



OUR CITY STREETS



5/14/2012

A Perspective on Street Maintenance

A review and analysis of street maintenance from 2000 through 2011 containing linear feet paved, asphalt tons applied, and total expenditures annually and by term. As well as a detailed breakdown of the current paving needs list, projected asphalt prices and suggested five year paving schedule with additional proposed actions.

Our City Streets

A PERSPECTIVE ON STREET MAINTENANCE

This morning thousands of Albertville's citizens awoke and began preparing themselves and their families for the day. After hurriedly getting everyone showered, dressed, fed and finishing that first cup of coffee or two they head out the door. Although some will walk or bicycle, most will hit the roads of our city in cars, trucks, or school buses. When they do regrettably they will find most of these roads in mediocre or poor condition.

Our network of streets is a tangible and visible foundation of our community. We use it every day to get to work, school, church and our city's many places of business. It provides connectivity to industries manufacturing goods and needing an efficient means of transportation. These industries provide a vital job market and as we seek to grow these job opportunities our transportation network is becoming more and more essential as a tool in further recruitment.

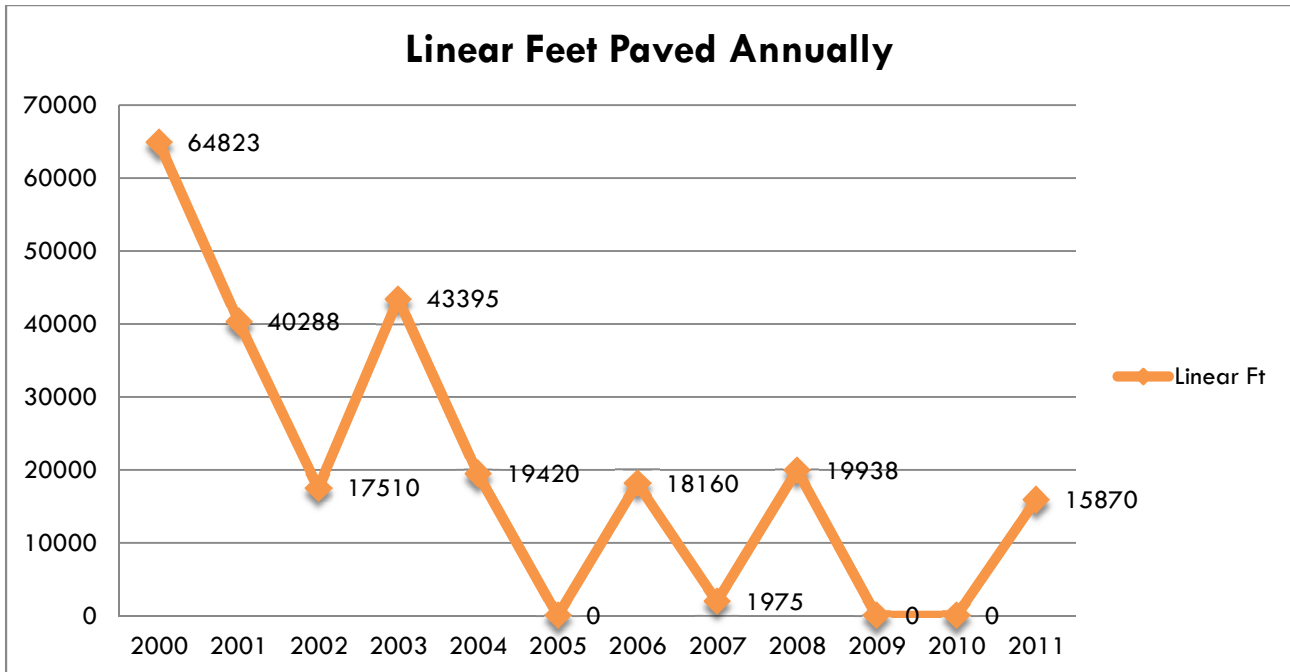
Infrastructure maintenance is a growing issue not only in the city of Albertville but throughout our state and country. The U.S. Department of Transportation currently estimates that there is a \$461 billion backlog of needed road, highway, and bridge repair and improvements. The city's current paving list represents \$1.2 million in needed repairs however a more realistic estimate would be \$2 to \$3 million.

Although an attempt has been made to include as much available information as possible in this report and provide some basis for prioritizing current needs, there are some clear deficiencies. The list of past paving projects only accounts for repair projects dating back to 1990. It is not a complete inventory of streets as it does not include roads that have not been paved since 1990 or those that have been constructed in that same time period. As such, a comprehensive needs analysis is not possible without further data collection and compilation. Nevertheless this report offers a good overview and a starting place for sustaining our ongoing infrastructure maintenance needs.

The analysis indicates that over the last decade not only have the miles paved and asphalt tons applied fallen dramatically, but expenditures for paving have also dropped off significantly. The noted increase in the cost of asphalt has understandably contributed to the decrease in the number of miles paved. However, the reduction in expenditures is a policy decision and it is here that the trend can be reversed. If allowed to continue it is certain to lead to further disrepair, an ever growing backlog of needs, and substantial increases in the costs associated with repair.

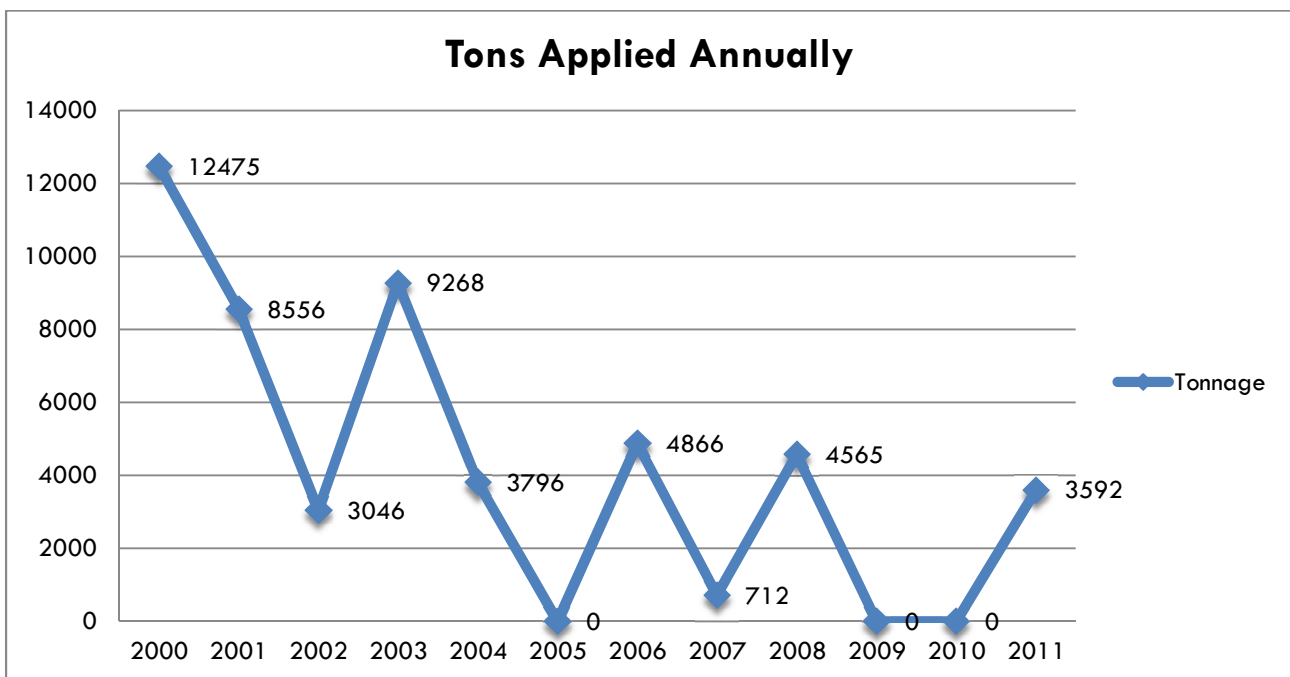
The infrastructure needs of our city are great. But they are not insurmountable. With an honest and realistic assessment of our needs, well thought out and manageable goals, and a willingness to take the actions necessary to achieve these goals we can meet this challenge. And if we do, our city will see the benefits of it for many years to come.

ANNUAL TOTALS FROM 2000 TO 2011



The total distance of streets paved in 2011 represent a 76% decrease from 2000.

The city paved over 12 miles of road in 2000, while only paving 3 miles in 2011.



The total tons of asphalt applied in 2011 represent a 71% decrease from 2000.

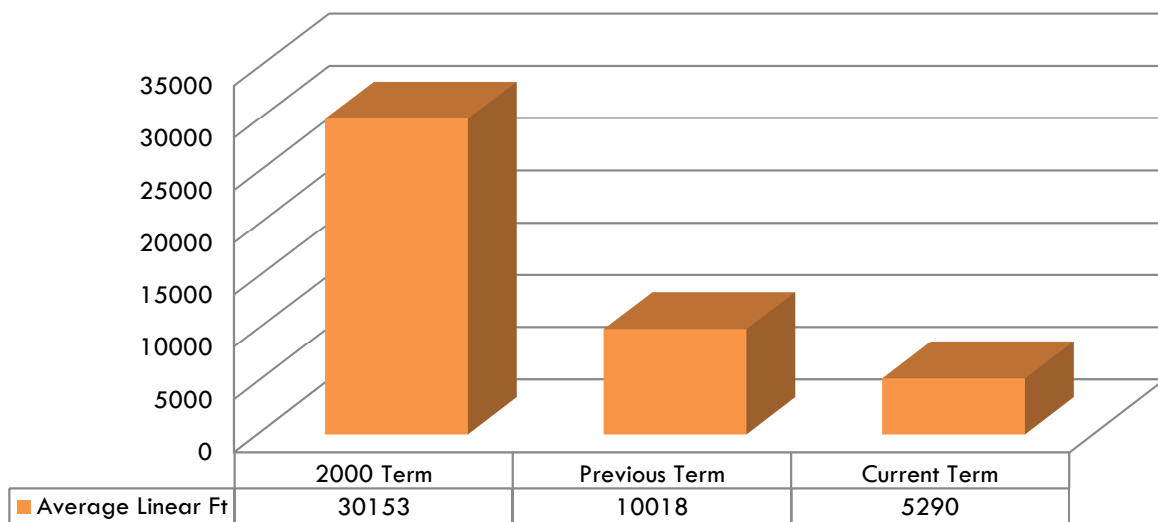
Total Expenditures Annually



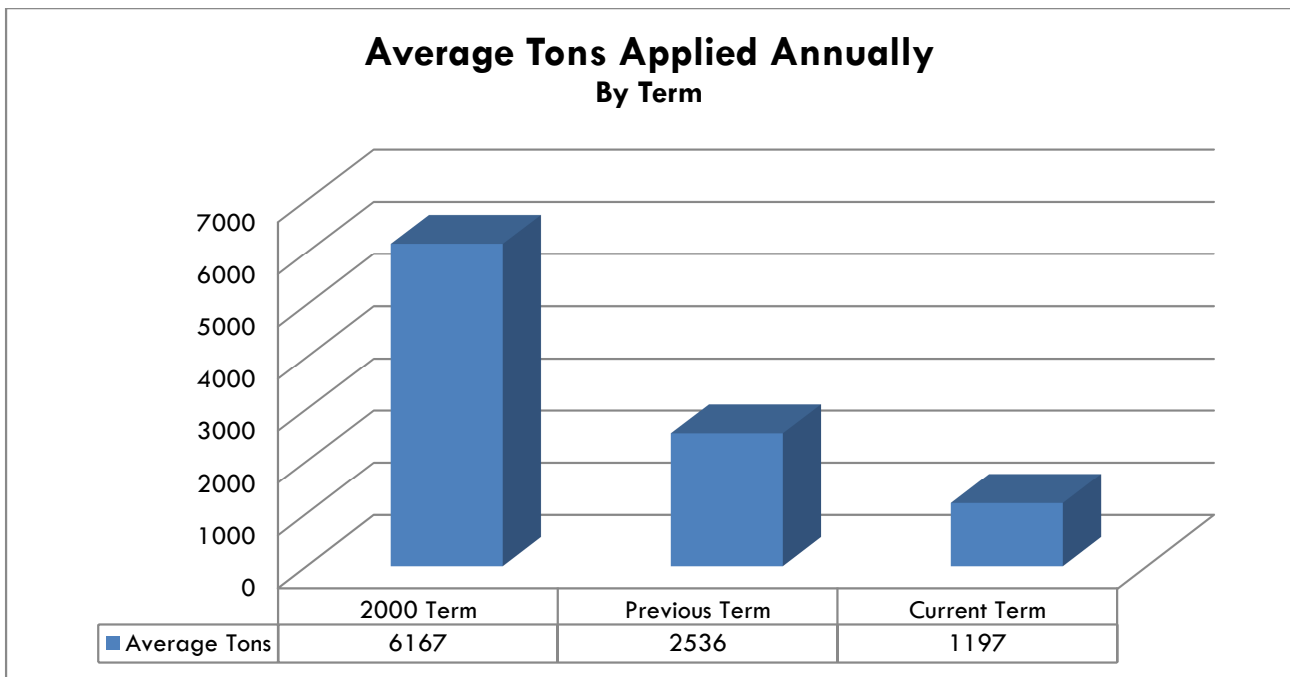
The total expenditures for street paving in 2011 represent a 36% decrease from 2000.

ANNUAL AVERAGES COMPARED BY TERM

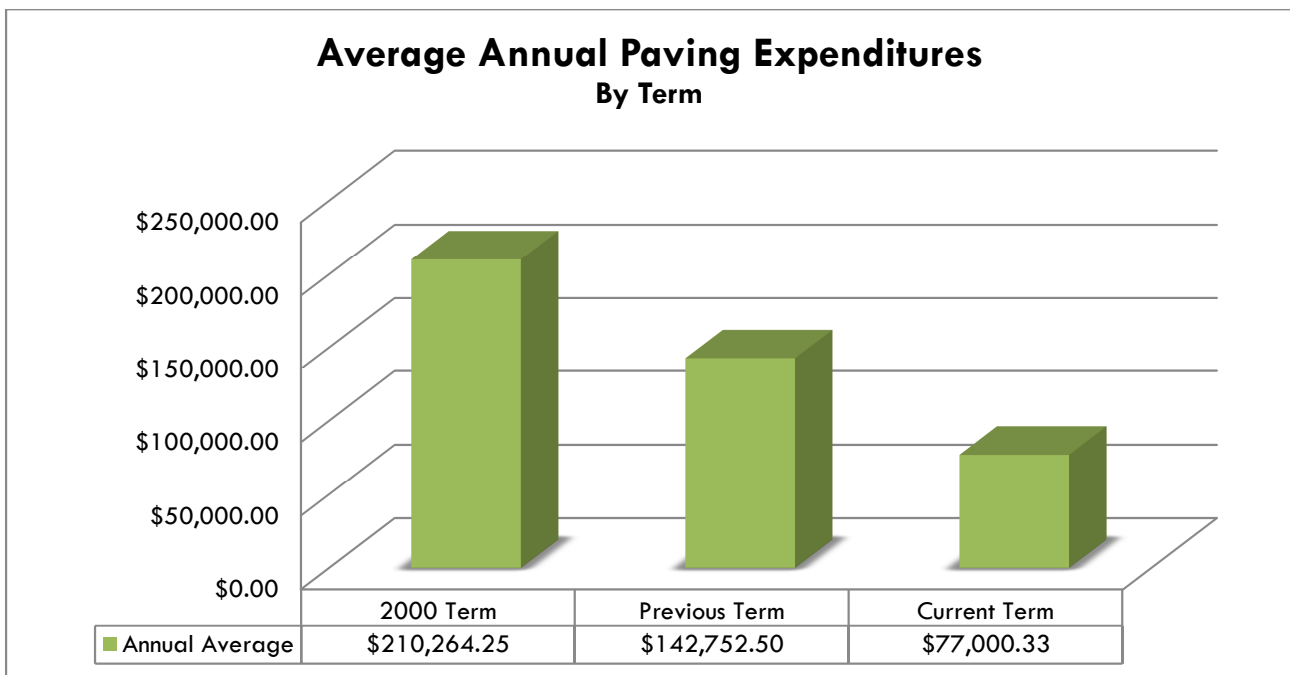
Average Linear Feet Annually By Term



The average distance of streets paved in the current term represents a 47% decrease from the previous term, an 82% decrease from the 2000 term and a 74% decrease overall.

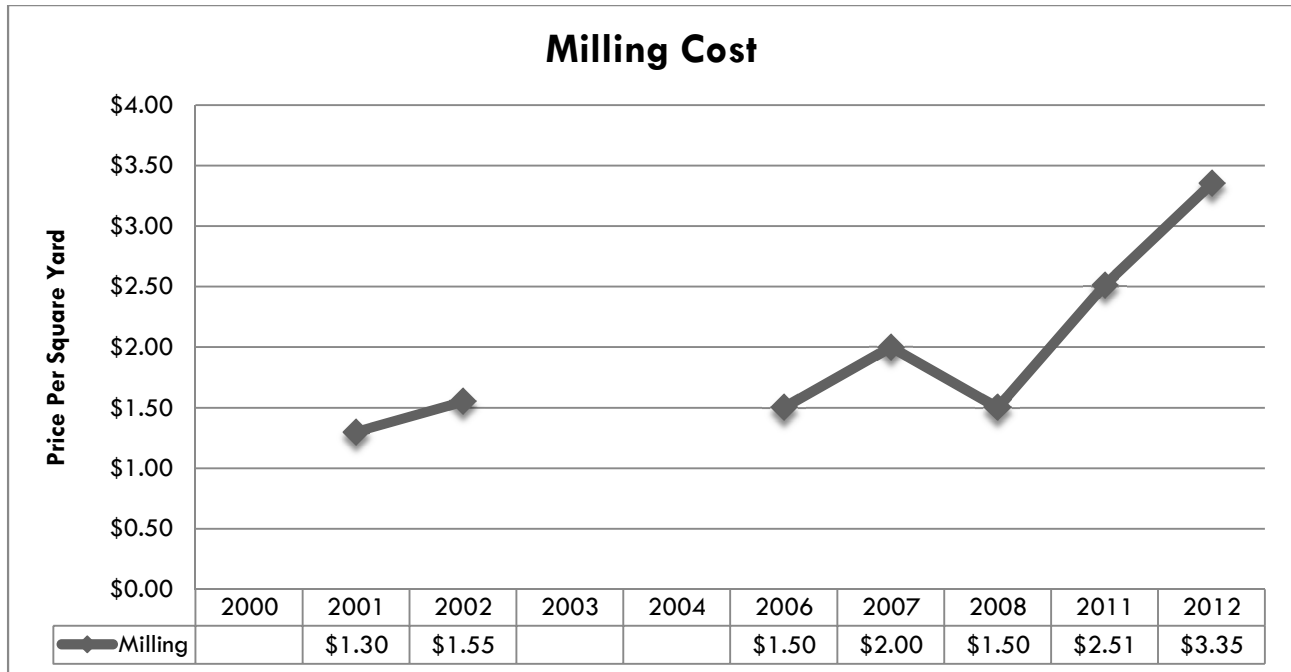


The total tons of asphalt applied in the current term represent a 53% decrease from the previous term, an 81 % decrease from the 2000 term and a 72% decrease overall.

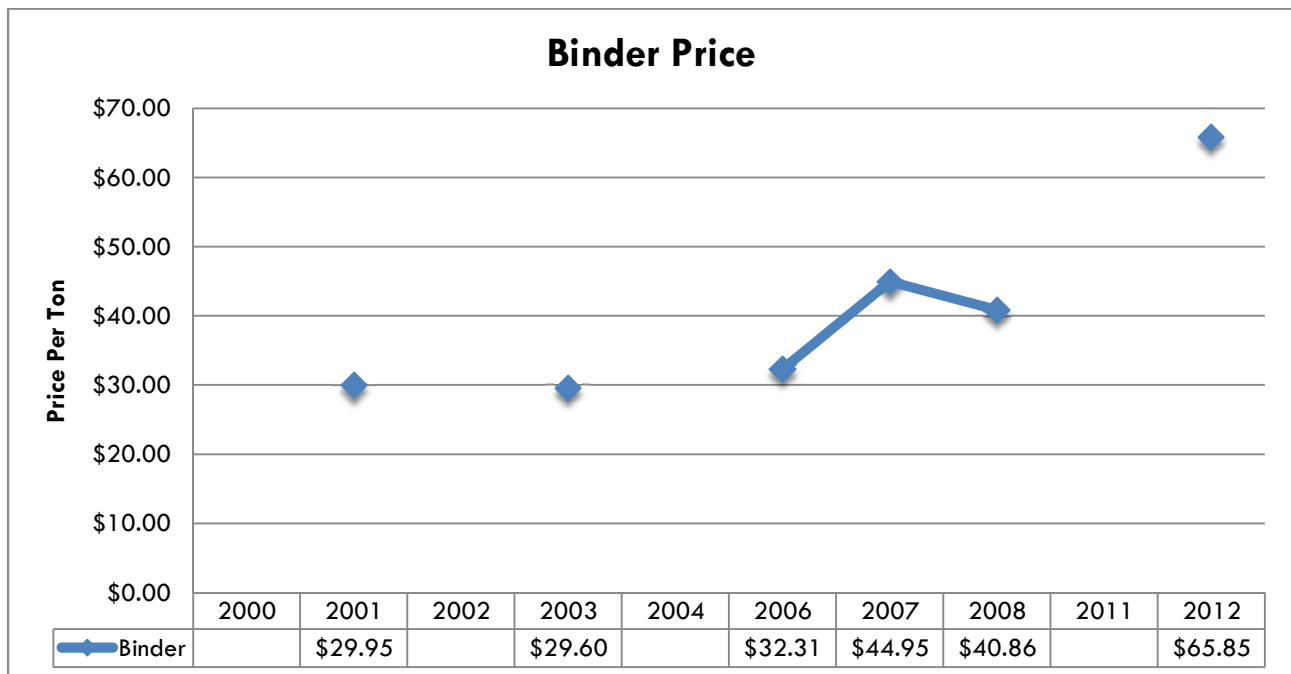


The total expenditures for street paving in the current term represent a 46% decrease from the previous term, a 63% decrease from the 2000 term and a 54% decrease overall.

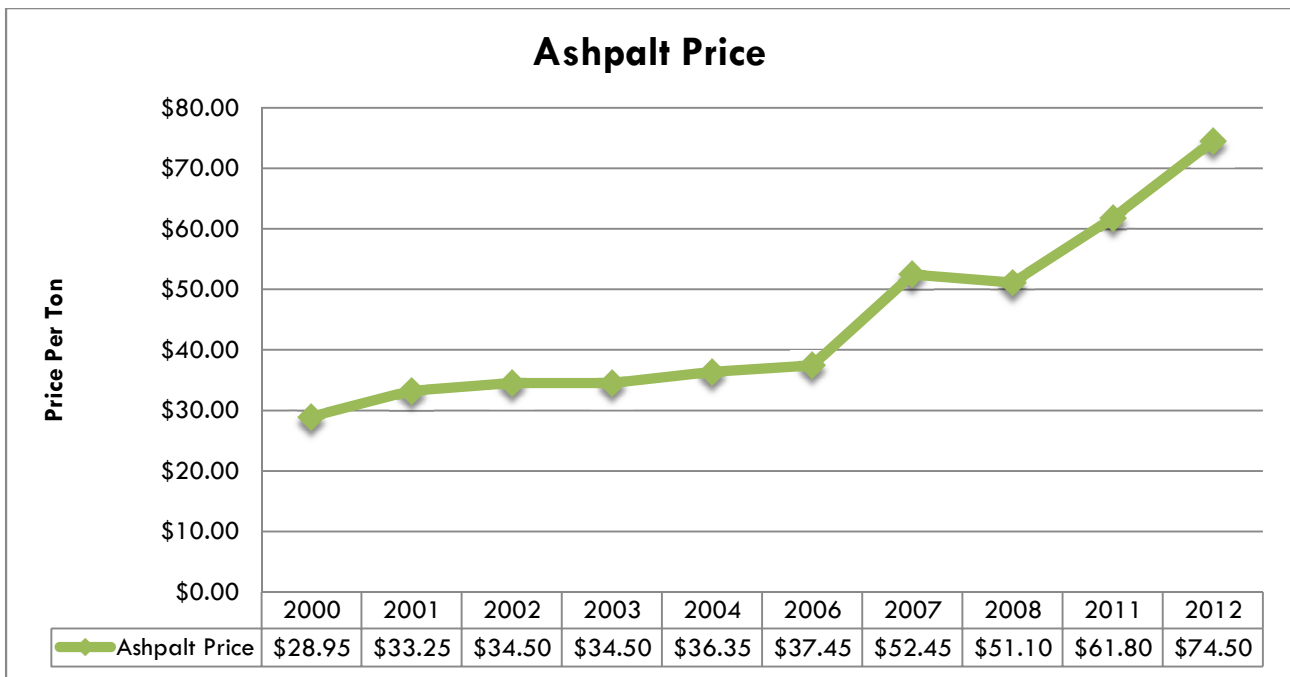
ANNUAL PAVING PRICES FROM 2000 TO PRESENT



The cost of milling has increased 158% since 2000 and 123% since 2008.



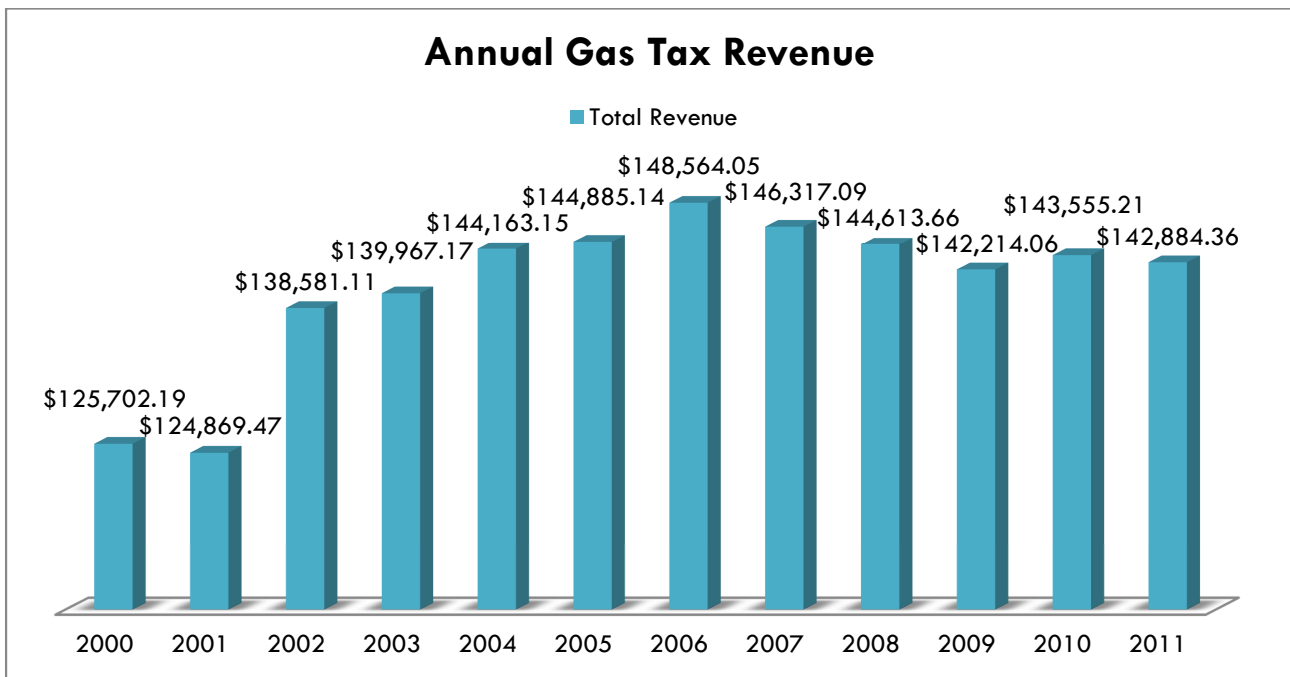
The price of asphalt binder base has increased 120% since 2001 and 61% since 2008.



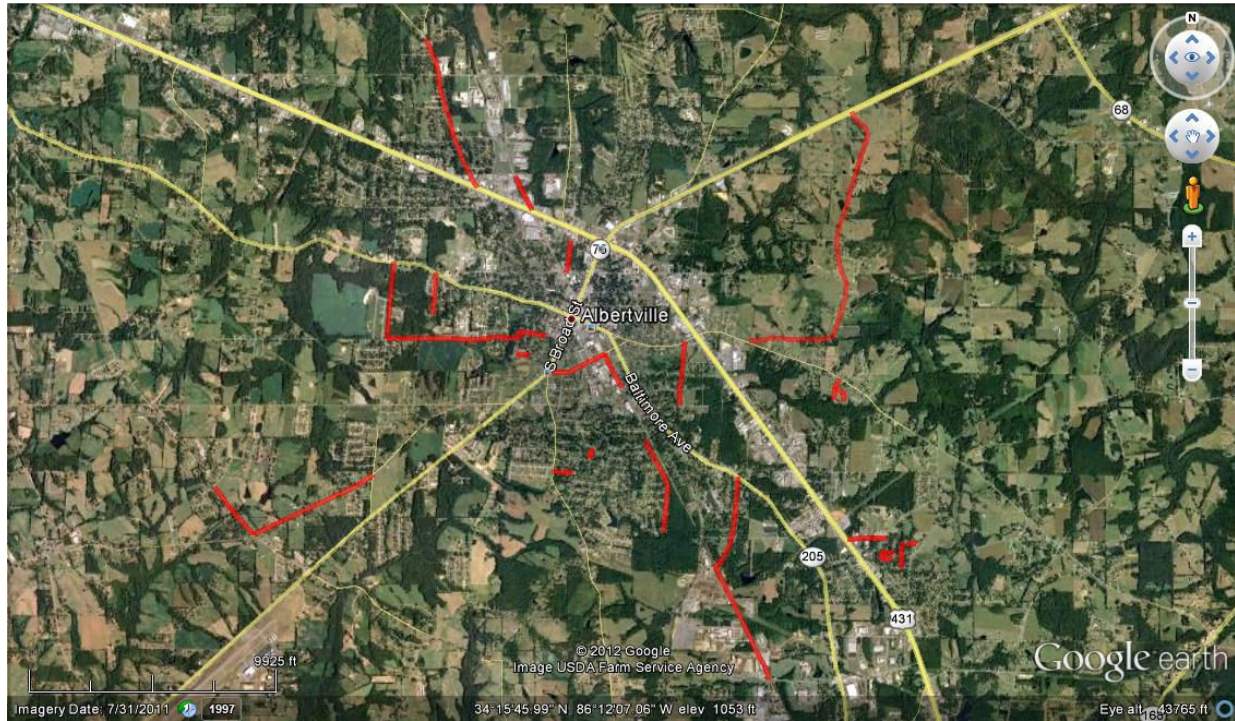
The price of asphalt has increased 157% since 2000 and 46% since 2008.

The change from 2011 to 2012 represents a 21% increase.

EXISTING STREET FUNDING SOURCE

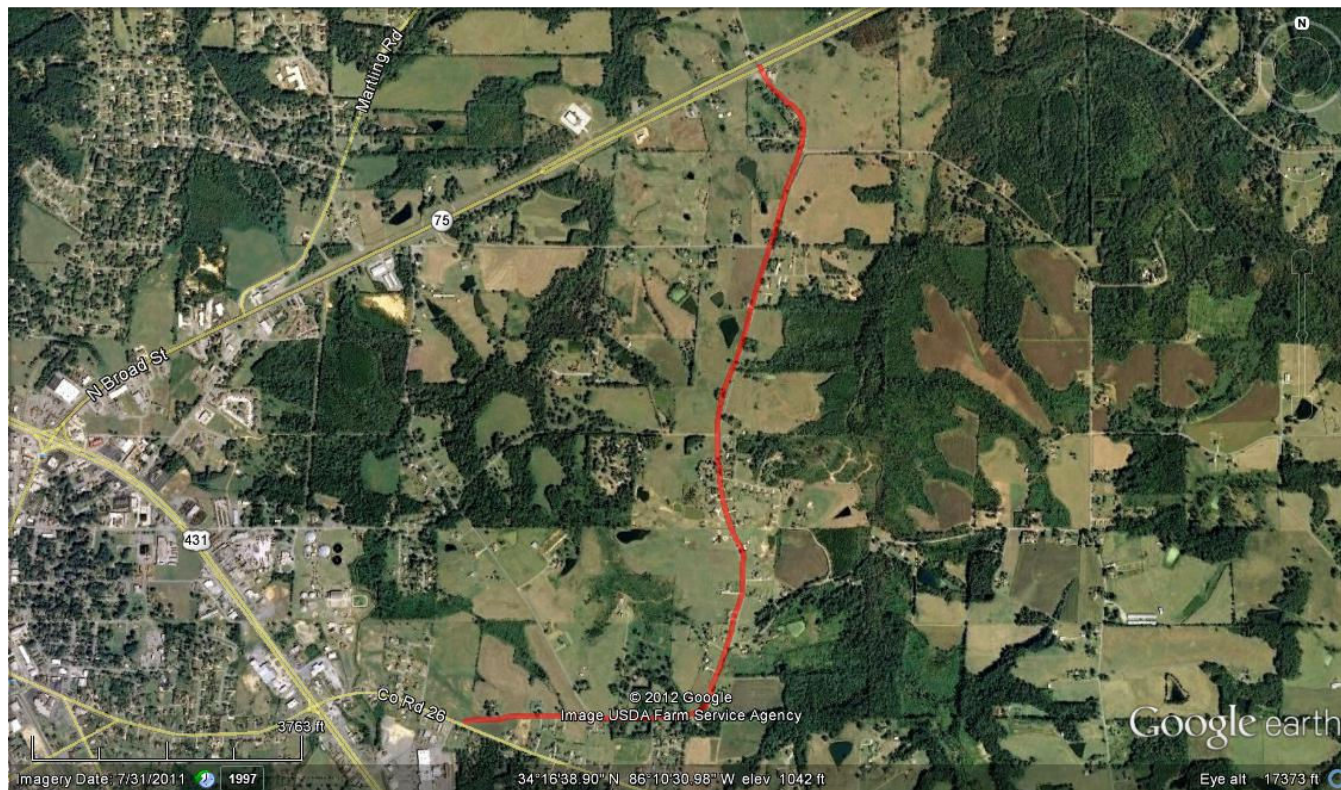


CURRENT 2012 PAVING LIST



Street	Section	Last Paved
THOMASON ROAD	EAST MAIN TO HWY 75	Prior to 1990
INDUSTRIAL BLVD	WAGNER DR TO FIRST ST	1997 (partial)
ROSE RD	HWY 431 TO BRIDGE	1992
HALF SECTION LINE RD	S HAMBRICK TO EDMONDSON	1992
HIGHPOINT RD	EDMONDSON TO TURNPIKE	1996
FIRST ST	HWY 205 TO INDUSTRIAL BLVD	Prior to 1990
JACKSON ST	MCDONALD AVE TO HWY 75	1995
FULTON ST	BARNES TO HICKORY	92 & '95 (partial)
MCDONALD AVE	JACKSON TO WAYNE FARMS	Prior to 1990
EDMONDSON ST	HWY 205 TO HALF SECTION LINE RD	1997
COLUMBUS ST	E MAIN TO CONWAY ST	Prior to 1990
TURNPIKE RD	HIGHPOINT RD TO MARLOW	1990
HIGHLAND AVE	MCKINNEY TO NEW PAVEMENT	Prior to 1990
LINWOOD AVE	S BROAD TO BOBO ST	Prior to 1990
MILTON ST	BURNS TO STEPHENS	Prior to 1990
SUMMERFIELD DRIVE	E. MAIN TO CUL-DE-SAC	New Subdivision
SUMMERFIELD LANE	SUMMERFIELD DRIVE TO CUL-DE-SACE	New Subdivision
JONES STREET	HWY 205 TO DAVID STREET	1998
ELM CIR	PECAN TO CUL-DE-SAC	Prior to 1990
HENLEY ST	PHILLIPSON ST TO AUBURN AVE	Prior to 1990
AUBURN AVE	GOOD PAVEMENT TO CUL-DE-SAC	Prior to 1990
DARDEN AVE	HWY 431 TO BEULAH CUT OFF RD	Prior to 1990
HILLCREST CIR	GRACESON ST TO GRACESON ST	Prior to 1990
RAILROAD AVE	HWY 431 TO SMITH ROAD	1993

THOMASON ROAD



Section: East Main to Hwy 75

Last Paved: No Record (*prior to 1990*)

Linear Feet: 13000 ft

Width: 20 ft

Tons: 2427

Est. Cost: \$180,812

INDUSTRIAL BLVD



Section: Wagner Dr to First St

Last Paved: 1997 (*partial*)

Linear Feet: 5080 ft

Width: 25 ft

Tons: 1967

Binder Base: 1580

Est. Cost: \$247,830

ROSE ROAD



Section: Hwy 431 to Drum Creek Bridge

Last Paved: 1992

Linear Feet: 6325 ft

Width: 25 ft

Tons: 1476

Est. Cost: \$109,962

HALF SECTION LINE ROAD/EDMONDSON STREET/MILTON STREET



HALF SECTION LINE ROAD

Section: S. Hambrick to Edmondson

Last Paved: 1992

Linear Feet: 6535

Width: 24

Tons: 1429

Est. Cost: \$106,461

EDMONDSON STREET

Section: Hwy 205 to Half Section Line

Last Paved: 1997

Linear Feet: 3050

Width: 22

Tons: 626

Est. Cost: \$46,637

MILTON STREET

Section: Burns to Stephens

Linear Feet: 760

Tons: 128

Last Paved: No Record (prior to 1990)

Width: 18

Est. Cost: \$9,536

HIGHPOINT ROAD/TURMPIKE ROAD



HIGHPOINT ROAD

Section: Edmondson to Turnpike

Last Paved: 1996

Linear Feet: 5500

Width: 20

Tons: 1027

Est. Cost: \$76,512

TURMPIKE ROAD

Section: Highpoint Rd to Marlowe

Last Paved: 1990

Linear Feet: 2500

Width: 20

Tons: 467

Est. Cost: \$34,792

FIRST STREET



Section: Hwy 205 to Industrial Blvd

Last Paved: No Record (*prior to 1990*)

Linear Feet: 3890

Width: 24

Tons: 855

Est. Cost: \$63,698



Est. Cost: \$84,071

MCDONALD AVENUE

Est. Cost: \$47,308

FULTON STREET/LINWOOD AVENUE/ELM CIRCLE



FULTON STREET

Section: Barnes St to Hickory St

Last Paved: 1992 & 1995 (*partial*)

Linear Feet: 3985

Width: 20

Tons: 730

Est. Cost: \$54,385

LINWOOD AVENUE

Section: S. Broad to Bobo St

Last Paved: No Record (*prior to 1990*)

Linear Feet: 850

Width: 20

Tons: 159

Est. Cost: \$11,846

ELM CIRCLE

Section: Pecan St to Cul-de-sac

Linear Feet: 450

Tons: 76

Last Paved: No Record (*prior to 1990*)

Width: 20

Est. Cost: \$5,662

COLUMBUS STREET



Section:	E. Main St to Conway St
Last Paved:	No Record (<i>prior to 1990</i>)
Linear Feet:	2650
Width:	20
Tons:	495
Est. Cost:	\$36,878

HIGHLAND AVENUE



Section: McKinney Ave to New Pavement

Last Paved: No Record (prior to 1990)

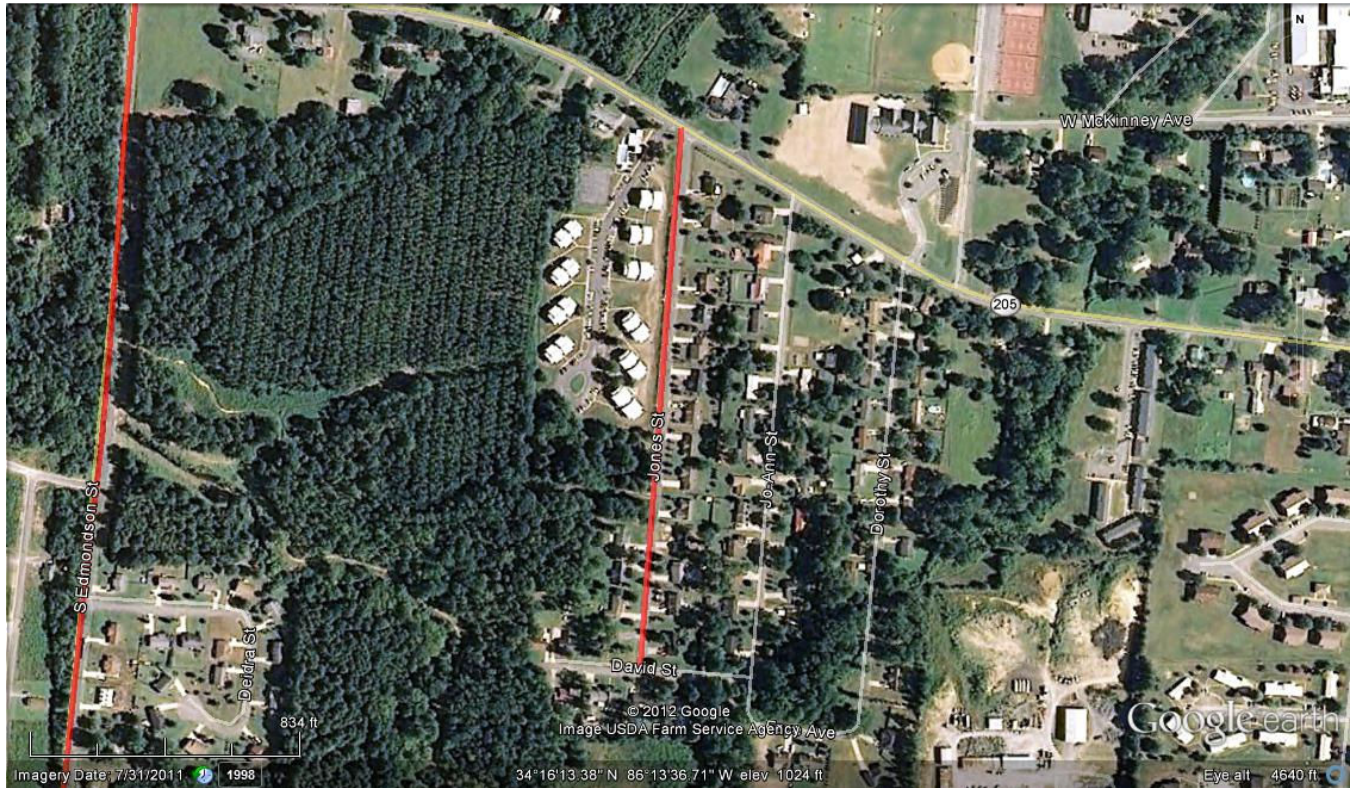
Linear Feet: 1290

Width: 25

Tons: 301

Est. Cost: \$22,425

JONES STREET



Section: Hwy 205 to David St

Last Paved: 1998

Linear Feet: 1650

Width: 21

Tons: 452

Est. Cost: \$33,674

SUMMERFIELD DRIVE/SUMMERFIELD LANE



SUMMERFIELD DRIVE

Section:	E. Main St to Cul-de-sac
Last Paved:	No Record (<i>new construction</i>)
Linear Feet:	1060
Width:	21
Tons:	208
Est. Cost:	\$15,496

SUMMERFIELD LANE

Section:	Summerfield Dr to Cul-de-sac
Last Paved:	No Record (<i>new construction</i>)
Linear Feet:	870
Width:	21
Tons:	171
Est. Cost:	\$12,740

HENLEY STREET/HILLCREST CIRCLE/AUBURN AVE



HENLEY STREET

Section: Phillipson St to Auburn Ave
Last Paved: No Record (*prior to 1990*)
Linear Feet: 970
Width: 21
Tons: 190
Est. Cost: \$14,155

AUBURN AVENUE

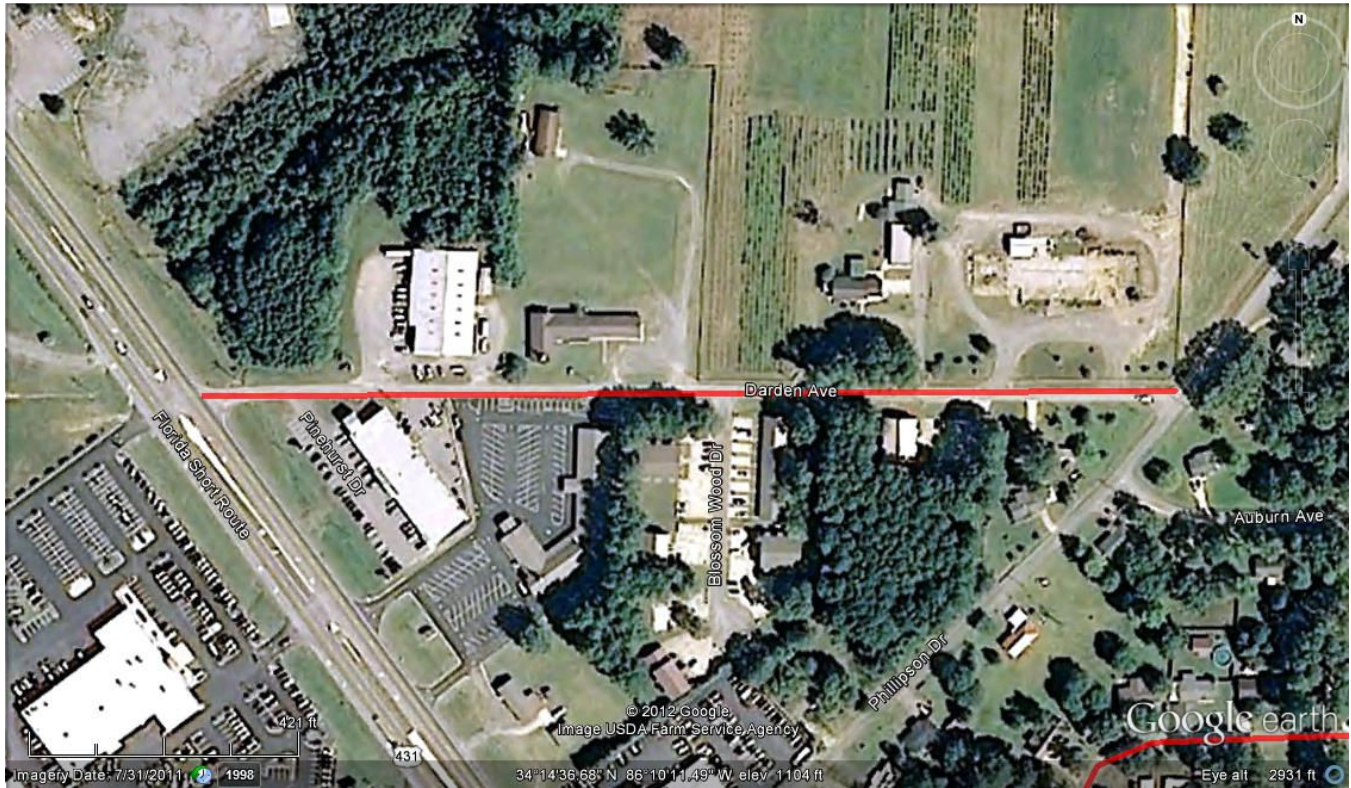
Section: S. Broad to Bobo St
Last Paved: No Record (*prior to 1990*)
Linear Feet: 450
Width: 20
Tons: 84
Est. Cost: \$6,258

HILLCREST CIRCLE

Section: Graceson St to Graceson St
Linear Feet: 1080
Tons: 212

Last Paved: No Record (*prior to 1990*)
Width: 21
Est. Cost: \$15,794

DARDEN AVENUE



Section: Hwy 431 to Beulah Cut Off Rd

Last Paved: No Record (*prior to 1990*)

Linear Feet: 1500

Width: 21

Tons: 294

Est. Cost: \$21,903

RAILROAD AVENUE



Section: Hwy 431 to Smith St

Last Paved: 1993

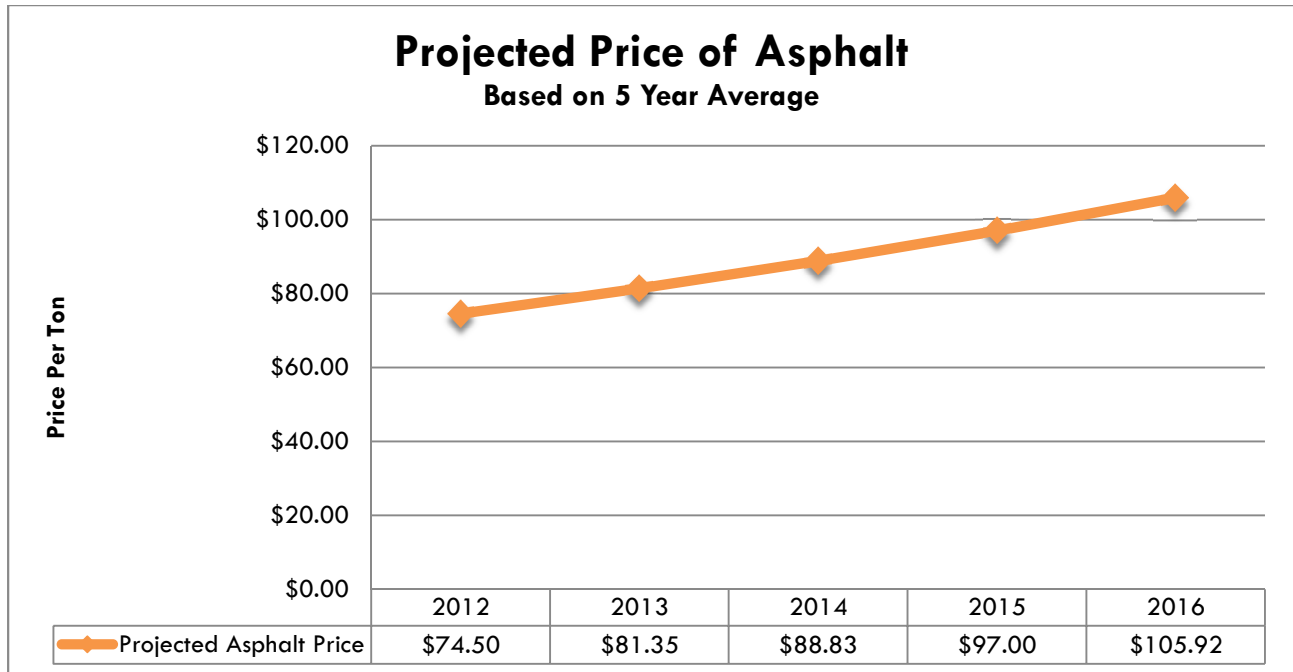
Linear Feet: 1450

Width: 22

Tons: 397

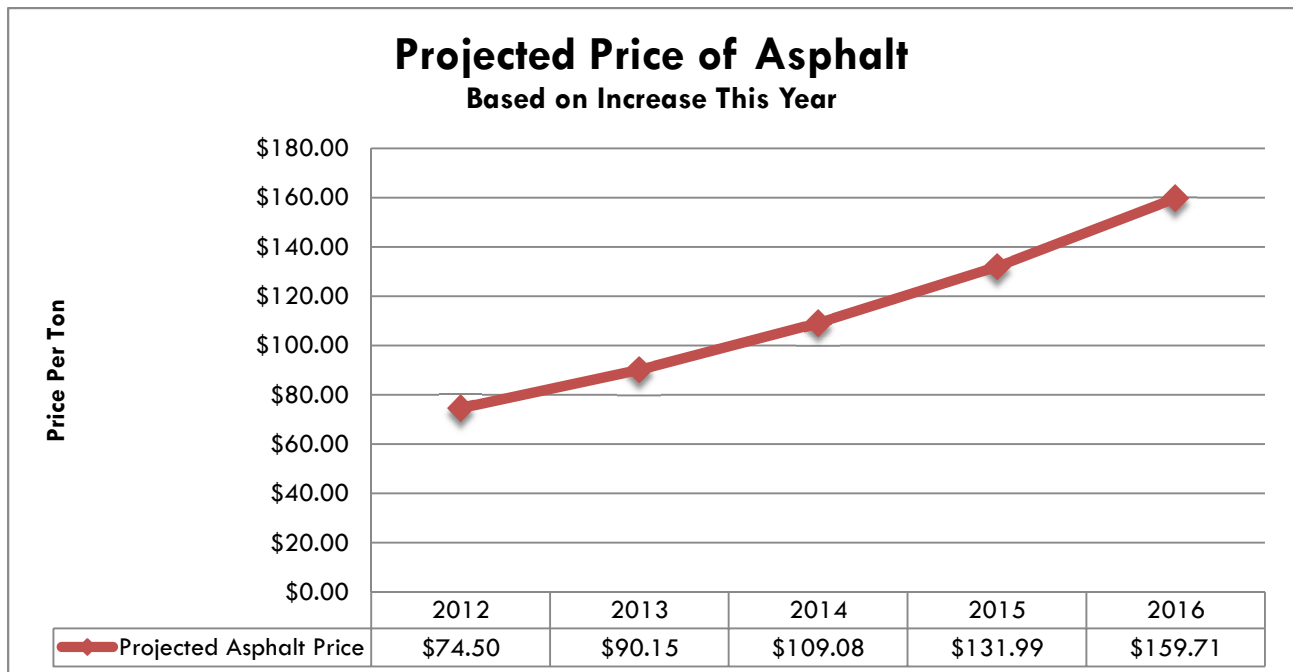
Est. Cost: \$29,577

FUTURE PRICE PROJECTIONS



The real price of asphalt has increased by 46% over the last five years.

This projection is based on an annual average increase of 9.2%.



The current price of asphalt reflects a 21% increase from last year.

This projection is based on an annual average increase of 21%.

PROSPECTIVE PAVING APPROPRIATIONS

Projected Results Funded \$200,000 Annually for 5 Years						
	2012	2013	2014	2015	2016	Total
Gas Tax Revenue	\$140,000.00	\$140,000.00	\$140,000.00	\$140,000.00	\$140,000.00	\$700,000.00
Street Paving Fund Allocation	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$1,000,000.00
Total Budgeted	\$340,000.00	\$340,000.00	\$340,000.00	\$340,000.00	\$340,000.00	\$1,700,000.00
Projected Asphalt Price	\$74.50	\$81.35	\$88.83	\$97.00	\$105.92	
Projected Linear Feet	21678	19852	18181	16649	15247	91608
Projected Tons Applied	4564	4179	3828	3505	3210	19286

The current paving list reflects a total need of 74625 linear feet—approximately 14 miles.

Allocating \$200,000 annually in addition to gas tax revenue will facilitate paving all streets on the current list within five years and allow for 16983 linear feet or 3 ¼ miles additional.

Projected Results Funded \$100,000 Annually for 5 Years						
	2012	2013	2014	2015	2016	Total
Gas Tax Revenue	\$140,000.00	\$140,000.00	\$140,000.00	\$140,000.00	\$140,000.00	\$700,000.00
Street Paving Fund Allocation	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$500,000.00
Total Budgeted	\$240,000.00	\$240,000.00	\$240,000.00	\$240,000.00	\$240,000.00	\$1,200,000.00
Projected Asphalt Price	\$74.50	\$81.35	\$88.83	\$97.00	\$105.92	
Projected Linear Feet	15302	14014	12834	11753	10763	64664
Projected Tons Applied	3221	2950	2702	2474	2266	13614

Allocating \$100,000 annually in addition to gas tax revenue will fall short of paving the current list within five years by 9961 linear feet—almost 2 miles.

Projected Results Funded \$50,000 Annually for 5 Years						
	2013	2014	2015	2016	2017	Total
Gas Tax Revenue	\$140,000.00	\$140,000.00	\$140,000.00	\$140,000.00	\$140,000.00	\$700,000.00
Street Paving Fund Allocation	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00
Total Budgeted	\$190,000.00	\$190,000.00	\$190,000.00	\$190,000.00	\$190,000.00	\$950,000.00
Projected Asphalt Price	\$74.50	\$81.35	\$88.83	\$97.00	\$105.92	
Projected Linear Feet	12114	11094	10160	9304	8521	51193
Projected Tons Applied	2550	2336	2139	1959	1794	10777

Allocating \$50,000 annually in addition to gas tax revenue will fall short of paving the current list within five years by 23432 linear feet—approximately 4 ½ miles.

PROPOSED 5 YEAR PAVING SCHEDULE

2012 Paving Project						
Street	Section	Year Paved	Linear Ft	Width	Tonnage	Cost
ROSE RD*	HWY 431 TO BRIDGE	1992	6325	25	1476	\$110,000
GEORGE WALLACE DR*	ROSE RD TO RAILROAD AVE					
RAILROAD AVE*	SMITH RD TO CITY LIMITS					
ELM CIR	PECAN TO CUL-DE-SAC	pre-1990	450	20	76	\$5,662
HENLEY ST	PHILLIPSON DR TO AUBURN AVE	pre-1990	970	21	190	\$14,155
AUBURN AVE	GOOD PAVEMENT TO CUL-DE-SAC	pre-1990	450	20	84	\$6,258
DARDEN AVE	HWY 431 TO BEAULAH CUT OFF	pre-1990	1500	21	294	\$21,903
HILLCREST CIR	GRACESON ST TO GRACESON ST	pre-1990	1080	21	212	\$15,794
THOMASON ROAD	EAST MAIN 1/2 WAY TO HWY 75	pre-1990	6500	20	1214	\$90,406
RAILROAD AVE	HWY 431 TO SMITH ROAD	1993	1450	22	397	\$29,577
MCDONALD AVE	JACKSON TO WAYNE FARMS	pre-1990	1500	35	635	\$47,308
TOTALS			20225		4578	\$341,063

The * marked sections of Rose Road, George Wallace Drive, and Railroad Avenue have been applied for as part of the ATRIP grant. The cost associated with this represents our estimated 20% match and engineering costs. The section of Railroad Avenue connecting Industrial Park West to US Hwy 431 was included due to its poor condition and to complement this project. McDonald Ave was included based on a combination of age, condition, and heavy use considering industrial and school traffic. The remainder are residential access roads and have been scheduled for immediate paving due to their particularly poor condition.

2013 Paving Project						
Street	Section	Year Paved	Linear Ft	Width	Tonnage	Cost
THOMASON ROAD	NEW PAVEMENT TO HWY 75	pre-1990	6500	20	1213	\$98,678
EDMONDSON ST	HWY 205 TO HALF SECTION LINE RD	1997	3050	22	626	\$50,925
HALF SECTION LINE RD	S HAMBRICK TO EDMONDSON	1992	6535	24	1429	\$116,249
FULTON ST	BARNES TO HICKORY	92 & '95	3985	20	730	\$59,386
LINWOOD AVE	S BROAD TO BOBO ST	pre-1990	850	20	159	\$12,935
TOTALS			20920		4157	\$338,173

The first half of Thomason Road will be paved the prior year with the other half being paved this year. Edmondson Street has been included based on its poor condition and heavy use as primary collector road. This portion of Half Section Line Road is a minor collector road and has been added based on its poor condition and regular use by heavy trucks owned by the city. Fulton Street and Linwood Avenue are residential access roads included based on age and condition.

2014 Paving Project						
Street	Section	Year Paved	Linear Ft	Width	Tonnage	Cost
INDUSTRIAL BLVD*	WAGNER DR TO FIRST ST	1997 (partial)	5080	25	1976	\$161,340
INDUSTRIAL BLVD	WAGNER DR TO FIRST ST		5080	25	1580	\$140,351
HIGHLAND AVE	MCKINNEY TO NEW PAVEMENT	pre-1990	1290	25	301	\$26,738
MILTON ST	BURNS TO STEPHENS	pre-1990	760	18	128	\$11,370
TOTALS			12210		3985	\$339,799

Industrial Blvd has been scheduled based on its considerably poor condition. Due to its heavy use as an industrial access road and its state of disrepair a binder base will be applied to provide for a longer life. Highland Avenue, a mixed use access road, has been included based on age and condition. Milton Street is a residential access road and has been added based on age and condition.

2015 Paving Project						
Street	Section	Year Paved	Linear Ft	Width	Tonnage	Cost
HIGHPOINT RD	EDMONDSON TO TURNPIKE	1996	5500	20	1027	\$99,619
FIRST ST	HWY 205 TO INDUSTRIAL BLVD	pre-1990	3890	24	855	\$82,935
JACKSON ST	MCDONALD AVE TO HWY 75	1995	3150	25	735	\$71,295
JACKSON ST	MILLING					\$43,750
JONES STREET	HWY 205 TO DAVID STREET	1998	1650	21	452	\$43,844
TOTALS			14190		3069	\$341,443

This section of Highpoint Road has been included based on its traffic levels as a major collector road and current condition. First Street is a mixed use residential/industrial access road and has been scheduled due to heavy use, age, and poor condition. Jackson Street is a mixed use access road and is the primary access to the high school. The current disrepair of portions of this section will require milling of the current pavement before a new surface can be applied. Jones Street has been scheduled due to its particularly poor condition in several sections.

2016 Paving Project						
Street	Section	Year Paved	Linear Ft	Width	Tonnage	Cost
COLUMBUS ST	E MAIN TO CONWAY ST	pre-1990	2650	20	495	\$52,430
TURNPIKE RD	HIGHPOINT RD TO MARLOW	1990	2500	20	467	\$49,465
SUMMERFIELD DRIVE	E. MAIN TO CUL-DE-SAC	<i>not listed</i>	1060	21	208	\$22,031
SUMMERFIELD LANE	SUMMERFIELD DRIVE TO CUL-DE-SAC	<i>not listed</i>	870	21	171	\$18,112
ADDITIONAL STREETS	TBD				1869	\$197,964
TOTALS			7080		3210	\$340,002

Columbus Street has been scheduled based on age, condition and use as a residential access road. Turnpike Road is a major collector road and has been included due to its age and condition. Summerfield Drive and Summerfield Lane are residential access roads and have been added based on condition.

RECOMMENDATIONS MOVING FORWARD

- **Create a Street Paving Fund**

This could be created by council resolution. It would provide a line item in the budget showing a prioritization for paving projects and creating better accountability.

- **Create a City Street Master Plan w/ Assistance of CDG Engineers**

Benefits of a Master Plan:

- If every street within Albertville has a 15 – year lifecycle, then 1/15th of the City's streets **must** be paved every year. Which streets will be paved? When?
- By having a Master Plan the City can budget street rehabilitation with un-biased information.
- If the timing of the rehabilitation of every street within the City is known, then preventative maintenance can be performed on streets that are farther down the schedule.
- Better contractor pricing could result if the contractor knows which streets they will be paving before they bid. Additionally, if the contractor isn't given a specific schedule (other than by the end of the fiscal year) – bid prices could reflect this.
- The Master Plan becomes a living document that can be updated.
- The City is better prepared should grants become available for street rehabilitation.

Engineering Approaches to Master Plan:

1. One large evaluation

- Pros:
 - All information is available immediately after evaluation (in 2012).
- Cons:
 - Second most expensive option

2. 4 years with 4 staged evaluations (Split City into 4 sections – evaluate one section per year)

- Pros:
 - Receive all information of one large evaluation with the engineering cost distributed over four years
- Cons:
 - All information is not available immediately in the first year.
 - Complete evaluation for City budgeting is not available until fourth year.
 - Maintenance for all streets is not planned until fourth year.
 - Most expensive option cumulatively.
 - From engineering perspective – it is the most difficult option to remain objective on (Evaluating two streets, four years apart is more difficult to evaluate because the scoring system is subjective).

3. Evaluation and training (Engineering evaluation with City personnel until training complete. City personnel will provide the data and CDG will complete the evaluation.)

- Pros:
 - Least expensive option
 - All information is available immediately after evaluation (in 2012).
- Cons:
 - Requires extensive input from one City employee.

- **Research and Implement New Pavement Maintenance Strategies**

- Infrared pavement patching
- Crack sealing techniques
- Graded aggregate seals
- Overlays
- Recycling

- **Require Permits for Utility Cuts**

- Track utility cuts by requiring permits to be obtained from City Hall
- Discuss possible fees for these cuts to help with maintenance
- Discuss possible maintenance agreement or partnership with utility companies