	175.70	83.03	209.50	67.39			
В	17.10	8.08	24.00	11.34	72.00	23.16			
C	6.40	3.02	8.40	3.97	27.30	8.78			
D	4.30	2.03	1.00	0.47	2.10	0.68			
F	7.00	3.31	2.50	1.18	0.00	0.00			
Σ	211.60	100.00	211.60	100.00	310.90	100.00			

		Sum	mary Scores for Distric	et 13(2002)		
U.S.	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	367.60	69.54	343.20	64.95	215.60	40.80
В	56.00	10.59	122.60	23.20	250.20	47.35
С	60.50	11.45	53.40	10.11	62.10	11.75
D	36.90	6.98	8.20	1.55	0.50	0.09
F	7.60	1.44	1.00	0.19	0.00	0.00
Σ	528.60	100.00	528.40	100.00	528.40	100.00
		Sum	mary Scores for Distri	et 13(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	636.90	82.27	607.50	78.64	362.70	45.91
В	47.80	6.17	97.90	12.67	336.00	42.53
С	37.10	4.79	53.20	6.89	89.50	11.33
D	37.70	4.87	9.90	1.28	1.20	0.15
F	14.70	1.90	4.00	0.52	0.60	0.08
Σ	774.20	100.00	772.50	100.00	790.00	100.00
		Sum	mary Scores for Distri	et 13(2002)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	14.60	62.39	12.00	52.86	4.80	19.12
В	5.80	24.79	9.40	41.41	17.40	69.32
С	2.50	10.68	0.80	3.52	2.70	10.76
D	0.00	0.00	0.50	2.20	0.20	0.80
F	0.50	2.14	0.00	0.00	0.00	0.00
Σ	23.40	100.00	22.70	100.00	25.10	100.00
		Sum	mary Scores for Distri	et 13(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1128.00	63.74	984.10	55.65	103.90	5.70
В	178.20	10.07	375.70	21.25	682.90	37.49
С	159.50	9.01	281.50	15.92	928.20	50.95
D	162.90	9.21	70.60	3.99	105.80	5.81
F	141.00	7.97	56.40	3.19	0.90	0.05
Σ	1769.60	100.00	1768.30	100.00	1821.70	100.00
	T		mary Scores for Distric		1	
<u>PR</u>	Distres		Condition		Ride	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

		Sum	mary Scores for Distri	et 13(2003)			
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	187.50	79.08	186.50	78.66	185.40	65.51	
В	30.70	12.95	35.10	14.80	54.40	19.22	
С	4.90	2.07	10.40	4.39	38.70	13.67	
D	7.70	3.25	2.60	1.10	4.20	1.48	
F	6.30	2.66	2.50	1.05	0.30	0.11	
Σ	237.10	100.00	237.10	100.00	283.00	100.00	
		Sum	mary Scores for Distri	et 13(2003)			
U.S.	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	411.60	77.91	382.70	72.44	213.10	38.20	
В	48.80	9.24	94.10	17.81	272.20	48.80	
С	35.30	6.68	42.40	8.03	69.00	12.37	
D	26.70	5.05	6.70	1.27	3.50	0.63	
F	5.90	1.12	2.40	0.45	0.00	0.00	
Σ	528.30	100.00	528.30	100.00	557.80	100.00	
		Sum	mary Scores for Distri	et 13(2003)			
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	667.40	84.81	636.60	80.91	339.80	42.51	
В	47.40	6.02	99.50	12.65	373.20	46.69	
С	35.70	4.54	40.80	5.19	85.60	10.71	
D	29.90	3.80	7.80	0.99	0.80	0.10	
F	6.50	0.83	2.10	0.27	0.00	0.00	
Σ	786.90	100.00	786.80	100.00	799.40	100.00	
		Sum	mary Scores for Distri	et 13(2003)			
BR	Distres	s Score	Condition	on Score	Ride	de Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	14.20	58.68	13.60	56.43	7.00	29.05	
В	6.00	24.79	7.90	32.78	15.50	64.32	
С	2.00	8.26	1.60	6.64	1.60	6.64	
D	0.30	1.24	0.50	2.07	0.00	0.00	
F	1.70	7.02	0.50	2.07	0.00	0.00	
Σ	24.20	100.00	24.10	100.00	24.10	100.00	
		Sum	mary Scores for Distri	et 13(2003)			
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%	
A	1237.50	68.96	1118.00	62.34	118.00	6.58	
В	133.00	7.41	303.80	16.94	669.50	37.32	
С	132.20	7.37	241.70	13.48	903.80	50.38	
D	168.10	9.37	68.00	3.79	101.90	5.68	
F	123.80	6.90	62.00	3.46	0.80	0.04	
Σ	1794.60	100.00	1793.50	100.00	1794.00	100.00	

Summary Scores for District 13(2003)								
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	2.30	100.00	0.80	34.78	0.00	0.00		
В	0.00	0.00	0.00	0.00	0.50	21.74		
С	0.00	0.00	0.00	0.00	0.30	13.04		
D	0.00	0.00	0.50	21.74	0.50	21.74		
F	0.00	0.00	1.00	43.48	1.00	43.48		
Σ	2.30	100.00	2.30	100.00	2.30	100.00		

	Summary Scores for District 14(2001)								
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	12.00	100.00	12.00	100.00	12.00	100.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
С	0.00	0.00	0.00	0.00	0.00	0.00			
D	0.00	0.00	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	12.00	100.00	12.00	100.00	12.00	100.00			
		Sum	mary Scores for Distric	et 14(2001)					
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	221.00	72.32	218.60	71.53	147.60	48.14			
В	22.50	7.36	45.80	14.99	155.10	50.59			
С	23.00	7.53	35.70	11.68	3.40	1.11			
D	24.10	7.89	4.50	1.47	0.50	0.16			
F	15.00	4.91	1.00	0.33	0.00	0.00			
Σ	305.60	100.00	305.60	100.00	306.60	100.00			
	Summary Scores for District 14(2001)								
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	227.80	89.44	223.80	87.90	59.00	22.99			
В	10.50	4.12	21.00	8.25	191.50	74.63			
С	8.40	3.30	7.60	2.99	6.10	2.38			
D	4.50	1.77	2.20	0.86	0.00	0.00			
F	3.50	1.37	0.00	0.00	0.00	0.00			
Σ	254.70	100.00	254.60	100.00	256.60	100.00			
		Sum	mary Scores for Distric	et 14(2001)					
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	0.00	0.00	0.00	0.00	0.00	0.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
С	0.00	0.00	0.00	0.00	0.00	0.00			
D	0.00	0.00	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	0.00	0.00	0.00	0.00	0.00	0.00			

		Sum	mary Scores for Distri	ct 14(2001)			
<u>FM</u>	Distres	s Score	Condition	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	529.30	71.76	518.40	70.33	17.00	2.24	
В	70.50	9.56	164.20	22.28	493.70	64.99	
С	88.90	12.05	50.20	6.81	248.50	32.71	
D	39.30	5.33	3.00	0.41	0.50	0.07	
F	9.60	1.30	1.30	0.18	0.00	0.00	
Σ	737.60	100.00	737.10	100.00	759.70	100.00	
		Sum	mary Scores for Distri	ct 14(2001)			
<u>PR</u>	Distres	s Score	Condition Score		Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	13.20	84.08	12.20	77.71	0.00	0.00	
В	1.00	6.37	3.00	19.11	5.50	35.03	
С	1.50	9.55	0.50	3.18	10.20	64.97	
D	0.00	0.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
Σ	15.70	100.00	15.70	100.00	15.70	100.00	

Summary Scores for District 14(2002)									
<u>IH</u>	Distres	s Score	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	12.00	100.00	12.00	100.00	12.00	100.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
С	0.00	0.00	0.00	0.00	0.00	0.00			
D	0.00	0.00	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	12.00	100.00	12.00	100.00	12.00	100.00			
	Summary Scores for District 14(2002)								
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	197.80	65.89	197.10	65.66	139.30	45.93			
В	24.50	8.16	49.10	16.36	160.20	52.82			
С	25.80	8.59	44.50	14.82	3.60	1.19			
D	32.00	10.66	7.00	2.33	0.20	0.07			
F	20.10	6.70	2.50	0.83	0.00	0.00			
Σ	300.20	100.00	300.20	100.00	303.30	100.00			
		Sum	mary Scores for Distri	et 14(2002)					
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	204.20	79.06	202.00	78.29	62.30	24.10			
В	20.00	7.74	35.60	13.80	190.10	73.54			
С	15.60	6.04	14.20	5.50	6.10	2.36			
D	11.30	4.37	5.20	2.02	0.00	0.00			
F	7.20	2.79	1.00	0.39	0.00	0.00			
Σ	258.30	100.00	258.00	100.00	258.50	100.00			

		Sum	mary Scores for Distri	ct 14(2002)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distri	ct 14(2002)	,	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	519.80	66.99	505.80	65.21	13.60	1.75
В	82.70	10.66	194.40	25.06	502.50	64.78
C	102.40	13.20	72.50	9.35	258.40	33.31
D	61.00	7.86	3.00	0.39	1.20	0.15
F	10.00	1.29	0.00	0.00	0.00	0.00
Σ	775.90	100.00	775.70	100.00	775.70	100.00
		Sum	mary Scores for Distri	ct 14(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	15.80	100.00	13.70	86.71	0.00	0.00
В	0.00	0.00	2.00	12.66	3.70	23.42
С	0.00	0.00	0.10	0.63	12.10	76.58
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	15.80	100.00	15.80	100.00	15.80	100.00

	Summary Scores for District 14(2003)								
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	11.50	95.83	11.50	95.83	12.00	100.00			
В	0.50	4.17	0.50	4.17	0.00	0.00			
С	0.00	0.00	0.00	0.00	0.00	0.00			
D	0.00	0.00	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	12.00	100.00	12.00	100.00	12.00	100.00			
		Sum	mary Scores for Distric	et 14(2003)					
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	239.70	80.82	237.10	79.99	143.90	48.39			
В	16.00	5.39	30.10	10.16	149.90	50.40			
С	13.60	4.59	20.10	6.78	3.60	1.21			
D	13.20	4.45	4.10	1.38	0.00	0.00			
F	14.10	4.75	5.00	1.69	0.00	0.00			
Σ	296.60	100.00	296.40	100.00	297.40	100.00			

		Sum	mary Scores for Distric	et 14(2003)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	205.70	81.05	203.60	80.25	56.60	21.75
В	21.30	8.39	33.00	13.01	197.80	76.02
C	13.60	5.36	15.10	5.95	5.50	2.11
D	7.50	2.96	1.40	0.55	0.20	0.08
F	5.70	2.25	0.60	0.24	0.10	0.04
Σ	253.80	100.00	253.70	100.00	260.20	100.00
		Sum	mary Scores for Distric	et 14(2003)		
BR	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	et 14(2003)		
<u>FM</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	510.20	66.59	495.70	64.71	17.50	2.26
В	79.60	10.39	192.80	25.17	526.70	68.05
С	104.30	13.61	71.30	9.31	228.60	29.53
D	57.50	7.50	5.00	0.65	1.20	0.16
F	14.60	1.91	1.20	0.16	0.00	0.00
Σ	766.20	100.00	766.00	100.00	774.00	100.00
		Sum	mary Scores for Distric	et 14(2003)		
<u>PR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	15.60	100.00	15.00	96.15	0.00	0.00
В	0.00	0.00	0.50	3.21	3.50	22.44
С	0.00	0.00	0.00	0.00	12.00	76.92
D	0.00	0.00	0.00	0.00	0.10	0.64
F	0.00	0.00	0.10	0.64	0.00	0.00
Σ	15.60	100.00	15.60	100.00	15.60	100.00

	Summary Scores for District 15(2001)								
<u>IH</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	379.40	90.74	370.10	88.52	232.00	54.83			
В	20.40	4.88	35.00	8.37	112.90	26.68			
C	9.30	2.22	8.30	1.99	69.10	16.33			
D	5.80	1.39	4.30	1.03	8.90	2.10			
F	3.20	0.77	0.40	0.10	0.20	0.05			
Σ	418.10	100.00	418.10	100.00	423.10	100.00			

		Sum	mary Scores for Distri	et 15(2001)		
U.S.	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	156.90	63.94	148.40	60.47	71.10	28.97
В	13.30	5.42	31.90	13.00	127.90	52.12
С	16.00	6.52	45.20	18.42	46.40	18.91
D	22.20	9.05	14.50	5.91	0.00	0.00
F	37.00	15.08	5.40	2.20	0.00	0.00
Σ	245.40	100.00	245.40	100.00	245.40	100.00
		Sum	mary Scores for Distri	et 15(2001)	'	
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	454.20	78.03	400.40	68.79	69.40	11.79
В	50.40	8.66	109.60	18.83	357.50	60.74
С	34.60	5.94	42.60	7.32	137.50	23.36
D	19.60	3.37	14.90	2.56	23.70	4.03
F	23.30	4.00	14.60	2.51	0.50	0.08
Σ	582.10	100.00	582.10	100.00	588.60	100.00
		Sum	mary Scores for Distri	et 15(2001)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	7.70	88.51	6.40	73.56	1.30	13.13
В	0.50	5.75	2.30	26.44	6.80	68.69
С	0.50	5.75	0.00	0.00	1.80	18.18
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	8.70	100.00	8.70	100.00	9.90	100.00
		Sum	mary Scores for Distri	et 15(2001)		
FM	Distres		Condition		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	866.40	77.07	736.80	65.54	28.00	2.49
В	106.00	9.43	217.70	19.36	420.70	37.35
С	67.10	5.97	103.30	9.19	591.90	52.54
D	45.20	4.02	37.30	3.32	83.30	7.39
F	39.50	3.51	29.10	2.59	2.60	0.23
Σ	1124.20	100.00	1124.20	100.00	1126.50	100.00
		Sum	mary Scores for Distri	et 15(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	12.20	70.52	9.40	54.34	0.00	0.00
В	1.50	8.67	4.00	23.12	10.40	59.77
С	3.10	17.92	2.80	16.18	4.00	22.99
D	0.50	2.89	0.00	0.00	3.00	17.24
F	0.00	0.00	1.10	6.36	0.00	0.00
Σ	17.30	100.00	17.30	100.00	17.40	100.00

		Sum	mary Scores for Distric	et 15(2002)		
IH	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	388.60	89.13	375.60	86.66	232.50	53.53
В	20.50	4.70	36.90	8.51	128.10	29.50
С	10.00	2.29	16.00	3.69	63.10	14.53
D	11.50	2.64	3.30	0.76	9.70	2.23
F	5.40	1.24	1.60	0.37	0.90	0.21
Σ	436.00	100.00	433.40	100.00	434.30	100.00
		Sum	mary Scores for Distri	et 15(2002)	,	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	193.00	76.80	186.20	74.09	90.00	35.81
В	16.50	6.57	25.50	10.15	132.60	52.77
C	7.30	2.90	20.60	8.20	27.30	10.86
D	12.00	4.78	11.50	4.58	1.40	0.56
F	22.50	8.95	7.50	2.98	0.00	0.00
Σ	251.30	100.00	251.30	100.00	251.30	100.00
		Sum	mary Scores for Distri	et 15(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	463.30	79.76	429.40	73.92	69.40	11.26
В	37.60	6.47	80.20	13.81	404.40	65.61
C	32.10	5.53	44.70	7.69	132.10	21.43
D	24.10	4.15	13.80	2.38	10.00	1.62
F	23.80	4.10	12.80	2.20	0.50	0.08
Σ	580.90	100.00	580.90	100.00	616.40	100.00
		Sum	mary Scores for Distri	et 15(2002)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	9.90	100.00	8.90	89.90	1.80	18.18
В	0.00	0.00	1.00	10.10	6.40	64.65
С	0.00	0.00	0.00	0.00	1.70	17.17
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	9.90	100.00	9.90	100.00	9.90	100.00
		Sum	mary Scores for Distric	et 15(2002)		
<u>FM</u>	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	862.50	77.40	754.20	67.68	32.80	2.91
В	71.10	6.38	183.40	16.46	478.80	42.52
С	68.30	6.13	108.80	9.76	549.20	48.77
D	53.60	4.81	41.70	3.74	60.60	5.38
F	58.90	5.29	26.20	2.35	4.70	0.42
Σ	1114.40	100.00	1114.30	100.00	1126.10	100.00

	Summary Scores for District 15(2002)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	22.40	92.18	15.60	67.24	0.00	0.00			
В	1.00	4.12	2.40	10.34	6.30	27.16			
С	0.00	0.00	0.90	3.88	9.30	40.09			
D	0.00	0.00	1.60	6.90	6.20	26.72			
F	0.90	3.70	2.70	11.64	1.40	6.03			
Σ	24.30	100.00	23.20	100.00	23.20	100.00			

		Sumi	mary Scores for Distric	et 15(2003)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	369.90	84.94	360.80	82.90	239.40	54.92
В	27.00	6.20	51.30	11.79	128.10	29.39
C	18.00	4.13	18.50	4.25	61.20	14.04
D	11.00	2.53	4.00	0.92	7.20	1.65
F	9.60	2.20	0.60	0.14	0.00	0.00
Σ	435.50	100.00	435.20	100.00	435.90	100.00
		Sumi	mary Scores for Distric	et 15(2003)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	183.40	72.60	178.10	70.51	77.30	30.42
В	15.40	6.10	34.20	13.54	154.50	60.80
C	18.40	7.28	26.10	10.33	21.80	8.58
D	16.20	6.41	10.90	4.32	0.50	0.20
F	19.20	7.60	3.30	1.31	0.00	0.00
Σ	252.60	100.00	252.60	100.00	254.10	100.00
		Sumi	mary Scores for Distric	et 15(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	477.10	81.02	447.10	75.93	73.50	12.41
В	31.90	5.42	80.30	13.64	379.90	64.13
C	33.60	5.71	39.10	6.64	122.60	20.70
D	21.80	3.70	12.40	2.11	16.40	2.77
F	24.50	4.16	9.90	1.68	0.00	0.00
Σ	588.90	100.00	588.80	100.00	592.40	100.00
		Sumi	mary Scores for Distric	et 15(2003)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	9.90	100.00	8.50	85.86	2.20	22.22
В	0.00	0.00	0.50	5.05	5.60	56.57
C	0.00	0.00	0.30	3.03	1.80	18.18
D	0.00	0.00	0.60	6.06	0.30	3.03
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	9.90	100.00	9.90	100.00	9.90	100.00

	Summary Scores for District 15(2003)								
<u>FM</u>	Distres	s Score	Condition	on Score	Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	915.40	80.55	809.90	71.28	28.40	2.49			
В	71.60	6.30	163.40	14.38	475.00	41.63			
С	55.20	4.86	100.10	8.81	565.70	49.57			
D	53.80	4.73	39.00	3.43	68.40	5.99			
F	40.40	3.56	23.80	2.09	3.60	0.32			
Σ	1136.40	100.00	1136.20	100.00	1141.10	100.00			
		Sum	mary Scores for Distri	ct 15(2003)					
<u>PR</u>	Distres	s Score	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	21.80	89.71	14.70	61.51	0.00	0.00			
В	0.00	0.00	3.00	12.55	5.90	24.69			
С	0.30	1.23	2.90	12.13	10.30	43.10			
D	1.00	4.12	2.00	8.37	7.60	31.80			
F	1.20	4.94	1.30	5.44	0.10	0.42			
Σ	24.30	100.00	23.90	100.00	23.90	100.00			

		Sum	mary Scores for Distric	et 16(2001)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	182.50	91.25	175.10	87.55	145.50	45.53
В	5.50	2.75	14.90	7.45	109.00	34.11
С	3.00	1.50	7.00	3.50	58.70	18.37
D	3.00	1.50	3.00	1.50	6.40	2.00
F	6.00	3.00	0.00	0.00	0.00	0.00
Σ	200.00	100.00	200.00	100.00	319.60	100.00
		Sum	mary Scores for Distric	et 16(2001)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	642.40	69.59	626.70	67.89	422.30	39.39
В	50.40	5.46	93.50	10.13	581.50	54.23
С	41.90	4.54	155.50	16.85	68.20	6.36
D	64.20	6.95	29.30	3.17	0.20	0.02
F	124.20	13.45	18.10	1.96	0.00	0.00
Σ	923.10	100.00	923.10	100.00	1072.20	100.00
		Sum	mary Scores for Distric	et 16(2001)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	547.60	78.75	525.80	75.63	128.80	17.91
В	39.40	5.67	83.90	12.07	520.70	72.40
С	36.20	5.21	68.20	9.81	64.40	8.95
D	34.40	4.95	6.40	0.92	5.30	0.74
F	37.80	5.44	10.90	1.57	0.00	0.00
Σ	695.40	100.00	695.20	100.00	719.20	100.00

		Sum	mary Scores for Distri	ct 16(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	52.40	56.10	40.40	43.30	9.20	9.86
В	7.20	7.71	16.20	17.36	52.70	56.48
С	8.60	9.21	17.60	18.86	28.50	30.55
D	14.40	15.42	11.70	12.54	2.90	3.11
F	10.80	11.56	7.40	7.93	0.00	0.00
Σ	93.40	100.00	93.30	100.00	93.30	100.00
		Sum	mary Scores for Distri	ct 16(2001)	,	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1674.70	77.73	1421.20	65.99	36.70	1.67
В	145.90	6.77	361.80	16.80	658.50	29.91
C	100.50	4.66	255.40	11.86	1310.90	59.55
D	114.80	5.33	80.10	3.72	193.70	8.80
F	118.50	5.50	35.30	1.64	1.50	0.07
Σ	2154.40	100.00	2153.80	100.00	2201.30	100.00
		Sum	mary Scores for Distri	ct 16(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	25.40	92.70	19.80	72.26	0.00	0.00
В	1.00	3.65	3.30	12.04	2.70	9.85
С	0.00	0.00	2.70	9.85	21.90	79.93
D	1.00	3.65	0.80	2.92	2.00	7.30
F	0.00	0.00	0.80	2.92	0.80	2.92
Σ	27.40	100.00	27.40	100.00	27.40	100.00

	Summary Scores for District 16(2002)								
<u>IH</u>	Distres	s Score	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	119.70	88.73	118.60	87.92	87.10	54.51			
В	8.20	6.08	12.40	9.19	35.30	22.09			
С	4.10	3.04	3.70	2.74	35.10	21.96			
D	2.90	2.15	0.20	0.15	2.30	1.44			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	134.90	100.00	134.90	100.00	159.80	100.00			
		Sumi	mary Scores for Distric	et 16(2002)					
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	329.10	71.02	319.70	68.99	205.70	38.40			
В	26.90	5.80	51.80	11.18	287.00	53.57			
С	23.20	5.01	76.00	16.40	42.50	7.93			
D	33.30	7.19	14.00	3.02	0.50	0.09			
F	50.90	10.98	1.90	0.41	0.00	0.00			
Σ	463.40	100.00	463.40	100.00	535.70	100.00			

		Sum	mary Scores for Distric	et 16(2002)		
SH	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	285.60	79.96	274.60	76.94	49.70	13.89
В	21.40	5.99	43.80	12.27	272.30	76.13
С	20.10	5.63	28.80	8.07	33.20	9.28
D	19.20	5.38	6.20	1.74	2.50	0.70
F	10.90	3.05	3.50	0.98	0.00	0.00
Σ	357.20	100.00	356.90	100.00	357.70	100.00
	•	Sum	mary Scores for Distric	et 16(2002)	,	
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	28.00	60.22	21.50	46.24	4.30	9.25
В	2.10	4.52	6.40	13.76	27.10	58.28
С	3.60	7.74	7.10	15.27	12.60	27.10
D	4.60	9.89	6.90	14.84	2.50	5.38
F	8.20	17.63	4.60	9.89	0.00	0.00
Σ	46.50	100.00	46.50	100.00	46.50	100.00
	•	Sum	mary Scores for Distric	et 16(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	870.70	79.31	743.80	67.81	16.90	1.54
В	72.70	6.62	187.20	17.07	311.50	28.34
C	53.50	4.87	106.70	9.73	682.90	62.12
D	52.30	4.76	37.30	3.40	86.80	7.90
F	48.70	4.44	21.90	2.00	1.20	0.11
Σ	1097.90	100.00	1096.90	100.00	1099.30	100.00
		Sum	mary Scores for Distric	et 16(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	13.30	97.08	10.10	73.72	0.00	0.00
В	0.40	2.92	1.90	13.87	0.40	2.92
С	0.00	0.00	1.00	7.30	11.10	81.02
D	0.00	0.00	0.30	2.19	1.80	13.14
F	0.00	0.00	0.40	2.92	0.40	2.92
Σ	13.70	100.00	13.70	100.00	13.70	100.00

	Summary Scores for District 16(2003)								
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	153.80	95.83	151.20	94.21	87.30	54.39			
В	3.20	1.99	7.00	4.36	36.60	22.80			
C	2.70	1.68	2.30	1.43	34.50	21.50			
D	0.80	0.50	0.00	0.00	2.10	1.31			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	160.50	100.00	160.50	100.00	160.50	100.00			

		Sum	mary Scores for Distric	et 16(2003)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	381.30	72.22	369.90	70.06	271.30	50.62
В	32.70	6.19	59.80	11.33	231.10	43.12
С	22.70	4.30	57.30	10.85	33.40	6.23
D	31.10	5.89	24.50	4.64	0.20	0.04
F	60.20	11.40	16.50	3.13	0.00	0.00
Σ	528.00	100.00	528.00	100.00	536.00	100.00
		Sum	mary Scores for Distri	et 16(2003)	'	
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	267.50	73.94	255.10	70.55	49.80	13.77
В	28.40	7.85	57.20	15.82	272.70	75.41
С	26.20	7.24	36.10	9.98	36.30	10.04
D	21.30	5.89	8.10	2.24	2.50	0.69
F	18.40	5.09	5.10	1.41	0.30	0.08
Σ	361.80	100.00	361.60	100.00	361.60	100.00
		Sum	mary Scores for Distri	et 16(2003)		
BR	Distres			Ride	Score	
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	34.70	74.62	27.20	58.62	4.30	9.27
В	2.50	5.38	7.40	15.95	30.50	65.73
С	1.80	3.87	7.00	15.09	10.70	23.06
D	3.00	6.45	2.90	6.25	0.90	1.94
F	4.50	9.68	1.90	4.09	0.00	0.00
Σ	46.50	100.00	46.40	100.00	46.40	100.00
		Sum	mary Scores for Distric	et 16(2003)		
FM	Distres		Condition		Ride Score	
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	856.60	77.93	714.70	65.06	11.40	1.03
В	88.50	8.05	211.70	19.27	290.20	26.33
С	63.00	5.73	112.40	10.23	698.60	63.39
D	54.10	4.92	39.40	3.59	100.00	9.07
F	37.00	3.37	20.40	1.86	1.90	0.17
Σ	1099.20	100.00	1098.60	100.00	1102.10	100.00
		Sum	mary Scores for Distric	et 16(2003)		
PR	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	12.10	96.03	9.40	74.60	0.00	0.00
В	0.00	0.00	1.90	15.08	0.90	6.57
С	0.50	3.97	1.00	7.94	10.90	79.56
D	0.00	0.00	0.30	2.38	1.50	10.95
F	0.00	0.00	0.00	0.00	0.40	2.92
Σ	12.60	100.00	12.60	100.00	13.70	100.00

		Sum	mary Scores for Distri	et 17(2001)		
<u>IH</u>	Distres	s Score	Condition Score Ride Score			Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	267.00	76.09	255.00	72.73	163.80	43.68
В	15.20	4.33	31.30	8.93	115.70	30.85
С	12.80	3.65	27.00	7.70	78.10	20.83
D	13.50	3.85	13.70	3.91	17.30	4.61
F	42.40	12.08	23.60	6.73	0.10	0.03
Σ	350.90	100.00	350.60	100.00	375.00	100.00
		Sum	mary Scores for Distri	et 17(2001)	'	
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	275.60	85.48	261.50	81.11	154.40	45.07
В	21.60	6.70	38.70	12.00	159.80	46.64
С	8.60	2.67	12.70	3.94	25.70	7.50
D	9.80	3.04	4.80	1.49	2.70	0.79
F	6.80	2.11	4.70	1.46	0.00	0.00
Σ	322.40	100.00	322.40	100.00	342.60	100.00
		Sum	mary Scores for Distric	et 17(2001)		
SH			Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%
A	463.00	85.11	420.60	77.32	191.00	33.74
В	26.20	4.82	64.20	11.80	240.30	42.45
С	21.40	3.93	34.80	6.40	120.60	21.30
D	22.60	4.15	14.40	2.65	13.30	2.35
F	10.80	1.99	10.00	1.84	0.90	0.16
Σ	544.00	100.00	544.00	100.00	566.10	100.00
			mary Scores for Distric	et 17(2001)		
BR	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%
A	10.20	69.86	4.60	31.51	1.00	6.85
В	2.40	16.44	5.10	34.93	5.10	34.93
C	1.00	6.85	3.20	21.92	7.60	52.05
D	0.50	3.42	0.80	5.48	0.80	5.48
F	0.50	3.42	0.90	6.16	0.10	0.68
Σ	14.60	100.00	14.60	100.00	14.60	100.00
			mary Scores for Distric			
FM	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%
A	1207.60	74.19	1001.50	61.54	44.30	2.66
В	82.80	5.09	237.70	14.61	659.50	39.56
C	73.60	4.52	205.90	12.65	833.60	50.01
D	104.70	6.43	91.50	5.62	128.20	7.69
F	159.00	9.77	90.90	5.59	1.30	0.08
						0.00

	Summary Scores for District 17(2001)								
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	10.10	67.79	7.60	51.01	0.00	0.00			
В	0.00	0.00	1.80	12.08	4.50	30.20			
C	1.80	12.08	2.20	14.77	7.90	53.02			
D	0.50	3.36	2.30	15.44	2.00	13.42			
F	2.50	16.78	1.00	6.71	0.50	3.36			
Σ	14.90	100.00	14.90	100.00	14.90	100.00			

		Sum	mary Scores for Distric	ct 17(2002)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	228.00	72.27	222.90	70.74	195.80	55.58
В	17.50	5.55	27.70	8.79	76.80	21.80
С	6.70	2.12	26.40	8.38	66.30	18.82
D	15.40	4.88	15.40	4.89	12.30	3.49
F	47.90	15.18	22.70	7.20	1.10	0.31
Σ	315.50	100.00	315.10	100.00	352.30	100.00
		Sum	mary Scores for Distric	ct 17(2002)		
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	302.20	94.14	297.30	92.62	186.90	54.91
В	5.50	1.71	11.90	3.71	137.30	40.33
С	3.60	1.12	4.60	1.43	14.70	4.32
D	3.40	1.06	6.00	1.87	1.50	0.44
F	6.30	1.96	1.20	0.37	0.00	0.00
Σ	321.00	100.00	321.00	100.00	340.40	100.00
		Sum	mary Scores for Distric	et 17(2002)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	455.90	83.97	420.60	77.52	197.80	36.17
В	21.20	3.90	64.50	11.89	236.80	43.30
С	29.30	5.40	38.30	7.06	106.10	19.40
D	27.30	5.03	11.90	2.19	6.10	1.12
F	9.20	1.69	7.30	1.35	0.10	0.02
Σ	542.90	100.00	542.60	100.00	546.90	100.00
		Sum	mary Scores for Distric	ct 17(2002)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	7.10	57.72	2.20	19.13	0.90	5.29
В	2.10	17.07	3.10	26.96	6.40	37.65
С	0.60	4.88	3.20	27.83	9.70	57.06
D	1.50	12.20	2.00	17.39	0.00	0.00
F	1.00	8.13	1.00	8.70	0.00	0.00
Σ	12.30	100.00	11.50	100.00	17.00	100.00

Summary Scores for District 17(2002)								
<u>FM</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	1231.20	75.12	1045.30	63.82	39.20	2.34		
В	92.70	5.66	245.00	14.96	733.90	43.88		
C	79.40	4.84	194.40	11.87	814.70	48.71		
D	108.10	6.60	86.10	5.26	83.00	4.96		
F	127.60	7.79	67.20	4.10	1.70	0.10		
Σ	1639.00	100.00	1638.00	100.00	1672.50	100.00		
		Sum	mary Scores for Distric	et 17(2002)				
<u>PR</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	10.10	67.33	9.60	64.00	0.50	3.33		
В	0.00	0.00	0.50	3.33	5.70	38.00		
C	1.00	6.67	1.20	8.00	5.60	37.33		
D	0.20	1.33	0.00	0.00	2.70	18.00		
F	3.70	24.67	3.70	24.67	0.50	3.33		
Σ	15.00	100.00	15.00	100.00	15.00	100.00		

		Sum	mary Scores for Distri	ct 17(2003)		
<u>IH</u>	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	280.30	78.91	275.00	78.35	199.40	56.50
В	20.80	5.86	34.40	9.80	68.20	19.33
С	15.90	4.48	15.30	4.36	76.00	21.54
D	11.10	3.13	9.40	2.68	8.60	2.44
F	27.10	7.63	16.90	4.81	0.70	0.20
Σ	355.20	100.00	351.00	100.00	352.90	100.00
		Sum	mary Scores for Distri	ct 17(2003)	•	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	325.20	96.93	322.10	96.01	259.90	76.08
В	2.90	0.86	5.90	1.76	72.70	21.28
С	2.60	0.77	4.60	1.37	7.40	2.17
D	4.10	1.22	2.90	0.86	1.60	0.47
F	0.70	0.21	0.00	0.00	0.00	0.00
Σ	335.50	100.00	335.50	100.00	341.60	100.00
		Sum	mary Scores for Distri	ct 17(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	477.90	88.01	443.60	81.77	226.30	40.64
В	14.70	2.71	53.80	9.92	216.30	38.85
С	26.50	4.88	34.80	6.41	108.50	19.49
D	19.10	3.52	7.30	1.35	5.70	1.02
F	4.80	0.88	3.00	0.55	0.00	0.00
Σ	543.00	100.00	542.50	100.00	556.80	100.00

		Sum	mary Scores for Distri	ct 17(2003)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	17.30	94.54	10.40	57.14	4.40	24.18
В	1.00	5.46	5.60	30.77	8.00	43.96
С	0.00	0.00	1.00	5.49	5.50	30.22
D	0.00	0.00	0.60	3.30	0.30	1.65
F	0.00	0.00	0.60	3.30	0.00	0.00
Σ	18.30	100.00	18.20	100.00	18.20	100.00
		Sum	mary Scores for Distri	ct 17(2003)	,	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1237.50	73.96	1059.00	63.30	39.00	2.32
В	118.80	7.10	281.80	16.84	707.00	41.97
С	118.30	7.07	197.00	11.77	852.30	50.59
D	105.80	6.32	84.20	5.03	85.00	5.05
F	92.90	5.55	51.10	3.05	1.30	0.08
Σ	1673.30	100.00	1673.10	100.00	1684.60	100.00
		Sum	mary Scores for Distri	ct 17(2003)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	9.50	60.51	8.40	53.85	0.00	0.00
В	1.00	6.37	2.30	14.74	6.10	39.10
С	1.40	8.92	2.20	14.10	6.30	40.38
D	0.20	1.27	1.00	6.41	3.00	19.23
F	3.60	22.93	1.70	10.90	0.20	1.28
Σ	15.70	100.00	15.60	100.00	15.60	100.00

	Summary Scores for District 18(2001)									
<u>IH</u>	Distres	s Score	Condition	Condition Score		Score				
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	62.10	62.22	59.10	59.82	8.40	8.17				
В	8.60	8.62	10.90	11.03	53.80	52.33				
С	3.20	3.21	8.30	8.40	31.90	31.03				
D	3.90	3.91	4.70	4.76	8.70	8.46				
F	22.00	22.04	15.80	15.99	0.00	0.00				
Σ	99.80	100.00	98.80	100.00	102.80	100.00				
		Sum	mary Scores for Distri	et 18(2001)						
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score					
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	20.90	100.00	19.60	93.78	0.70	3.20				
В	0.00	0.00	0.80	3.83	17.40	79.45				
С	0.00	0.00	0.00	0.00	3.80	17.35				
D	0.00	0.00	0.50	2.39	0.00	0.00				
F	0.00	0.00	0.00	0.00	0.00	0.00				
Σ	20.90	100.00	20.90	100.00	21.90	100.00				

		Sum	mary Scores for Distric	ct 18(2001)		
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	62.40	66.24	53.80	57.36	27.20	24.75
В	9.30	9.87	18.30	19.51	60.50	55.05
С	4.90	5.20	7.80	8.32	21.30	19.38
D	2.40	2.55	5.80	6.18	0.90	0.82
F	15.20	16.14	8.10	8.64	0.00	0.00
Σ	94.20	100.00	93.80	100.00	109.90	100.00
		Sum	mary Scores for Distri	ct 18(2001)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	7.10	87.65	6.10	75.31	1.70	20.99
В	1.00	12.35	0.50	6.17	4.90	60.49
С	0.00	0.00	1.00	12.35	1.50	18.52
D	0.00	0.00	0.50	6.17	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	8.10	100.00	8.10	100.00	8.10	100.00
		Sum	mary Scores for Distri	ct 18(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	191.40	62.84	161.10	52.91	35.20	10.48
В	16.40	5.38	36.60	12.02	72.70	21.64
C	12.50	4.10	43.10	14.15	193.90	57.71
D	20.60	6.76	23.30	7.65	33.70	10.03
F	63.70	20.91	40.40	13.27	0.50	0.15
Σ	304.60	100.00	304.50	100.00	336.00	100.00
		Sum	mary Scores for Distri	ct 18(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00

	Summary Scores for District 18(2002)								
<u>IH</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	52.70	53.67	50.80	51.73	5.00	4.60			
В	7.70	7.84	13.90	14.15	58.50	53.82			
С	10.30	10.49	16.10	16.40	34.70	31.92			
D	11.70	11.91	5.50	5.60	10.20	9.38			
F	15.80	16.09	11.90	12.12	0.30	0.28			
Σ	98.20	100.00	98.20	100.00	108.70	100.00			

		Sum	mary Scores for Distric	et 18(2002)		
U.S.	Distres		Condition		Ride Score	
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	21.60	98.18	19.40	88.18	0.50	2.27
В	0.40	1.82	1.70	7.73	17.80	80.91
С	0.00	0.00	0.50	2.27	3.70	16.82
D	0.00	0.00	0.40	1.82	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	22.00	100.00	22.00	100.00	22.00	100.00
		Sum	mary Scores for Distri	et 18(2002)	,	
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	71.10	70.40	62.30	61.68	20.40	17.32
В	4.90	4.85	9.90	9.80	70.80	60.10
С	2.60	2.57	10.90	10.79	25.70	21.82
D	4.50	4.46	5.70	5.64	0.90	0.76
F	17.90	17.72	12.20	12.08	0.00	0.00
Σ	101.00	100.00	101.00	100.00	117.80	100.00
		Sum	mary Scores for Distri	et 18(2002)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.80	65.75	3.80	52.05	0.50	6.02
В	1.80	24.66	2.70	36.99	5.80	69.88
C	0.50	6.85	0.30	4.11	2.00	24.10
D	0.00	0.00	0.50	6.85	0.00	0.00
F	0.20	2.74	0.00	0.00	0.00	0.00
Σ	7.30	100.00	7.30	100.00	8.30	100.00
		Sum	mary Scores for Distri	et 18(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	151.10	49.03	128.80	41.86	14.60	4.74
В	22.10	7.17	45.80	14.88	64.20	20.86
C	19.70	6.39	56.70	18.43	200.80	65.26
D	48.70	15.80	30.80	10.01	27.40	8.90
F	66.60	21.61	45.60	14.82	0.70	0.23
Σ	308.20	100.00	307.70	100.00	307.70	100.00
	_	Sum	mary Scores for Distri	et 18(2002)		
<u>PR</u>	Distres		Condition	on Score	Ride	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
\sum	0.00	0.00	0.00	0.00	0.00	0.00

		Sum	mary Scores for Distric	et 18(2003)		
IH	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	60.70	64.51	55.80	59.30	8.20	8.40
В	6.40	6.80	13.80	14.67	49.50	50.72
С	4.50	4.78	5.30	5.63	29.90	30.64
D	3.40	3.61	3.40	3.61	10.00	10.25
F	19.10	20.30	15.80	16.79	0.00	0.00
Σ	94.10	100.00	94.10	100.00	97.60	100.00
		Sum	mary Scores for Distric	et 18(2003)		
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	5.90	29.50	5.70	28.64	0.50	2.28
В	8.20	41.00	9.40	47.24	18.00	82.19
С	1.00	5.00	3.40	17.09	3.40	15.53
D	3.80	19.00	1.00	5.03	0.00	0.00
F	1.10	5.50	0.40	2.01	0.00	0.00
Σ	20.00	100.00	19.90	100.00	21.90	100.00
		Sum	mary Scores for Distric	et 18(2003)		
<u>SH</u>	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	66.30	70.61	56.20	60.17	26.80	23.91
В	11.00	11.71	19.00	20.34	67.70	60.39
C	2.50	2.66	9.40	10.06	17.10	15.25
D	2.90	3.09	4.20	4.50	0.50	0.45
F	11.20	11.93	4.60	4.93	0.00	0.00
Σ	93.90	100.00	93.40	100.00	112.10	100.00
		Sum	mary Scores for Distric	et 18(2003)		
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	5.30	71.62	4.60	62.16	0.00	0.00
В	1.20	16.22	0.80	10.81	5.90	71.08
С	0.00	0.00	0.50	6.76	2.40	28.92
D	0.00	0.00	0.60	8.11	0.00	0.00
F	0.90	12.16	0.90	12.16	0.00	0.00
Σ	7.40	100.00	7.40	100.00	8.30	100.00
		Sum	mary Scores for Distric	et 18(2003)		
<u>FM</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	175.20	67.54	140.60	54.45	13.50	4.41
В	20.10	7.75	49.20	19.05	70.80	23.12
С	13.40	5.17	33.70	13.05	193.70	63.26
D	16.90	6.52	20.10	7.78	27.10	8.85
F	33.80	13.03	14.60	5.65	1.10	0.36
\sum	259.40	100.00	258.20	100.00	306.20	100.00

Summary Scores for District 18(2003)								
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	0.00	0.00	0.00	0.00	0.00	0.00		
В	0.00	0.00	0.00	0.00	0.00	0.00		
C	0.00	0.00	0.00	0.00	0.00	0.00		
D	0.00	0.00	0.00	0.00	0.00	0.00		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	0.00	0.00	0.00	0.00	0.00	0.00		

	Summary Scores for District 19(2001)								
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	67.70	95.35	67.40	94.93	53.90	70.92			
В	1.50	2.11	3.10	4.37	7.90	10.39			
С	1.30	1.83	0.50	0.70	13.90	18.29			
D	0.50	0.70	0.00	0.00	0.30	0.39			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	71.00	100.00	71.00	100.00	76.00	100.00			
		Sum	mary Scores for Distric	et 19(2001)					
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	181.60	88.03	162.00	78.79	108.70	49.14			
В	18.40	8.92	32.70	15.90	87.80	39.69			
С	2.60	1.26	6.70	3.26	23.70	10.71			
D	0.80	0.39	1.80	0.88	1.00	0.45			
F	2.90	1.41	2.40	1.17	0.00	0.00			
Σ	206.30	100.00	205.60	100.00	221.20	100.00			
		Sum	mary Scores for Distric	et 19(2001)					
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	252.20	90.85	226.10	81.48	33.80	11.86			
В	15.50	5.58	37.60	13.55	183.20	64.26			
С	6.10	2.20	8.90	3.21	66.10	23.18			
D	2.80	1.01	3.50	1.26	2.00	0.70			
F	1.00	0.36	1.40	0.50	0.00	0.00			
Σ	277.60	100.00	277.50	100.00	285.10	100.00			
		Sum	mary Scores for Distric	et 19(2001)					
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	9.80	83.05	2.70	23.08	0.00	0.00			
В	0.50	4.24	3.40	29.06	3.20	27.35			
С	0.50	4.24	1.50	12.82	7.50	64.10			
D	0.00	0.00	1.60	13.68	1.00	8.55			
F	1.00	8.47	2.50	21.37	0.00	0.00			
Σ	11.80	100.00	11.70	100.00	11.70	100.00			

Summary Scores for District 19(2001)								
<u>FM</u>	Distres	s Score	Condition	Condition Score		Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	701.80	87.31	603.10	75.04	21.60	2.66		
В	57.30	7.13	141.60	17.62	356.90	44.02		
С	27.10	3.37	48.60	6.05	422.20	52.08		
D	12.10	1.51	7.20	0.90	9.70	1.20		
F	5.50	0.68	3.20	0.40	0.30	0.04		
Σ	803.80	100.00	803.70	100.00	810.70	100.00		
		Sum	mary Scores for Distri	et 19(2001)				
<u>PR</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	1.10	84.62	0.60	46.15	0.00	0.00		
В	0.20	15.38	0.70	53.85	0.00	0.00		
С	0.00	0.00	0.00	0.00	0.80	61.54		
D	0.00	0.00	0.00	0.00	0.50	38.46		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	1.30	100.00	1.30	100.00	1.30	100.00		

		Sum	mary Scores for Distric	et 19(2002)		
IH	Distres		Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	56.80	75.83	56.20	75.13	58.20	77.81
В	6.00	8.01	9.50	12.70	3.90	5.21
С	3.00	4.01	8.10	10.83	12.70	16.98
D	6.70	8.95	0.50	0.67	0.00	0.00
F	2.40	3.20	0.50	0.67	0.00	0.00
Σ	74.90	100.00	74.80	100.00	74.80	100.00
		Sum	mary Scores for Distri	et 19(2002)	•	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	162.30	76.96	153.60	73.04	134.00	61.55
В	12.50	5.93	24.50	11.65	64.40	29.58
С	13.70	6.50	25.10	11.94	19.10	8.77
D	16.40	7.78	6.30	3.00	0.00	0.00
F	6.00	2.84	0.80	0.38	0.20	0.09
Σ	210.90	100.00	210.30	100.00	217.70	100.00
		Sum	mary Scores for Distri	et 19(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	215.80	82.21	203.00	77.39	72.90	25.48
В	20.60	7.85	40.70	15.52	178.10	62.25
С	12.60	4.80	12.90	4.92	34.10	11.92
D	11.50	4.38	4.00	1.52	1.00	0.35
F	2.00	0.76	1.70	0.65	0.00	0.00
Σ	262.50	100.00	262.30	100.00	286.10	100.00

		Sum	mary Scores for Distri	ct 19(2002)		
<u>BR</u>	Distres	s Score	Condition	Condition Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	8.00	72.73	3.20	29.09	0.00	0.00
В	0.70	6.36	1.40	12.73	2.20	20.00
С	1.50	13.64	3.10	28.18	7.40	67.27
D	0.80	7.27	0.90	8.18	1.40	12.73
F	0.00	0.00	2.40	21.82	0.00	0.00
Σ	11.00	100.00	11.00	100.00	11.00	100.00
		Sum	mary Scores for Distri	ct 19(2002)	,	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	589.50	74.29	515.20	65.10	17.50	2.15
В	133.40	16.81	214.90	27.15	399.70	49.18
С	44.20	5.57	51.20	6.47	389.00	47.87
D	19.10	2.41	6.30	0.80	6.30	0.78
F	7.30	0.92	3.80	0.48	0.20	0.02
Σ	793.50	100.00	791.40	100.00	812.70	100.00
		Sum	mary Scores for Distri	ct 19(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.40	18.18	0.10	4.55	0.00	0.00
В	0.60	27.27	0.60	27.27	0.50	13.51
С	0.00	0.00	1.00	45.45	2.70	72.97
D	0.50	22.73	0.30	13.64	0.50	13.51
F	0.70	31.82	0.20	9.09	0.00	0.00
Σ	2.20	100.00	2.20	100.00	3.70	100.00

Summary Scores for District 19(2003)								
<u>IH</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	53.20	70.09	52.90	69.70	56.90	71.39		
В	7.90	10.41	11.80	15.55	6.40	8.03		
С	4.20	5.53	10.20	13.44	16.10	20.20		
D	6.70	8.83	0.50	0.66	0.30	0.38		
F	3.90	5.14	0.50	0.66	0.00	0.00		
Σ	75.90	100.00	75.90	100.00	79.70	100.00		
		Sumi	mary Scores for Distric	et 19(2003)				
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	191.80	84.94	178.10	79.54	155.30	67.40		
В	7.40	3.28	22.00	9.83	55.20	23.96		
С	9.60	4.25	18.50	8.26	19.00	8.25		
D	7.40	3.28	3.60	1.61	0.90	0.39		
F	9.60	4.25	1.70	0.76	0.00	0.00		
Σ	225.80	100.00	223.90	100.00	230.40	100.00		

		Sum	mary Scores for Distric	ct 19(2003)		
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	245.30	89.46	236.10	86.14	82.50	29.73
В	11.70	4.27	23.50	8.57	172.70	62.23
С	8.40	3.06	10.30	3.76	21.30	7.68
D	5.50	2.01	2.90	1.06	1.00	0.36
F	3.30	1.20	1.30	0.47	0.00	0.00
Σ	274.20	100.00	274.10	100.00	277.50	100.00
		Sum	mary Scores for Distri	ct 19(2003)	,	
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.50	36.00	1.90	15.20	0.00	0.00
В	1.50	12.00	2.00	16.00	3.50	28.00
С	1.50	12.00	1.60	12.80	7.90	63.20
D	0.70	5.60	2.70	21.60	1.10	8.80
F	4.30	34.40	4.30	34.40	0.00	0.00
Σ	12.50	100.00	12.50	100.00	12.50	100.00
		Sum	mary Scores for Distri	ct 19(2003)		
<u>FM</u>	Distres	s Score	Condition Score		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	681.50	86.05	611.10	77.29	21.80	2.68
В	66.70	8.42	133.80	16.92	416.20	51.16
C	25.40	3.21	34.80	4.40	369.30	45.40
D	13.30	1.68	8.30	1.05	5.50	0.68
F	5.10	0.64	2.70	0.34	0.70	0.09
Σ	792.00	100.00	790.70	100.00	813.50	100.00
		Sum	mary Scores for Distri	ct 19(2003)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.00	93.75	3.00	93.75	0.00	0.00
В	0.00	0.00	0.00	0.00	0.40	12.50
C	0.00	0.00	0.00	0.00	2.60	81.25
D	0.00	0.00	0.20	6.25	0.20	6.25
F	0.20	6.25	0.00	0.00	0.00	0.00
\sum	3.20	100.00	3.20	100.00	3.20	100.00

Summary Scores for District 20(2001)								
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	0.00	0.00	0.00	0.00	0.00	0.00		
В	0.00	0.00	0.00	0.00	0.00	0.00		
С	0.00	0.00	0.00	0.00	0.00	0.00		
D	0.00	0.00	0.00	0.00	0.00	0.00		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	0.00	0.00	0.00	0.00	0.00	0.00		

		Sum	mary Scores for Distric	et 20(2001)			
U.S.	Distres		Condition		Ride	Ride Score	
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	137.10	68.31	128.60	66.05	50.20	25.20	
В	13.70	6.83	24.30	12.48	130.70	65.61	
С	14.40	7.17	21.90	11.25	17.30	8.68	
D	13.50	6.73	8.20	4.21	1.00	0.50	
F	22.00	10.96	11.70	6.01	0.00	0.00	
Σ	200.70	100.00	194.70	100.00	199.20	100.00	
		Sum	mary Scores for Distri	et 20(2001)	•		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	119.00	78.70	113.80	76.63	16.80	11.31	
В	10.50	6.94	19.00	12.79	115.00	77.44	
С	9.00	5.95	12.50	8.42	16.60	11.18	
D	7.50	4.96	2.60	1.75	0.00	0.00	
F	5.20	3.44	0.60	0.40	0.10	0.07	
Σ	151.20	100.00	148.50	100.00	148.50	100.00	
		Sum	mary Scores for Distri	et 20(2001)			
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	1.50	100.00	1.30	86.67	0.30	20.00	
В	0.00	0.00	0.00	0.00	1.00	66.67	
С	0.00	0.00	0.20	13.33	0.20	13.33	
D	0.00	0.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
Σ	1.50	100.00	1.50	100.00	1.50	100.00	
		Sum	mary Scores for Distri	et 20(2001)			
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	384.10	84.72	365.10	82.03	11.50	2.57	
В	17.70	3.90	41.80	9.39	327.00	73.20	
C	18.10	3.99	29.40	6.61	105.80	23.68	
D	20.40	4.50	6.50	1.46	2.30	0.51	
F	13.10	2.89	2.30	0.52	0.10	0.02	
Σ	453.40	100.00	445.10	100.00	446.70	100.00	
		Sum	mary Scores for Distri	et 20(2001)			
<u>PR</u>	Distres		Condition	on Score	Ride		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	51.50	85.69	51.40	85.52	2.50	4.08	
В	3.90	6.49	6.50	10.82	54.00	88.24	
C	2.50	4.16	2.20	3.66	4.70	7.68	
D	1.50	2.50	0.00	0.00	0.00	0.00	
F	0.70	1.16	0.00	0.00	0.00	0.00	
\sum	60.10	100.00	60.10	100.00	61.20	100.00	

		Sum	mary Scores for Distric	et 20(2002)		
IH	Distres	s Score	Condition		Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distri	et 20(2002)	,	
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	118.70	60.13	111.50	56.48	50.90	25.40
В	14.60	7.40	27.20	13.78	132.00	65.87
C	10.20	5.17	29.80	15.10	17.50	8.73
D	14.20	7.19	15.80	8.00	0.00	0.00
F	39.70	20.11	13.10	6.64	0.00	0.00
Σ	197.40	100.00	197.40	100.00	200.40	100.00
		Sum	mary Scores for Distri	et 20(2002)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	93.70	63.06	89.60	60.30	15.30	10.30
В	16.40	11.04	31.30	21.06	116.60	78.47
С	13.80	9.29	17.70	11.91	16.70	11.24
D	11.60	7.81	7.50	5.05	0.00	0.00
F	13.10	8.82	2.50	1.68	0.00	0.00
Σ	148.60	100.00	148.60	100.00	148.60	100.00
	T		mary Scores for Distric	et 20(2002)	1	
BR		s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.50	100.00	1.40	93.33	0.00	0.00
В	0.00	0.00	0.00	0.00	1.40	93.33
С	0.00	0.00	0.10	6.67	0.10	6.67
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	1.50	100.00	1.50	100.00	1.50	100.00
	T		mary Scores for Distric	, ,	T	
<u>FM</u>		s Score	Condition		Ride	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	374.00	82.83	367.30	81.48	10.80	2.40
В	29.50	6.53	52.10	11.56	332.10	73.67
С	20.50	4.54	24.80	5.50	107.30	23.80
D	14.60	3.23	4.20	0.93	0.60	0.13
F	12.90	2.86	2.40	0.53	0.00	0.00
Σ	451.50	100.00	450.80	100.00	450.80	100.00

	Summary Scores for District 20(2002)								
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	40.40	65.91	40.30	65.74	2.00	3.26			
В	9.20	15.01	13.20	21.53	51.90	84.67			
С	3.90	6.36	5.70	9.30	7.40	12.07			
D	3.70	6.04	1.50	2.45	0.00	0.00			
F	4.10	6.69	0.60	0.98	0.00	0.00			
Σ	61.30	100.00	61.30	100.00	61.30	100.00			

		Sum	mary Scores for Distric	et 20(2003)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	et 20(2003)		
<u>U.S.</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	71.00	38.13	66.60	35.81	51.30	25.57
В	14.30	7.68	37.30	20.05	131.80	65.70
C	24.20	13.00	48.20	25.91	17.50	8.72
D	17.50	9.40	20.90	11.24	0.00	0.00
F	59.20	31.79	13.00	6.99	0.00	0.00
Σ	186.20	100.00	186.00	100.00	200.60	100.00
		Sum	mary Scores for Distric	et 20(2003)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	76.40	55.16	73.40	53.00	19.80	13.33
В	22.50	16.25	38.10	27.51	114.50	77.10
С	14.00	10.11	20.60	14.87	14.20	9.56
D	16.20	11.70	3.40	2.45	0.00	0.00
F	9.40	6.79	3.00	2.17	0.00	0.00
Σ	138.50	100.00	138.50	100.00	148.50	100.00
		Sum	mary Scores for Distric	et 20(2003)		
<u>BR</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.50	100.00	1.40	100.00	0.00	0.00
В	0.00	0.00	0.00	0.00	1.40	100.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	1.50	100.00	1.40	100.00	1.40	100.00

		Sum	mary Scores for Distric	et 20(2003)		
<u>FM</u>	Distress Score		Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	338.20	77.68	333.40	76.71	6.80	1.51
В	30.50	7.01	65.30	15.03	348.60	77.57
С	33.60	7.72	31.20	7.18	92.50	20.58
D	21.80	5.01	2.60	0.60	1.50	0.33
F	11.30	2.60	2.10	0.48	0.00	0.00
Σ	435.40	100.00	434.60	100.00	449.40	100.00
	•	Sum	mary Scores for Distri	et 20(2003)	,	
<u>PR</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.30	2.12	1.30	2.12	2.50	4.08
В	12.70	20.75	23.10	37.75	48.40	79.08
С	10.40	16.99	32.80	53.59	10.30	16.83
D	19.30	31.54	4.00	6.54	0.00	0.00
F	17.50	28.59	0.00	0.00	0.00	0.00
Σ	61.20	100.00	61.20	100.00	61.20	100.00

		Sum	mary Scores for Distric	et 21(2001)		
<u>IH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distric	et 21(2001)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	252.00	85.86	251.30	85.62	206.40	70.32
В	15.50	5.28	26.50	9.03	84.70	28.86
С	11.50	3.92	14.20	4.84	1.90	0.65
D	7.30	2.49	1.00	0.34	0.50	0.17
F	7.20	2.45	0.50	0.17	0.00	0.00
Σ	293.50	100.00	293.50	100.00	293.50	100.00
		Sum	mary Scores for Distric	et 21(2001)		
<u>SH</u>	Distres	s Score	Conditio	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	121.30	96.81	121.00	96.57	100.00	79.81
В	4.00	3.19	3.70	2.95	24.50	19.55
С	0.00	0.00	0.60	0.48	0.80	0.64
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	125.30	100.00	125.30	100.00	125.30	100.00

		Sum	mary Scores for Distri	ct 21(2001)		
<u>BR</u>	Distres	s Score	Condition	Condition Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	14.20	82.56	13.70	79.65	4.70	27.33
В	2.00	11.63	2.50	14.53	9.80	56.98
C	0.00	0.00	0.50	2.91	2.20	12.79
D	0.00	0.00	0.00	0.00	0.50	2.91
F	1.00	5.81	0.50	2.91	0.00	0.00
Σ	17.20	100.00	17.20	100.00	17.20	100.00
		Sum	mary Scores for Distri	ct 21(2001)	,	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	440.20	90.13	425.40	87.12	101.10	20.68
В	25.60	5.24	46.90	9.60	285.70	58.45
C	12.00	2.46	13.70	2.81	97.50	19.95
D	6.00	1.23	2.30	0.47	4.50	0.92
F	4.60	0.94	0.00	0.00	0.00	0.00
Σ	488.40	100.00	488.30	100.00	488.80	100.00
		Sum	mary Scores for Distri	ct 21(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	3.10	100.00	2.60	83.87	0.00	0.00
В	0.00	0.00	0.00	0.00	0.50	16.13
С	0.00	0.00	0.50	16.13	2.60	83.87
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	3.10	100.00	3.10	100.00	3.10	100.00

		Sumi	mary Scores for Distric	et 21(2002)		
<u>IH</u>	Distres	s Score	Conditio	Condition Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sumi	mary Scores for Distric	et 21(2002)		
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	219.40	78.64	216.30	77.53	195.70	66.20
В	15.40	5.52	27.60	9.89	96.10	32.51
С	10.20	3.66	23.60	8.46	3.30	1.12
D	14.30	5.13	7.50	2.69	0.50	0.17
F	19.70	7.06	4.00	1.43	0.00	0.00
Σ	279.00	100.00	279.00	100.00	295.60	100.00

		Sum	mary Scores for Distric	ct 21(2002)		
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	143.00	97.68	141.90	96.93	116.10	79.30
В	1.40	0.96	2.40	1.64	28.70	19.60
С	1.00	0.68	1.10	0.75	1.10	0.75
D	0.50	0.34	0.00	0.00	0.00	0.00
F	0.50	0.34	1.00	0.68	0.50	0.34
Σ	146.40	100.00	146.40	100.00	146.40	100.00
		Sum	mary Scores for Distri	ct 21(2002)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	5.40	31.03	5.20	29.89	4.90	28.16
В	5.90	33.91	6.90	39.66	8.70	50.00
С	2.00	11.49	3.80	21.84	2.80	16.09
D	3.10	17.82	0.50	2.87	1.00	5.75
F	1.00	5.75	1.00	5.75	0.00	0.00
Σ	17.40	100.00	17.40	100.00	17.40	100.00
		Sum	mary Scores for Distri	ct 21(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	392.90	86.01	375.70	82.25	88.80	19.44
В	28.50	6.24	50.80	11.12	257.00	56.26
C	12.20	2.67	25.40	5.56	106.00	23.20
D	12.00	2.63	3.40	0.74	4.50	0.99
F	11.20	2.45	1.50	0.33	0.50	0.11
Σ	456.80	100.00	456.80	100.00	456.80	100.00
		Sum	mary Scores for Distri	ct 21(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2.40	100.00	1.80	75.00	0.00	0.00
В	0.00	0.00	0.10	4.17	0.90	37.50
С	0.00	0.00	0.50	20.83	1.50	62.50
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	2.40	100.00	2.40	100.00	2.40	100.00

	Summary Scores for District 21(2003)								
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	0.00	0.00	0.00	0.00	0.00	0.00			
В	0.00	0.00	0.00	0.00	0.00	0.00			
С	0.00	0.00	0.00	0.00	0.00	0.00			
D	0.00	0.00	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	0.00	0.00	0.00	0.00	0.00	0.00			

		Sum	mary Scores for Distri	et 21(2003)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	253.90	87.19	251.90	86.50	197.20	67.72
В	20.00	6.87	25.00	8.59	90.80	31.18
С	5.00	1.72	13.10	4.50	3.20	1.10
D	4.60	1.58	1.20	0.41	0.00	0.00
F	7.70	2.64	0.00	0.00	0.00	0.00
Σ	291.20	100.00	291.20	100.00	291.20	100.00
		Sum	mary Scores for Distri	et 21(2003)		
SH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	115.20	77.47	114.90	77.27	113.70	76.46
В	10.90	7.33	16.70	11.23	34.20	23.00
С	6.10	4.10	17.00	11.43	0.70	0.47
D	11.50	7.73	0.10	0.07	0.10	0.07
F	5.00	3.36	0.00	0.00	0.00	0.00
Σ	148.70	100.00	148.70	100.00	148.70	100.00
		Sum	mary Scores for Distri	et 21(2003)		
BR	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	13.10	98.50	12.40	93.23	6.50	48.87
В	0.20	1.50	0.90	6.77	5.60	42.11
С	0.00	0.00	0.00	0.00	1.20	9.02
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	13.30	100.00	13.30	100.00	13.30	100.00
			mary Scores for Distri	et 21(2003)		
FM	Distres		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	396.40	80.88	385.00	78.56	138.50	28.01
В	40.30	8.22	63.40	12.94	254.50	51.48
С	15.30	3.12	39.10	7.98	98.00	19.82
D	17.30	3.53	2.60	0.53	3.40	0.69
F	20.80	4.24	0.00	0.00	0.00	0.00
Σ	490.10	100.00	490.10	100.00	494.40	100.00
			mary Scores for Distri			
PR	Distres		, , , , , , , , , , , , , , , , , , , 	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	1.90	79.17	1.50	62.50	0.00	0.00
В	0.50	20.83	0.40	16.67	0.10	4.17
C	0.00	0.00	0.50	20.83	2.30	95.83
	0.00	0.00	0.00	0.00	0.00	0.00
D						
D F	0.00	0.00	0.00	0.00	0.00	0.00

		Sum	mary Scores for Distri	et 22(2001)		
IH	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	126.20	83.36	85.70	56.61	13.90	8.89
В	8.60	5.68	24.10	15.92	52.30	33.44
С	3.70	2.44	20.50	13.54	55.80	35.68
D	6.90	4.56	10.20	6.74	29.00	18.54
F	6.00	3.96	10.90	7.20	5.40	3.45
Σ	151.40	100.00	151.40	100.00	156.40	100.00
		Sum	mary Scores for Distri	et 22(2001)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	379.20	87.45	346.30	79.87	71.20	16.16
В	17.40	4.01	39.10	9.02	300.00	68.09
С	11.90	2.74	27.40	6.32	63.90	14.50
D	7.00	1.61	12.10	2.79	5.50	1.25
F	18.10	4.17	8.70	2.01	0.00	0.00
Σ	433.60	100.00	433.60	100.00	440.60	100.00
		Sum	mary Scores for Distri	et 22(2001)		
SH	Distress Score		Condition	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	273.50	80.46	219.30	64.79	22.10	6.53
В	31.30	9.21	66.20	19.56	138.50	40.92
С	13.70	4.03	27.90	8.24	132.40	39.11
D	9.00	2.65	10.20	3.01	44.00	13.00
F	12.40	3.65	14.90	4.40	1.50	0.44
Σ	339.90	100.00	338.50	100.00	338.50	100.00
		Sum	mary Scores for Distric	et 22(2001)		
BR	Distres		Condition		Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	4.90	69.01	2.50	36.23	0.00	0.00
В	0.00	0.00	0.00	0.00	2.20	31.88
С	0.00	0.00	1.70	24.64	3.70	53.62
D	0.00	0.00	1.20	17.39	1.00	14.49
F	2.20	30.99	1.50	21.74	0.00	0.00
Σ	7.10	100.00	6.90	100.00	6.90	100.00
		Sum	mary Scores for Distri	et 22(2001)	'	
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	706.80	79.71	519.30	58.91	6.90	0.78
В	84.20	9.50	164.90	18.71	184.00	20.73
С	36.50	4.12	111.50	12.65	494.90	55.74
D	26.60	3.00	39.80	4.52	189.20	21.31
F	32.60	3.68	46.00	5.22	12.80	1.44
Σ	886.70	100.00	881.50	100.00	887.80	100.00

	Summary Scores for District 22(2001)								
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	7.20	93.51	7.10	92.21	0.00	0.00			
В	0.50	6.49	0.50	6.49	7.00	90.91			
С	0.00	0.00	0.00	0.00	0.60	7.79			
D	0.00	0.00	0.00	0.00	0.10	1.30			
F	0.00	0.00	0.10	1.30	0.00	0.00			
Σ	7.70	100.00	7.70	100.00	7.70	100.00			

		Suili	mary Scores for Distric	et 22(2002)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	118.40	69.08	110.20	64.29	44.30	25.85
В	14.70	8.58	21.70	12.66	62.80	36.64
С	4.40	2.57	19.50	11.38	51.60	30.11
D	11.40	6.65	10.00	5.83	12.70	7.41
F	22.50	13.13	10.00	5.83	0.00	0.00
Σ	171.40	100.00	171.40	100.00	171.40	100.00
		Sum	mary Scores for Distric	t 22(2002)		
<u>U.S.</u>	Distres	s Score	Conditio	n Score	Ride S	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	334.40	73.09	315.60	69.12	82.20	17.58
В	26.30	5.75	55.90	12.24	324.70	69.45
С	23.10	5.05	51.00	11.17	58.60	12.53
D	28.20	6.16	17.70	3.88	1.90	0.41
F	45.50	9.95	16.40	3.59	0.10	0.02
Σ	457.50	100.00	456.60	100.00	467.50	100.00
		Sum	mary Scores for Distric	t 22(2002)		
<u>SH</u>	Distres	s Score	Conditio	n Score	Ride S	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	277.60	82.08	240.50	71.24	51.20	15.08
В	24.10	7.13	54.90	16.26	144.10	42.43
C	9.20	2.72	24.20	7.17	115.80	34.10
D	6.10	1.80	11.00	3.26	27.90	8.22
F	21.20	6.27	7.00	2.07	0.60	0.18
Σ	338.20	100.00	337.60	100.00	339.60	100.00
		Sum	mary Scores for Distric	et 22(2002)		
<u>BR</u>	Distres	s Score	Conditio	n Score	Ride S	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.90	69.01	4.10	60.29	0.00	0.00
В	0.00	0.00	0.00	0.00	4.10	60.29
С	0.00	0.00	1.20	17.65	2.70	39.71
D	0.00	0.00	0.50	7.35	0.00	0.00
F	2.20	30.99	1.00	14.71	0.00	0.00
Σ	7.10	100.00	6.80	100.00	6.80	100.00

Summary Scores for District 22(2002)								
<u>FM</u>	Distres	s Score	Condition	Condition Score		Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	732.40	84.62	573.90	66.41	7.40	0.83		
В	40.40	4.67	127.50	14.75	184.60	20.73		
С	19.30	2.23	89.90	10.40	536.80	60.29		
D	31.40	3.63	36.40	4.21	152.70	17.15		
F	42.00	4.85	36.50	4.22	8.80	0.99		
Σ	865.50	100.00	864.20	100.00	890.30	100.00		
		Sum	mary Scores for Distri	ct 22(2002)				
<u>PR</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	7.10	93.42	7.10	93.42	0.50	6.49		
В	0.50	6.58	0.50	6.58	6.20	80.52		
С	0.00	0.00	0.00	0.00	0.90	11.69		
D	0.00	0.00	0.00	0.00	0.00	0.00		
F	0.00	0.00	0.00	0.00	0.10	1.30		
Σ	7.60	100.00	7.60	100.00	7.70	100.00		

		Sumi	nary Scores for Distric	et 22(2003)				
<u>IH</u>	Distress		Condition		Ride S	Score		
Grade	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)		
A	111.60	71.54	106.60	68.38	51.70	30.47		
В	10.80	6.92	16.50	10.58	64.80	38.19		
С	6.90	4.42	23.20	14.88	42.80	25.22		
D	10.20	6.54	7.00	4.49	9.90	5.83		
F	16.50	10.58	2.60	1.67	0.50	0.29		
Σ	156.00	100.00	155.90	100.00	169.70	100.00		
	Summary Scores for District 22(2003)							
U.S.	Distress	Distress Score		Condition Score		Score		
Grade	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)		
A	352.00	76.14	332.10	71.95	93.10	20.02		
В	27.20	5.88	50.60	10.96	314.50	67.62		
С	19.00	4.11	47.80	10.36	53.90	11.59		
D	19.00	4.11	16.80	3.64	3.60	0.77		
F	45.10	9.76	14.30	3.10	0.00	0.00		
Σ	462.30	100.00	461.60	100.00	465.10	100.00		
		Sumi	nary Scores for Distric	t 22(2003)				
<u>SH</u>	Distress	Score	Condition	on Score	Ride Score			
Grade	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)		
A	237.40	70.36	211.60	62.77	12.50	3.68		
В	24.20	7.17	63.20	18.75	188.20	55.35		
С	21.60	6.40	39.50	11.72	116.70	34.32		
D	18.00	5.33	13.20	3.92	22.60	6.65		
F	36.20	10.73	9.60	2.85	0.00	0.00		
Σ	337.40	100.00	337.10	100.00	340.00	100.00		

		Sum	mary Scores for Distric	et 22(2003)		
<u>BR</u>	Distress	Score	Condition	Condition Score		Score
Grade	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)
A	3.90	66.10	3.30	55.93	1.00	14.49
В	1.00	16.95	1.00	16.95	3.80	55.07
С	0.00	0.00	0.60	10.17	2.10	30.43
D	0.00	0.00	1.00	16.95	0.00	0.00
F	1.00	16.95	0.00	0.00	0.00	0.00
Σ	5.90	100.00	5.90	100.00	6.90	100.00
		Sum	mary Scores for Distric	t 22(2003)		
<u>FM</u>	Distress	Score	Condition	on Score	Ride S	Score
Grade	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)
A	683.90	77.10	549.80	62.19	8.70	0.98
В	53.40	6.02	148.60	16.81	191.50	21.49
С	31.90	3.60	103.70	11.73	550.10	61.74
D	40.80	4.60	45.70	5.17	133.90	15.03
F	77.00	8.68	36.20	4.10	6.80	0.76
Σ	887.00	100.00	884.00	100.00	891.00	100.00
		Sum	mary Scores for Distric	et 22(2003)		
<u>PR</u>	Distress	Score	Condition	on Score	Ride S	Score
Grade	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)	Length Centerline	Percentage (%)
A	7.70	100.00	7.60	100.00	0.00	0.00
В	0.00	0.00	0.00	0.00	7.20	94.74
С	0.00	0.00	0.00	0.00	0.40	5.26
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	7.70	100.00	7.60	100.00	7.60	100.00

	Summary Scores for District 23(2001)									
<u>IH</u>	Distres	s Score	Condition	on Score	Ride Score					
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	123.60	83.23	121.60	81.89	40.30	27.14				
В	4.20	2.83	15.10	10.17	81.70	55.02				
С	9.90	6.67	9.60	6.46	24.30	16.36				
D	9.40	6.33	1.20	0.81	2.20	1.48				
F	1.40	0.94	1.00	0.67	0.00	0.00				
Σ	148.50	100.00	148.50	100.00	148.50	100.00				
		Sum	mary Scores for Distri	et 23(2001)						
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score					
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)				
A	523.40	83.95	512.00	82.12	161.80	25.90				
В	36.30	5.82	71.00	11.39	424.40	67.95				
С	29.90	4.80	32.30	5.18	37.80	6.05				
D	21.30	3.42	5.90	0.95	0.50	0.08				
F	12.60	2.02	2.30	0.37	0.10	0.02				
Σ	623.50	100.00	623.50	100.00	624.60	100.00				

		Sum	mary Scores for Distri	ct 23(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	317.50	77.31	308.50	77.55	83.60	20.97
В	32.50	7.91	52.10	13.10	294.50	73.88
C	26.70	6.50	31.70	7.97	17.90	4.49
D	25.10	6.11	3.50	0.88	2.60	0.65
F	8.90	2.17	2.00	0.50	0.00	0.00
Σ	410.70	100.00	397.80	100.00	398.60	100.00
		Sum	mary Scores for Distri	ct 23(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distri	ct 23(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1283.30	82.75	1249.60	80.58	27.80	1.79
В	113.10	7.29	217.70	14.04	827.00	53.30
C	95.50	6.16	76.00	4.90	678.00	43.69
D	52.60	3.39	3.60	0.23	18.90	1.22
F	6.40	0.41	3.80	0.25	0.00	0.00
Σ	1550.90	100.00	1550.70	100.00	1551.70	100.00
		Sum	mary Scores for Distri	ct 23(2001)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	17.70	81.57	17.20	79.26	0.00	0.00
В	0.50	2.30	4.00	18.43	8.80	40.55
С	3.00	13.82	0.50	2.30	12.40	57.14
D	0.50	2.30	0.00	0.00	0.50	2.30
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	21.70	100.00	21.70	100.00	21.70	100.00

	Summary Scores for District 23(2002)								
<u>IH</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	116.10	78.18	113.70	76.57	28.60	19.26			
В	8.20	5.52	17.60	11.85	90.60	61.01			
C	9.00	6.06	14.90	10.03	27.20	18.32			
D	11.20	7.54	0.50	0.34	2.10	1.41			
F	4.00	2.69	1.80	1.21	0.00	0.00			
Σ	148.50	100.00	148.50	100.00	148.50	100.00			

		Sumi	mary Scores for Distric	et 23(2002)			
U.S.	Distress Score Condition Score Ride Sco				Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	442.10	71.20	433.40	69.80	141.00	22.63	
В	58.10	9.36	118.10	19.02	435.10	69.83	
С	57.60	9.28	56.10	9.04	46.50	7.46	
D	37.00	5.96	6.60	1.06	0.50	0.08	
F	26.10	4.20	6.70	1.08	0.00	0.00	
Σ	620.90	100.00	620.90	100.00	623.10	100.00	
		Sumi	mary Scores for Distric	et 23(2002)			
SH	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	286.70	72.80	277.40	70.46	57.60	14.63	
В	41.30	10.49	68.70	17.45	295.50	75.04	
С	28.20	7.16	39.60	10.06	37.80	9.60	
D	30.80	7.82	4.70	1.19	2.90	0.74	
F	6.80	1.73	3.30	0.84	0.00	0.00	
Σ	393.80	100.00	393.70	100.00	393.80	100.00	
		Sum	mary Scores for Distric	et 23(2002)			
BR	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	0.00	0.00	0.00	0.00	0.00	0.00	
В	0.00	0.00	0.00	0.00	0.00	0.00	
С	0.00	0.00	0.00	0.00	0.00	0.00	
D	0.00	0.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
Σ	0.00	0.00	0.00	0.00	0.00	0.00	
		Sumi	mary Scores for Distric	et 23(2002)			
FM	Distres	s Score	1	on Score	Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	1286.10	82.82	1247.60	80.39	18.30	1.18	
В	103.70	6.68	207.90	13.40	763.10	49.15	
С	95.50	6.15	77.40	4.99	739.80	47.65	
D	54.00	3.48	11.90	0.77	31.20	2.01	
F	13.50	0.87	7.20	0.46	0.20	0.01	
Σ	1552.80	100.00	1552.00	100.00	1552.60	100.00	
			mary Scores for Distric				
PR	Distres			on Score	Ride	Score	
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	
A	24.10	100.00	24.10	100.00	0.00	0.00	
В	0.00	0.00	0.00	0.00	13.40	55.60	
C	0.00	0.00	0.00	0.00	10.70	44.40	
D	0.00	0.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
-	00	00	1		1	3.00	

		Sum	mary Scores for Distric	et 23(2003)		
IH	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	109.80	92.42	108.80	91.58	61.80	51.85
В	4.00	3.37	8.00	6.73	48.70	40.86
С	3.40	2.86	1.00	0.84	7.10	5.96
D	1.00	0.84	0.40	0.34	1.60	1.34
F	0.60	0.51	0.60	0.51	0.00	0.00
Σ	118.80	100.00	118.80	100.00	119.20	100.00
		Sum	mary Scores for Distri	et 23(2003)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	505.30	82.06	499.10	81.05	204.00	33.13
В	39.50	6.41	75.50	12.26	385.40	62.59
С	33.20	5.39	32.50	5.28	25.70	4.17
D	22.80	3.70	5.70	0.93	0.70	0.11
F	15.00	2.44	3.00	0.49	0.00	0.00
Σ	615.80	100.00	615.80	100.00	615.80	100.00
		Sum	mary Scores for Distri	et 23(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	326.20	82.52	319.60	80.85	112.60	28.36
В	23.30	5.89	46.40	11.74	265.10	66.78
С	21.90	5.54	25.20	6.37	17.70	4.46
D	19.70	4.98	3.00	0.76	1.60	0.40
F	4.20	1.06	1.10	0.28	0.00	0.00
Σ	395.30	100.00	395.30	100.00	397.00	100.00
		Sum	mary Scores for Distri	et 23(2003)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	0.00	0.00
		Sum	mary Scores for Distri	et 23(2003)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1286.60	83.75	1256.60	81.82	33.80	2.20
В	88.20	5.74	212.20	13.82	880.70	57.32
С	105.40	6.86	58.40	3.80	607.10	39.51
D	48.90	3.18	4.30	0.28	14.60	0.95
F	7.10	0.46	4.40	0.29	0.20	0.01
Σ	1536.20	100.00	1535.90	100.00	1536.40	100.00

	Summary Scores for District 23(2003)								
<u>PR</u>	Distress Score		Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	20.20	93.09	20.20	93.09	0.00	0.00			
В	1.00	4.61	1.00	4.61	13.80	63.59			
С	0.00	0.00	0.50	2.30	7.90	36.41			
D	0.50	2.30	0.00	0.00	0.00	0.00			
F	0.00	0.00	0.00	0.00	0.00	0.00			
Σ	21.70	100.00	21.70	100.00	21.70	100.00			

		Sum	mary Scores for Distric	et 24(2001)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	191.00	59.54	169.00	53.58	34.00	10.78
В	26.80	8.35	57.40	18.20	208.50	66.11
С	26.20	8.17	62.00	19.66	59.10	18.74
D	31.50	9.82	18.30	5.80	10.50	3.33
F	45.30	14.12	8.70	2.76	3.30	1.05
Σ	320.80	100.00	315.40	100.00	315.40	100.00
		Sum	mary Scores for Distric	et 24(2001)		
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	350.60	86.91	347.90	86.24	114.70	28.36
В	15.70	3.89	25.70	6.37	273.80	67.71
С	9.20	2.28	27.20	6.74	15.90	3.93
D	18.60	4.61	2.60	0.64	0.00	0.00
F	9.30	2.31	0.00	0.00	0.00	0.00
Σ	403.40	100.00	403.40	100.00	404.40	100.00
		Sum	mary Scores for Distric	et 24(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	255.70	80.92	228.80	72.45	38.40	12.16
В	21.40	6.77	45.40	14.38	176.00	55.73
C	17.50	5.54	20.30	6.43	60.30	19.09
D	12.40	3.92	11.10	3.51	39.80	12.60
F	9.00	2.85	10.20	3.23	1.30	0.41
Σ	316.00	100.00	315.80	100.00	315.80	100.00
		Sum	mary Scores for Distric	et 24(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	4.50	60.81	3.90	52.70	0.10	1.35
В	0.00	0.00	2.40	32.43	5.30	71.62
С	1.90	25.68	0.80	10.81	1.90	25.68
D	0.10	1.35	0.20	2.70	0.10	1.35
F	0.90	12.16	0.10	1.35	0.00	0.00
Σ	7.40	100.00	7.40	100.00	7.40	100.00

		Sum	mary Scores for Distric	et 24(2001)			
<u>FM</u>	Distres	s Score	Condition	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	414.90	84.30	334.90	68.04	11.30	2.25	
В	19.50	3.96	63.20	12.84	161.30	32.09	
С	20.70	4.21	49.50	10.06	236.00	46.96	
D	15.60	3.17	32.80	6.66	92.30	18.36	
F	21.50	4.37	11.80	2.40	1.70	0.34	
Σ	492.20	100.00	492.20	100.00	502.60	100.00	
		Sum	mary Scores for Distric	et 24(2001)	,		
<u>PR</u>	Distres	s Score	Condition Score		Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	2.50	67.57	2.50	67.57	0.00	0.00	
В	0.00	0.00	0.00	0.00	0.00	0.00	
С	0.50	13.51	0.50	13.51	3.00	81.08	
D	0.70	18.92	0.00	0.00	0.50	13.51	
F	0.00	0.00	0.70	18.92	0.20	5.41	
Σ	3.70	100.00	3.70	100.00	3.70	100.00	

Summary Scores for District 24(2002)									
<u>IH</u>	Distres	s Score	Condition Score		Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	142.20	55.40	129.50	50.70	23.60	9.22			
В	40.40	15.74	65.70	25.72	156.30	61.08			
C	33.30	12.97	33.90	13.27	61.40	23.99			
D	20.20	7.87	13.60	5.32	11.70	4.57			
F	20.60	8.02	12.70	4.97	2.90	1.13			
Σ	256.70	100.00	255.40	100.00	255.90	100.00			
	Summary Scores for District 24(2002)								
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	307.90	77.05	304.20	76.13	140.30	34.77			
В	66.60	16.67	87.50	21.90	254.20	63.00			
С	18.80	4.70	7.60	1.90	9.00	2.23			
D	5.30	1.33	0.30	0.08	0.00	0.00			
F	1.00	0.25	0.00	0.00	0.00	0.00			
Σ	399.60	100.00	399.60	100.00	403.50	100.00			
		Sum	mary Scores for Distric	et 24(2002)					
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)			
A	156.90	50.03	141.40	45.10	48.00	15.23			
В	100.20	31.95	135.10	43.09	175.50	55.70			
С	43.30	13.81	26.40	8.42	59.30	18.82			
D	6.60	2.10	5.50	1.75	31.70	10.06			
F	6.60	2.10	5.10	1.63	0.60	0.19			
Σ	313.60	100.00	313.50	100.00	315.10	100.00			

		Sum	mary Scores for Distric	et 24(2002)		
BR	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	6.10	83.56	5.10	70.83	0.20	2.78
В	1.20	16.44	0.90	12.50	4.80	66.67
C	0.00	0.00	1.10	15.28	2.20	30.56
D	0.00	0.00	0.10	1.39	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	7.30	100.00	7.20	100.00	7.20	100.00
		Sum	mary Scores for Distric	et 24(2002)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	254.10	52.77	205.30	42.71	15.80	3.27
В	154.10	32.00	181.60	37.78	141.70	29.29
С	50.50	10.49	48.50	10.09	238.70	49.34
D	7.50	1.56	26.60	5.53	84.60	17.49
F	15.30	3.18	18.70	3.89	3.00	0.62
Σ	481.50	100.00	480.70	100.00	483.80	100.00
		Sum	mary Scores for Distric	et 24(2002)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.00	27.03	1.00	27.03	0.00	0.00
В	1.50	40.54	1.50	40.54	1.00	27.03
С	0.50	13.51	0.00	0.00	1.50	40.54
D	0.70	18.92	0.50	13.51	1.20	32.43
F	0.00	0.00	0.70	18.92	0.00	0.00
Σ	3.70	100.00	3.70	100.00	3.70	100.00

Summary Scores for District 24(2003)								
<u>IH</u>	Distress Score		Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	239.90	84.95	203.20	74.90	31.70	11.67		
В	20.20	7.15	41.10	15.15	161.40	59.43		
С	7.70	2.73	14.20	5.23	62.90	23.16		
D	4.10	1.45	6.90	2.54	11.60	4.27		
F	10.50	3.72	5.90	2.17	4.00	1.47		
Σ	282.40	100.00	271.30	100.00	271.60	100.00		
		Sum	mary Scores for Distric	et 24(2003)				
<u>U.S.</u>	Distres	s Score	Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	364.10	90.39	359.60	89.28	107.60	26.61		
В	14.70	3.65	22.10	5.49	281.70	69.66		
С	6.20	1.54	15.50	3.85	15.10	3.73		
D	6.30	1.56	5.60	1.39	0.00	0.00		
F	11.50	2.86	0.00	0.00	0.00	0.00		
Σ	402.80	100.00	402.80	100.00	404.40	100.00		

		Sum	mary Scores for Distric	et 24(2003)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	271.30	87.46	231.30	74.61	38.80	12.49
В	17.40	5.61	43.60	14.06	173.80	55.96
С	14.80	4.77	22.90	7.39	57.50	18.51
D	3.20	1.03	8.40	2.71	39.10	12.59
F	3.50	1.13	3.80	1.23	1.40	0.45
Σ	310.20	100.00	310.00	100.00	310.60	100.00
		Sum	mary Scores for Distric	et 24(2003)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	5.80	78.38	4.70	64.38	0.50	6.85
В	0.50	6.76	1.90	26.03	5.20	71.23
С	0.50	6.76	0.70	9.59	1.60	21.92
D	0.60	8.11	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	7.40	100.00	7.30	100.00	7.30	100.00
		Sum	mary Scores for Distric	et 24(2003)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	416.30	84.02	317.20	64.03	2.50	0.50
В	27.60	5.57	85.40	17.24	147.40	29.75
С	35.10	7.08	45.60	9.20	236.90	47.81
D	15.00	3.03	26.60	5.37	100.80	20.34
F	1.50	0.30	20.60	4.16	7.90	1.59
Σ	495.50	100.00	495.40	100.00	495.50	100.00
		Sum	mary Scores for Distric	et 24(2003)		
<u>PR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	2.50	67.57	2.50	67.57	0.00	0.00
В	0.20	5.41	0.00	0.00	0.00	0.00
С	0.50	13.51	0.00	0.00	2.50	67.57
D	0.50	13.51	0.00	0.00	1.00	27.03
F	0.00	0.00	1.20	32.43	0.20	5.41
Σ	3.70	100.00	3.70	100.00	3.70	100.00

Summary Scores for District 25(2001)								
<u>IH</u>	Distress Score		Condition	Condition Score		Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	75.50	67.47	68.80	65.40	51.30	38.66		
В	12.00	10.72	21.80	20.72	46.00	34.66		
C	7.60	6.79	8.60	8.17	33.90	25.55		
D	7.60	6.79	2.30	2.19	1.50	1.13		
F	9.20	8.22	3.70	3.52	0.00	0.00		
Σ	111.90	100.00	105.20	100.00	132.70	100.00		

		Sum	mary Scores for Distric	et 25(2001)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	362.30	61.19	357.40	60.36	324.70	54.33
В	130.60	22.06	167.90	28.36	245.10	41.01
С	37.30	6.30	53.60	9.05	27.30	4.57
D	34.20	5.78	10.40	1.76	0.50	0.08
F	27.70	4.68	2.80	0.47	0.00	0.00
Σ	592.10	100.00	592.10	100.00	597.60	100.00
		Sum	mary Scores for Distric	et 25(2001)		
<u>SH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	350.70	68.14	346.90	67.40	73.60	14.26
В	90.60	17.60	134.30	26.09	374.30	72.50
С	41.60	8.08	32.30	6.28	67.60	13.09
D	23.60	4.59	0.10	0.02	0.70	0.14
F	8.20	1.59	1.10	0.21	0.10	0.02
Σ	514.70	100.00	514.70	100.00	516.30	100.00
		Sum	mary Scores for Distric	et 25(2001)		
<u>BR</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	0.00	0.00	0.00	0.00	3.20	100.00
С	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	0.00	0.00	0.00	0.00	3.20	100.00
		Sum	mary Scores for Distric	et 25(2001)		
<u>FM</u>	Distres	s Score	Condition	on Score	Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1026.10	74.21	1015.80	73.46	62.10	4.49
В	196.80	14.23	284.40	20.57	904.80	65.39
С	84.40	6.10	79.30	5.74	409.40	29.59
D	65.70	4.75	1.00	0.07	6.60	0.48
F	9.70	0.70	2.20	0.16	0.70	0.05
Σ	1382.70	100.00	1382.70	100.00	1383.60	100.00
		Sur	mary Scores for Distric	et 25(2001)		
<u>PR</u>	Distress Score		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.50	100.00	1.50	100.00	0.00	0.00
В	0.00	0.00	0.00	0.00	0.90	60.00
С	0.00	0.00	0.00	0.00	0.60	40.00
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.00	0.00	0.00	0.00
Σ	1.50	100.00	1.50	100.00	1.50	100.00

		Sum	mary Scores for Distric	et 25(2002)		
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	75.20	66.96	72.80	66.79	47.20	35.38
В	8.20	7.30	18.60	17.06	51.90	38.91
С	10.50	9.35	7.80	7.16	32.20	24.14
D	5.20	4.63	2.60	2.39	2.10	1.57
F	13.20	11.75	7.20	6.61	0.00	0.00
Σ	112.30	100.00	109.00	100.00	133.40	100.00
		Sum	mary Scores for Distric	et 25(2002)		
U.S.	Distres	s Score	Condition	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	458.20	77.50	451.00	76.35	320.50	52.98
В	45.90	7.76	92.60	15.68	250.10	41.34
С	46.20	7.81	41.80	7.08	32.90	5.44
D	28.50	4.82	2.40	0.41	1.50	0.25
F	12.40	2.10	2.90	0.49	0.00	0.00
Σ	591.20	100.00	590.70	100.00	605.00	100.00
	•	Sum	mary Scores for Distric	et 25(2002)		
SH	Distres	s Score	Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	454.70	87.38	447.60	86.43	63.10	12.17
В	16.60	3.19	41.60	8.03	371.20	71.60
С	21.40	4.11	27.20	5.25	83.00	16.01
D	23.20	4.46	1.00	0.19	1.10	0.21
F	4.50	0.86	0.50	0.10	0.00	0.00
Σ	520.40	100.00	517.90	100.00	518.40	100.00
		Sum	mary Scores for Distric	et 25(2002)		
BR	Distres	s Score	1	on Score	Ride	Score
Grade	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	0.00	0.00	0.00	0.00	0.00	0.00
В	1.30	37.14	2.10	60.00	1.40	40.00
С	0.80	22.86	1.30	37.14	2.10	60.00
D	1.10	31.43	0.00	0.00	0.00	0.00
F	0.30	8.57	0.10	2.86	0.00	0.00
Σ	3.50	100.00	3.50	100.00	3.50	100.00
		Sum	mary Scores for Distric	et 25(2002)		
FM	Distres	s Score	Γ΄	on Score	Ride	Score
Grade	Length_Roadbed	Percentage (%)	Length Roadbed	Percentage (%)	Length Roadbed	Percentage (%)
A	1152.50	83.95	1137.70	82.87	32.30	2.35
В	69.00	5.03	156.00	11.36	868.40	63.21
C	80.40	5.86	71.30	5.19	462.60	33.67
D	57.50	4.19	4.60	0.34	9.90	0.72
F	13.50	0.98	3.20	0.23	0.60	0.04

Summary Scores for District 25(2002)								
<u>PR</u>	Distress Score		Condition Score		Ride Score			
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)		
A	1.30	100.00	1.30	100.00	0.20	15.38		
В	0.00	0.00	0.00	0.00	1.10	84.62		
С	0.00	0.00	0.00	0.00	0.00	0.00		
D	0.00	0.00	0.00	0.00	0.00	0.00		
F	0.00	0.00	0.00	0.00	0.00	0.00		
Σ	1.30	100.00	1.30	100.00	1.30	100.00		

		Sum	mary Scores for Distric	et 25(2003)			
<u>IH</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	99.70	83.71	94.80	82.58	45.00	39.20	
В	7.60	6.38	12.20	10.63	39.70	34.58	
С	3.50	2.94	5.50	4.79	28.20	24.56	
D	4.80	4.03	1.30	1.13	1.90	1.66	
F	3.50	2.94	1.00	0.87	0.00	0.00	
Σ	119.10	100.00	114.80	100.00	114.80	100.00	
		Sur	mary Scores for Distric	et 25(2003)			
<u>U.S.</u>	Distres	s Score	Condition	on Score	Ride	Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	426.30	72.46	419.50	71.31	324.60	54.76	
В	56.40	9.59	98.30	16.71	247.50	41.75	
С	41.20	7.00	66.80	11.35	20.10	3.39	
D	43.50	7.39	1.80	0.31	0.60	0.10	
F	20.90	3.55	1.90	0.32	0.00	0.00	
Σ	588.30	100.00	588.30	100.00	592.80	100.00	
		Sum	mary Scores for Distric	et 25(2003)			
<u>SH</u>	Distres	s Score	Condition	on Score	core Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	347.60	66.78	341.10	65.61	83.70	16.08	
В	92.80	17.83	133.10	25.60	366.70	70.47	
С	38.20	7.34	42.30	8.14	68.20	13.11	
D	29.70	5.71	2.80	0.54	1.30	0.25	
F	12.20	2.34	0.60	0.12	0.50	0.10	
Σ	520.50	100.00	519.90	100.00	520.40	100.00	
		Sum	mary Scores for Distric	et 25(2003)			
<u>BR</u>	Distres	s Score	Condition	on Score	Ride Score		
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	
A	0.10	2.86	0.10	2.86	0.00	0.00	
В	1.50	42.86	2.70	77.14	2.50	71.43	
С	1.20	34.29	0.70	20.00	1.00	28.57	
D	0.70	20.00	0.00	0.00	0.00	0.00	
F	0.00	0.00	0.00	0.00	0.00	0.00	
Σ	3.50	100.00	3.50	100.00	3.50	100.00	

		Sum	mary Scores for Distric	et 25(2003)		
<u>FM</u>	Distress Score		Condition Score		Ride Score	
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1061.90	77.61	1055.00	77.11	37.70	2.76
В	118.00	8.62	200.70	14.67	857.00	62.64
С	82.50	6.03	105.70	7.73	463.40	33.87
D	85.90	6.28	4.70	0.34	9.80	0.72
F	20.00	1.46	2.10	0.15	0.30	0.02
Σ	1368.30	100.00	1368.20	100.00	1368.20	100.00
	•	Sum	mary Scores for Distric	et 25(2003)		
<u>PR</u>	Distres	s Score	Condition	ition Score Ride Score		Score
Grade	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)	Length_Roadbed	Percentage (%)
A	1.50	100.00	1.30	86.67	0.00	0.00
В	0.00	0.00	0.00	0.00	0.00	0.00
С	0.00	0.00	0.00	0.00	1.30	86.67
D	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.00	0.20	13.33	0.20	13.33
Σ	1.50	100.00	1.50	100.00	1.50	100.00