(Amended for the Record 4/11/2018)

Testimony of

Gabriel D. Chikes, President

Williamsburg Square Ashton Place HOA
Germantown, MD

before the

Montgomery County Council
FY 2019 Budget Hearing
April 11, 2018

Hans Reimer, At-Large
President

Good evening, President Reimer and Councilmembers, my name is Gabriel Chikes and I have the pleasure of serving as the President of the Williamsburg Square Ashton Place Homeowners' Association. Accompanying me tonight are fellow Board Members and residents of our community. We appear here this evening both to speak to several matters of concern to our community and in response to Councilmember Floreen's appearance before the UpCounty Citizens' Advisory Board March meeting. At that meeting, the Councilmember challenged the Germantown citizens in attendance to show up before the Council, make our voices heard, register to vote and then do so in great numbers, and as often as possible. Councilmember Floreen, we are here to say we accept your challenge!

ROADWAY REPAIR

The first matter about which we seek your support is for funding the milling and repaving of five roadways within our community that are sorely in need of repair. You can find photos of the streets, depicting some of the more serious roadbed degradation at Attachment A. When first addressing this issue, I contacted Mr. Richard Dorsey of the Division of Highway Services within the Department of Transportation. I asked Mr. Dorsey if he would confirm for me whether the streets in question (Metz Court, Mill House, Open Hearth,

Smokehouse and Well House) were in fact County maintained. I also asked if he could produce a report indicating the level of maintenance service each street has received. We also contacted Councilmember Rice to make him aware of the terribly poor condition of the roadways and sought and obtained his support to secure funding. Again, thank-you Councilmember Rice. Prior to my meeting with the Councilmember, Mr. Paugh, a colleague of Mr. Dorsey's, emailed a response (a copy can be found at Attachment B), in which he wrote that the County does acknowledge responsibility for the maintenance of the streets in question and that, according to a print-out from a DOT maintained database, **our streets have not been milled and repaved in the 25 years that the County has been keeping records**!

According to an article entitled "Life-Cycle Performance" published by the Asphalt Institute[i] (Attachment C), when considering climatic and traffic conditions, the "projected service life" of a Traffic Class II, Residential Street is no more than 20 years. Likewise, an Engineering.com forum entry[ii] written by an engineer who attended a Continuing Ed program held at Cornell University wrote:

> A new, well built, asphalt road should last at least 15 years before a major rehabilitation or full depth reconstruction is needed. However, surface treatments or thin overlays every 7-10 years can extend that to 20 years between major work. It is much cheaper to keep a good road in good repair than it is to rebuild a poor road. (underlines are my own)

It is clear even with minor patching and sealing, we are WELL BEYOND the useful life of our current streets. Therefore, we appeal to the Council, asking that members support Councilmember Rice's efforts to secure funding for our community roadways. In addition, we ask that given the neglect (benign, no doubt) in the maintenance of our streets and the number of years exceeding their useful life, our milling and paving project take place in the 2018 paving schedule. We feel we should not have to wait at the back of the line.

INSUFFICIENT PARKING ALONG ADJOINING COUNTY ROADWAYS

The next issue for which we seek support is to assist us in alleviating the terrible parking problem in our community. Like many communities, this problem arose because of changes in housing use; more employed members of a household; and, an increase in multigenerational and multi-family households. Many communities in Germantown have faced the same problem. However, unlike communities that can use County maintained roadways surrounding their communities for excess parking, Williamsburg Square Ashton Place cannot (see map at Attachment D). One street, Mateny Road, does not allow any parking along the street. Even if it would be permitted, it would not be feasible on that portion of Mateny between Clopper Road and Smoke House Way since it is lined

on both sides with as many as thirty Bradford Pear trees. Dairymaid Drive, to the west of our community, has restricted parking on one side due to Great Seneca Elementary School and very limited parking opposite the school, for reasons that are not entirely clear. To the north of the community is Metz Drive but that too has very limited parking and that which does exist is entirely used.

What we propose for your consideration and funding is the creation of parking on the north (school) side of Mateny Road between Dairymaid and Creamery Hill. We believe that since that portion of Mateny traverses a streambed, a permeable parking surface and/or rain garden would make most sense. The permeable surface/rain garden would filter rainwater, and fluid that may leak from vehicles that could be parked there, to minimize contaminants from entering the stream and the Chesapeake Bay watershed. The creation of additional parking along this County roadway would not only increase the availability of parking outside of our community but alleviate the problem of insufficient parking for parents of children attending the school. Currently, they park alongside the road on the side nearest the school, causing terrible erosion (see photo in Attachment D). We are seeking funds designated for the entire project (feasibility/impact study & construction) so that the school may benefit and so we can have desperately needed parking, outside of the community, as soon as possible.

CRIME

It is requested that the previously submitted section under this heading be stricken. Since the original submission of my testimony, my week by week review of the crime statistics (it appears that the 2017 annual report for the Department is not yet on the web) on the Montgomery County website, do not support or warrant my request for a public hearing. While the 5th District did experience two murders in CY 2017 and three shootings, the number is in keeping with other Districts (so, while troubling, not an anomaly) and far lower than in the 3rd District. In fact, reported crime in the 5th District is lower than several others. Commander Plazinski is deserving of my apology and he and his staff are to be commended for the work they are doing. Having said that, we do want to explore how as a community we can better partner with the Commander at addressing crime in the community. So too do we want to become aware of the County department and programs that work with the Commander in order that we can discover how we develop stronger law-enforcement/community partnerships. The Commander and his staff are performing admirably but our relying on "policing our way out" of crime puts too great, if not an unrealistic, a community expectation on outcomes. We all have a role to play.

To conclude, we seek support for rehabilitated community streets, for greater access to County roadways for parking and, finally for the Council and County Government to recognize the antecedents to criminal behavior in the Germantown area and to forge strong community partnerships. Councilmember Floreen, as you told us at the UCAB meeting, Councilmember Rice needs your support and that of at least three other members to succeed in securing funding for our requests. We are counting on your own and hoping that your colleagues SEE us, HEAR us, and believe that WE in Germantown WILL VOTE in support of those members who demonstrate support for our issues and concerns.

Mr. President and Members, thank-you for the opportunity to appear before you and provide this testimony. We look forward to your response.

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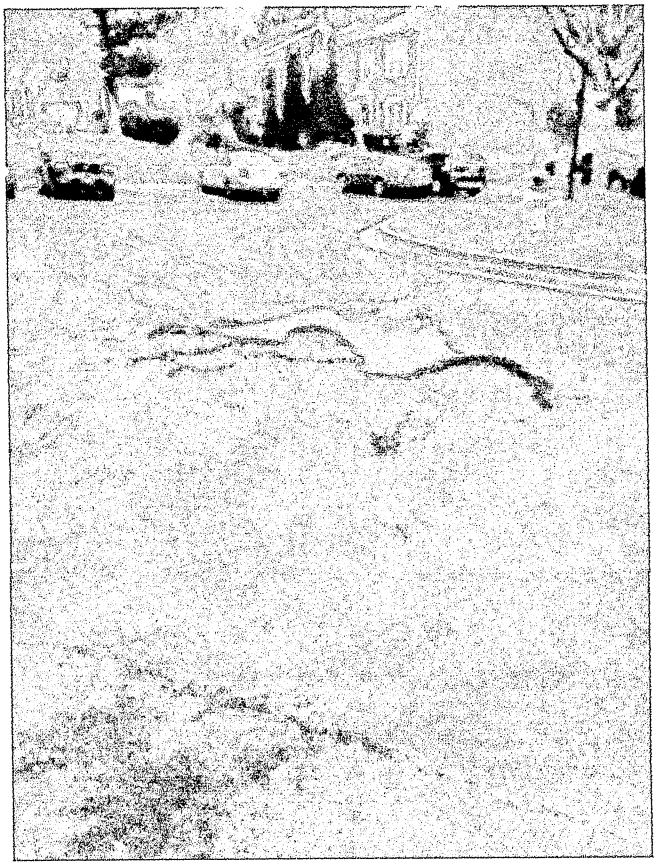
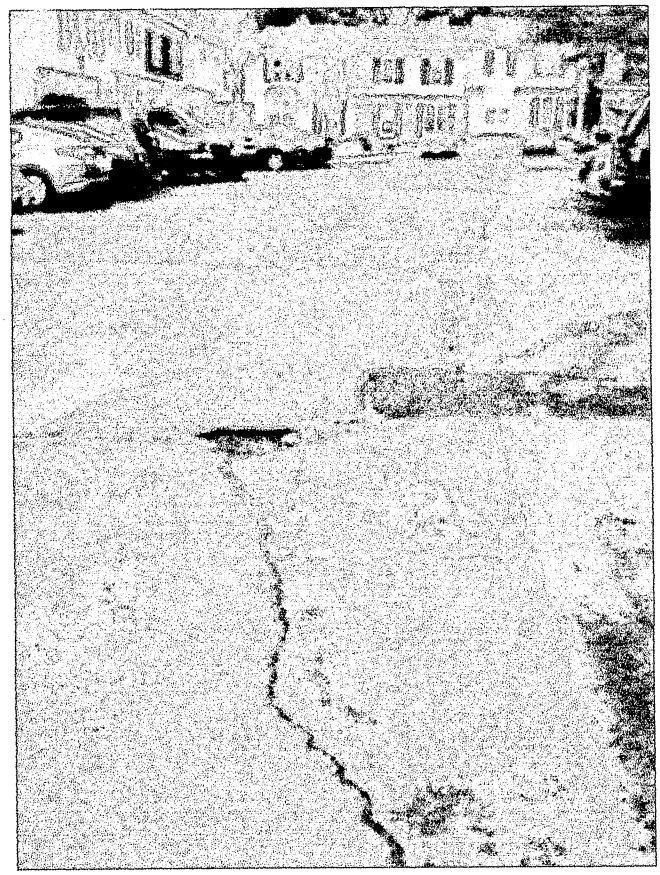
[i] http://www.asphaltinstitute.org/wp-content/uploads/Thickness_Mix/Life_Cycle_Performance.pdf
[ii] http://www.engineering.com/Ask@/qactid/1/qaqid/4074.aspx

Attachment A

Photos Depicting Condition of Streets in the Community





Attachment B

Copy of Email from Randy Paugh of MoCo DOT

Paugh, Randy <David.Paugh@montgomerycountymd.gov>

Mon, Jan 29, 2018 at 1:51 PM

To: Gabriel Chikes <gabriel.chikes@gmail.com>
Cc: "Dorsey, Richard" <Richard.Dorsey@montgomerycountymd.gov>, "Faust, Josh" <Josh.Faust@montgomerycountymd.gov>

Mr. Chikes,

Attached and below is information that I have compileded so far.

Williamsburg Square Ashton Place HOA

Metz Drive, Mill House Court, Open Hearth Way, Smoke House Court, and Well House Court.

2017 PCI = 59 average, Fair Condition (PCI Map attached)

Metz Drive is planned for FY18 CIP 500511 Depot resurfacing this construction season of which starts April thru October.

No Utility project is planned in APC tool.

History of maintenance and repair records

Streets	1993	2003	2016
1. Metz Drive	Slurry/Patching	Slurry/Patching	Permanent Patching
2. Mill House Court	Slurry/Patching	Slurry/Patching	Permanent Patching
3. Open Hearth Way	Slurry/Patching	Slurry/Patching	
4. Smoke House Court			
5. Well House Court	Slurry/Patching	Slurry/Patching	

I hope this information helps.

Attachment C

Asphalt Institute Publication

"Life Cycle Performance"

LIFE-CYCLE PERFORMANCE

By Dr. Bob Boyer, Asphalt Institute Senior District Engineer and Jay Hensley, Asphalt Institute Chief Engineer

The Asphalt Institute's life-cycle performance program now has and is developing a database to store and analyze life-cycle performance data and make it available to user agencies. So far, survey results show that asphalt pavements are performing better than previously reported.

Five Climatic Conditions

The program uses five climatic conditions—wet freeze, wet no-freeze, dry freeze, dry no-freeze, or all climatic conditions. The traffic, or functional, classification is divided into six different classes. Class 1 represents the basic residential street. The classification progresses upward to Class VI, which is heavy interstate. The construction level is composed of new, rehabilitation, or both. Fifty-four service life equations can be developed from the data using the various traffic, construction and climatic conditions for a PCR of 70.

Initial service life equations show that asphalt pavements are not only performing according to design life, which is normally 20 years, but can be maintained longer with routine maintenance, which may include crack pouring, surface treatments, milling and overlays of nominal aggregate size. Maintenance is not normally thought to add structural value to the pavement, but merely to restore surface for rideability, safety and environmental protection from the elements.

Performance Difference

Preliminary data also indicates a significant difference in pavement performance for various climatic conditions. The rehabilitation, or second phase performance, is also out-performing estimated design periods, which are normally 15 years. For major rehabilitation, often referred to as reconstruction, pavements are also lasting beyond their planned design life. A much longer life than that anticipated by the estimate of design life is seen for the total range of rehab projects.

As additional pavement sections are added to the database, including Superpave concepts and new quality control specs, asphalt pavements are expected to show even longer performance periods with less maintenance. The data will be available for further analysis not only by this program, but also by other procedures as well. By the end of 1998 more than 800 pavement sections were logged in the database. Ultimately, there will be several thousand pavement sections for the complete analysis of all criteria with respect to time.

Design Variables Follow AASHTO Lead

Over 35 state agencies use the American Association of State Highway and Transportation Officials (AASHTO) pavement design procedures, or some modification of them. Many larger city and county agencies also use this design procedure, or a standard section, for various streets and roadways based on it. All formal procedures, regardless of the source, attempt to address the common issues of design variables. Since the AASHTO procedure is used the most, it is a common reference on some of the major issues.

One of the first considerations in design is "design reliability," a statistically based factor that indicates how valid the design is for the input values. AASHTO provides a range of reliability factors based on traffic, as do other formal design procedures (See Table 1).

When higher reliability factors are used, the pavement design is proportionately thicker. Most agencies will select the 85 to 90 percent reliability for the higher traffic levels. A reliability factor of 87.5 percent is fairly common for most high-traffic designs. Having heavier traffic than expected in the design period often negates the design more than any other factor. Designing at 95 percent reliability or above is prohibited by cost for most agencies. Lower volume roads and streets typically specified by ordinance or standard sections fall into a 50 to 70 percent range of design reliability.

The preliminary data from the performance program shows a wider variation in the performance life of Classes I to III than for Classes IV to VI. The level of maintenance may not be as high for the lower volume roads, which

Table 1. Design Reliability Factors for Functional Classifications

Functional Classification	*Percent Recommended Level of Reliability* Urban	Rural
Interstate & Freeways	85 to 99.9	80 to 99.9
Principal Arterials	80 to 90	75 to 95
Collectors	80 to 95	75 to 95
Local (Low Volume)	50 to 80	50 to 80

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could contribute to a wider band in the performance curve. The Institute's traffic classifications are presented in Table 2. All facilities were placed into the appropriate traffic classification based on equivalent single axle load (ESAL) design zone.

Environment Affects Pavement Performance

Environmental factors can and do affect pavement performance, and extreme moisture and temperature variations appear to be the most common factors. When both are present, this combination can affect the strength and durability, as well as the load carrying capacity, of the structure. Prolonged exposure to these extreme conditions destroys the structural capacity of the roadway.

Aging effects under the various environmental conditions are normally degrading to the structural coefficients that are originally assigned to the materials. This has to be taken into consideration in long-term pavement performance. Level of maintenance is extremely important as environmental factors are considered, and may be an issue in the spread of performance on lower-volume roadways.

Timely Maintenance

The loss of serviceability or a decrease in present condition rating, can be the result of both traffic and environmental factors. Appropriate and timely maintenance, which may include crack sealing, cross-slope, shoulder and general drainage improvements in conjunction with surface structural restoration, can retard environmental effects on the loss of PCR.

Table 2 - Traffic Classifications

Traffic Class	ESAL	Type of Class Street or Highway	Approximate Range Number Of Heavy Trucks for Design Life
I	5×10^3	• Parking lots, driveways • Light traffic residential streets • Light traffic farm roads	<7,000
II	10^4	• Residential streets • Rural farm and residential roads	7,000 – 15,000
III	10^5	• Urban minor collector streets • Rural minor collector streets	70,000 – 150,000
IV	10^6	• Urban minor arterial and light industrial streets • Rural major collector and minor arterial highways	700,000 –1,500,000
V	3×10^6	• Urban freeways, expressways and principal arterial highways • Rural interstate and other principal arterial highways	2,000,000 – 4,500,000
VI	10^7	• Urban interstate highways • Some industrial roads	7,000,000 – 15,000,000

Table 3 - Projected Service Life of Hot Mix Asphalt

Traffic Class	Type of Construction			Climatic Conditions				
	New	Renal	Both	Wet Freeze	Wet No Freeze	Dry Freeze	Dry No Freeze	ALL
I	✓			X	X	X	X	24
I		✓		X	X	X	X	X
I			✓	X	X	X	X	18
II	✓			X	X	X	21	20
II		✓		X	9	X	17	13
II			✓	X	9	X	20	17
III	✓			9	X	47	27	23
III		✓		20	10	32	25	19
III			✓	16	11	39	27	21
IV	✓			18	X	36	X	34
IV		✓		41	34	X	35	46
IV			✓	30	X	43	33	39
V	✓			37	31	X	X	49
V		✓		24	38	27	X	29
V			✓	34	38	38	15	35
VI	✓			X	X	X	X	X
VI		✓		26	21	25	X	25
VI			✓	32	21	29	X	28

[1] Service life projected to a PCR of 70 indicates surface restoration be considered.
X = insufficient data

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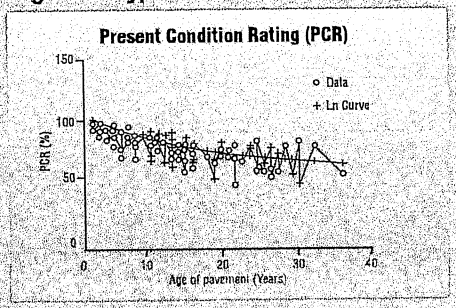
The pavement sections for climatic conditions of dry freeze and dry no-freeze appear to have the best overall service life, based on this preliminary data. Right now the study is short on projects from the dry no-freeze region. The projected service life for a PCR of 70 is presented for the classifications that have a significant amount of data (See Table 3). As more data is collected, current values are expected to change. Normally, as the R2 of the correlation equation increases, the projected service life decreases up to a given point. For some of the cells, there's not enough data to make a valid correlation. The categories of all climatic conditions and both categories for the construction level, should provide an overall estimate of the life expectancy of each roadway facility, before major rehabilitation or reconstruction will be required.

Figure 1. Typical Service Life Decay



Service Life Decay Curve

The typical and traditional polynomial curve often used to illustrate the decay or service life of pavements was not seen in the performance equations. A typical logarithmic decay curve was found to provide the best-fit curve (See Figure 1). The pavements do not drop by the purported 40 points of PCR in the 12 percent time remaining, as alleged. Perhaps this is due to timely maintenance by agencies.

Data Collection Methods Vary

All state DOTs have implemented some form of a pavement management system according to Federal Highway Administration (FHWA) directives. National Center for Highway Research Programs (NCHRP) Synthesis 203, Current Practices in Determining Pavement Condition, summarizes state agency procedures and shows what measurements are made in determining the pavement conditions. This data indicates most states use some measure of deducts combined with ride or roughness measurements.

It also shows that none of the states have rated their pavements in the same manner. As a result, the Asphalt Institute used a detailed rating form in existence for over 30 years and adopted by many agencies for use in determining PCR. The Asphalt Institute rating system, based on *A Pavement Rating System for Low Volume Asphalt Roads* (IS-169), contains practically all forms of asphalt pavement defects on a weighted scale with major load-associated defects assigned a deduct value of 10. Minor and environmental defects are assigned a deduct value of five.

This system has proven reliable because it offers a detailed breakdown of the defects. A summary of the deduct values are shown in Table 4. The rating is normally in a range of 40 to 100. The rating value is subjective, implying that the pavement is at this condition at the time and under the existing conditions of traffic and environmental factors. In a subjective rating, no attempt is made to project what any existing defect will have on future performance.

The form in Table 1 was used to correlate the data available from the state DOTs. The procedure entails a survey of the data available within a particular DOT's pavement management system, and subsequently, an on-site rating of specific sections of pavement. This procedure provides a standard for all pavement sections in the study. The states surveyed so far have been helpful and cooperative in providing existing, available data. Other states that do not have a rating system have provided project logs that can be used to establish the pavement's age. An Asphalt Institute District Engineer then rated the pavement.

Anyone can submit a project for this study. Projects submitted for inclusion will require verification by an Asphalt Institute District Engineer for pavement age and PCR. Many local agencies have data that can be added to the database directly because they are using this rating form in their current pavement management system. An update of this study should be made periodically, and the data can also be obtained from the Asphalt Institute's website as well as through written reports. This is an on-going study with no end-point currently established. ▲

This article was reprinted from the January 1999 issue of ***Asphalt Contractor.***

Table 4. Summary of Maximum Pavement Deductions

Cracking	Distortion	Disintegration	Drainage	Roughness (Ride)
35	20	10	10	PCR = 100 - deducts

Attachment D

Map of

Williamsburg Square Ashton Place

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Photo of Erosion by Great Seneca ES