Prince William County, Virginia
Internal Audit Report – Property and Casualty Insurance Review

August 19, 2022
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The Board Audit Committee of Prince William County, Virginia
1 County Complex Court
Prince William, Virginia 22192

Pursuant to the internal audit plan for calendar year (“CY”) 2022 for Prince William County, Virginia (“County” / “PWC”), approved by the Board of County Supervisors (“BOCS”), we hereby present the County’s Property & Casualty Insurance review. We will be presenting this report to the Board Audit Committee of Prince William County at the next scheduled meeting on December 13, 2022.

Our report is organized into the following sections:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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<tr>
<td>Executive Summary</td>
<td>This provides a high-level overview and summary of the opportunities noted in this internal audit, as well as the respective risk ratings.</td>
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<td>Background</td>
<td>This provides an overview of the function within the process, as well as pertinent operational control points and related requirements.</td>
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<tr>
<td>Objectives and Approach</td>
<td>The objectives of this internal audit are expanded upon in this section, as well as the various phases of our approach.</td>
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<td>Opportunities Matrix</td>
<td>This section gives a description of the opportunities noted during this review.</td>
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We would like to thank the staff and all those involved in assisting our firm with this internal audit.

Respectfully Submitted,

RSM US LLP

Internal Audit
EXECUTIVE SUMMARY

Background
Prince William County, Virginia (the “County,” “PWC”) requested that RSM review the County’s property and casualty insurance coverages to assess the County’s ability to self-insure coverage for its Fire and Rescue System (“FRS”) that are currently insured by McNeil.

In 2016, the County contracted with Aon Risk Services to provide insurance broker services to the FRS. This service included an assessment of all FRS’s insurance policies, resulting in a recommendation that all volunteer fire companies be insured under a single blanket policy for the package and umbrella coverages to ensure consistent limits for each company and to reduce premiums and administrative time and expenses. In June 2018, the insurance broker, Aon Risk Services and the FRS insurance team, met with the two carriers that provide insurance to fire and rescue services—ESIP and VFIS—to evaluate their programs. In October 2018, the blanket program was placed with ESIP/McNeil.

This blanket program succeeded in achieving the goals of consistent coverage at a reduced cost as well as a more streamlined administrative process.

In the first two years with ESIP/McNeil, the FRS insurance program experienced significant losses. As a result, the County was notified that ESIP/McNeil was intending to non-renew the FRS insurance program 2020-21 renewal. The only other carrier providing this coverage, VFIS, declined to quote the insurance for reasons unknown. After working with a Risk Control Manager hired by the carrier to address prevention measures related to the losses experienced by the FRS, the carrier did agree to continue providing coverage with a significant premium increase.

FRS paid a premium in the amount of $1,352,241 for the 2022-23 program year for all lines of coverage except workers’ compensation (subject to policy contract and claims determination).

The review focused on the following insurance categories: commercial property, general liability, business auto, marine (vessel), inland marine (portable equipment and emergency apparatus), umbrella, accident & sickness, and crime (8 fire department locations).

Objectives and Approach
The primary purpose of this project was to [1] perform an insurance coverage review to identify potential coverage gaps, coverage overlaps, and self-insurance opportunities within the existing insurance programs and [2] perform an actuarial review of certain coverages.

As part of the insurance coverage review, RSM completed the following activities:
- Developed an understanding of current FRS property and casualty coverage through interviews and review of eight lines of coverage and 309 associated coverages
- Analyzed existing FRS insurance coverages to identify elements of insurance coverage that may warrant an additional review

As part of the actuarial review, RSM completed the following activities:
- Leveraged McNeil historical claim runs to complete the self-insurance review
- Using actuarial methods, made the following adjustments to historical claims amounts to determine expected loss amounts for past policy years in line with the upcoming 2022-2023 policy year:
  - Development to their estimated ultimate amounts
  - Trending to current dollar amounts to account for inflationary trends
- Explored different self-insured retention limit options by capping certain limits to claims in past policy years to provide insights into PWC’s portfolio and outline the historical claims impact of larger self-retention limits

Overall Summary / Highlights
The opportunities for improvement identified during our assessment are detailed within the pages that follow. Based on the level of claims data currently available, in-depth loss models for the specific portfolio could not be developed. Insufficiency in loss data would limit the credibility of this analysis and provide inconclusive results.

Opportunities for Improvement Recommended

We would like to thank all County team members who assisted us throughout this review.
Executive Summary – Continued

Opportunities for Improvement Summary

The following is a summary of the opportunities for improvement noted in the areas reviewed. Each detailed opportunity is included in the opportunities for improvement section of the report.

<table>
<thead>
<tr>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insufficient Loss Data for Actuarial Analysis</td>
</tr>
<tr>
<td>2. FRS Insurance Governance</td>
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<td>3. Silent Coverages within the FRS Insurance Policy</td>
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<td>4. Insurance Proposal vs. Purchased Policy Differences Identified</td>
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<tr>
<td>5. Incomplete Claims Profile Due to Insufficient Loss Data</td>
</tr>
<tr>
<td>6. Claim Retention Levels</td>
</tr>
<tr>
<td>7. FRS Insurance Program Options</td>
</tr>
</tbody>
</table>
OBJECTIVES AND APPROACH – ACTUARIAL REVIEW

Objectives

The purpose of the actuarial portion of the review was to assess the County’s ability to self-insure the casualty blanket line of coverage for FRS. The coverages include:

- Property
- Inland Marine (Portable Equipment and Emergency Apparatus)
- Business Automobile
- General Liability
- Umbrella

In recent renewal periods, PWC has seen significant premium increases across the above coverages as a result of a combination of elements including the emergence of large claims on the portfolio, limited alternative insurers available in the market, and industry premium trends in recent years. These premium increases have resulted in PWC considering the potential benefits of implementing a self-insurance program for the noted risks.

Approach

We leveraged historical FRS claims data to perform this review. Using actuarial methods, the following adjustments were made to the historical claims to determine expected loss amounts for past policy years and provide comparability across policy years:

- Development of claims listing to estimate ultimate claim costs for each line of coverage and policy year utilizing loss development factors (“LDFs”). For all coverages except for property, we have leveraged LDFs from the FRS actuarial reports performed by their actuary. For the LDFs for the property coverage, we leveraged LDFs determined for comparable portfolios.
- Trending claim amounts to the 2022-2023 policy year dollar amounts to account for inflationary trends. Due to the County’s limited loss experience currently available, we leveraged trend factors determined for comparable portfolios.

Ideally, the above development and trending factors would be determined based on data available for the FRS casualty blanket portfolio. However, due to limited claims experience for the current portfolio this analysis would not currently be credible and comparable portfolios were utilized. That said, any differences between the selected factors and those developed for the FRS casualty blanket portfolio are not expected to impact the recommendations/conclusions determined herein.

The adjusted claims analysis provides “Trended Ultimate Losses”. These amounts allow us to compare incurred claim amounts across policy years by accounting for claims yet to be fully paid and reflecting losses on a consistent 2022-2023 policy year cost level. A detailed summary of the “Trended Ultimate Losses” for each line of coverage reviewed is included in Appendix B attached.

Based on the level of claims data currently available, in-depth loss models for the specific portfolio could not be developed. Insufficiency in loss data would limit the credibility of this analysis and provide inconclusive results.

Reporting

At the conclusion of this audit, we summarized our findings into this report. We have reviewed the results with the appropriate Management personnel and have incorporated Management’s response into this report.
OBJECTIVES AND APPROACH – INSURANCE COVERAGE REVIEW

Objectives

The purpose of the insurance coverage portion of the review was to identify potential coverage gaps and coverage overlaps within the existing insurance programs.

The scope encompassed reviews of the following County insurance coverages for FRS:

- Commercial Property
- General Liability
- Business Auto
- Marine (Vessel)
- Inland Marine (Portable Equipment)
- Inland Marine (Emergency Apparatus)
- Umbrella Liability
- Accident & Sickness
- Crime (8 fire department locations)

Approach

We utilized a two-phased approach to achieve the objectives of this review, a discovery phase, and an analysis phase.

- The discovery phase included a review of current FRS insurance policy forms (base policy, endorsements, and amendments) and broker related documentation for 8 lines of coverage and 309 associated coverages, and interviews and working sessions with key stakeholders to understand potential insurance protection triggers.
- The analysis phase focused on comparing risk exposure considerations based on interviews against coverage afforded through FRS insurance policies to identify possible gaps in insurance protection. Coverage protections were also compared across the different lines of coverage to identify potential coverage redundancies.

Reporting

At the conclusion of this audit, we summarized our findings into this report. We have reviewed the results with the appropriate Management personnel and have incorporated Management’s response into this report.
Opportunity #1 – Insufficient Loss Data for Actuarial Analysis

Current available data is insufficient to enable credible actuarial claims analysis. The County utilizes a decentralized claims reporting process, does not consistently track all incidents, and has limited reported years of coverage with McNeil.

Below is a summary of the historical reported claims to McNeil for all coverages (General Liability and Umbrella have no claims):

<table>
<thead>
<tr>
<th>Policy Year Beginning</th>
<th>Commercial Property</th>
<th>Portable Equipment</th>
<th>Emergency Apparatus</th>
<th>Business Automobile</th>
<th>General Liability</th>
<th>Crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3</td>
<td>3</td>
<td>26</td>
<td>19</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2019</td>
<td>3</td>
<td>1</td>
<td>27</td>
<td>19</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2020</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>4</td>
<td>58</td>
<td>52</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

As seen above, the data reported to McNeil to date is very limited. With only three years of reported experience with McNeil, it is difficult to understand the complete risk profile of the County. All incidents should be tracked consistently under a centralized process to validate that the maximum amount of data is available in reviewing the insurance program. This additional information can be used to supplement the insurer’s losses to obtain a comprehensive historical loss record of the County and FRS losses.

Recommendation

We recommend the implementation of a new internal claims reporting process to track smaller incidents which are not being reported to the insurer (whether due to the deductible or for other reasons) in order to include these claims in future analyses of the insurance portfolio.
# OPPORTUNITIES FOR IMPROVEMENT – INSURANCE COVERAGE REVIEW

## Opportunity #2 – Silent Coverages within the FRS Insurance Policy

The 2021 insurance policy proposal, provided by the County’s insurance broker for the Fire and Rescue Services (FRS), noted select coverages as being “silent regarding the amount of protection provided under the insurance policy. While the lack of specific reference to coverage protection within the insurance policy contract may indicate the affordance of coverage, the County should understand its potential exposure relative to the amount of insurance protection offered.

The following silent coverages were noted in the broker’s proposal and the insurance carrier confirmed losses related to “silent” coverages would be reviewed on a case-by-case basis to determine how much coverage would apply to a loss.

- **Property** – (1) Exhibitions, expositions, fairs, or tradeshows noted as “silent” on page 17 of the broker’s 2021 Master Policy Insurance Proposal. The Commercial Property Building and Personal Property Coverage Form CP0010101 notes coverage extensions for these items under section 5. (2) (a) (i) with noted conditions relative to the location of the property and/or coinsurance percentage. Policy form CP00301012- section 6.a. excludes the extension of Extra Expense Coverage for property at newly acquired locations except for fairs or exhibitions.
- **Auto** – (1) Lease gap coverage for vehicles is noted as “silent” on page 24 of the broker’s 2021 Master Policy Insurance Proposal, and the Commercial Auto policy (Form CADS031120) nor associated endorsements or amendments mention lease gap coverage.
- **General Liability** – (1) Sexual abuse noted as “silent” on page 21 of the broker’s 2021 Master Policy Insurance Proposal. The General Liability coverage form does not reference sexual “abuse,” but it does reference sexual (workplace) harassment in the context of Employment related practices. Form GL02000115 excludes harassment under the Exclusions section of the policy form (2.a.(4).

## Recommendation

The County should determine the probable exposure to FRS for “silent” coverages and work with the broker to validate the appropriateness of the County’s current level of protection based on the estimated exposure. The County should also discuss potential options for alternative coverage for noted items. Note, per inquiry, there are limited insurance carrier options available to the County to purchase insurance coverage protection.)
**Opportunity #3 – FRS Insurance Governance**

The Finance Department Risk & Wellness Division (“Risk & Wellness”) is responsible for positioning the County to minimize risk and financial impact to its county members. Currently, the insurance protection processes and standards are not fully defined for the FRS insurance program. Additionally, the Risk & Wellness does not have access to data that would enable early identification of program and county-level risks.

Our review of the FRS insurance related documentation and interviews with Risk & Wellness and FRS resources identified the need to implement a governance structure for the management of the FRS insurance program.

Undefined insurance program requirements and the lack of a centralized governance structure for managing insurance program adherence over the different FRS departments increases the overall risk to the County that potential categories of loss are not addressed by FRS insurance policies. Establishing centralized ownership of, and responsibility for the FRS insurance program, simplifies accountability for execution and adherence to the following:

- Accountability through defined roles and responsibilities for managing the FRS insurance program
- Standardized requirements for minimum and maximum insurance coverage limit and deductible amounts
- Managing claims execution and reporting for all claims losses (including self-insured retention (SIR) amounts and losses below insurance policy deductible amounts)

**Recommendation**

Implement a standardized insurance governance structure across FRS that is managed by the Finance Department Risk & Wellness Division. Components of an insurance governance structure should include:

- Leveraging the same broker across both the County and the FRS program to support insurance policy services holistically
- Implementing a claims reporting program managed through Risk & Wellness (as recommended in the Actuarial review)
- Implementing standard requirements for lines of insurance coverage and sub-coverages, coverage limits and deductibles, and monitoring policy adherence
- Approving deviations to standard FRS insurance requirements
- Reviewing and reporting risk related data (e.g., driver motor vehicle records) to proactively address potential insurance coverage risks
- Designing and implementing FRS insurance risk mitigation and training programs
## Opportunity #4 – Insurance Proposal vs. Purchased Policy Differences Identified

Risk & Wellness receives an insurance renewal proposal from the County’s insurance broker annually which captures all coverages that will be purchased. The insurance policy will be purchased once Risk & Wellness agrees to purchase the coverages included within the renewal proposal.

Based on our review of the 2020-2021 Master Insurance Policy proposal document, we identified various coverage names and details that did not align with lines of coverage in the FRS Common Policy (insurance package policy). Variances with how coverages are referenced in the proposal document versus the name of the coverage in the actual insurance policy could lead to a misunderstanding by the County of the actual coverage afforded by the policy.

1 Count includes coverages, coverage extensions, and exclusions. The 2021-2022 Aon Proposals for both Crime and Accident & Sickness did not include an extensive breakdown of coverages, coverage extensions, or exclusions. In order to consistently conduct our analysis, we leveraged the 2019-2020 Aon proposal for Crime and Accident & Sickness in order to conduct our review.

### Recommendation

Risk & Wellness should review the insurance proposal against the purchased insurance policy to confirm coverages are capped, limited, or excluded as intended, and determine if adjustments are needed to the in-force policies to validate the appropriate level of insurance protection is in place.
OPPORTUNITIES FOR IMPROVEMENT – ACTUARIAL REVIEW

Opportunity #5 – Incomplete Claims Profile Due to Insufficient Loss Data

Due to insufficient loss experience data, it is not yet credible enough to develop a full understanding of the downside risk on the portfolio.

Below is a summary of the historical claims experience across the entirety of the casualty blanket program, adjusted using actuarial methodologies to develop Trended Ultimate Losses for each policy year. To illustrate the claims coverage across potential self-insurance structures, we have shown the total amount of claims and the portion of this total that would be covered under each of a $10,000, $50,000 or $75,000 individual claim retention program. This analysis will help to illustrate the claims that would be retained by the County under a theoretical self-insurance program utilizing smaller retention limits.

<table>
<thead>
<tr>
<th>Total Portfolio</th>
<th>Trended Ultimate Capped (10K) Losses &amp; Expenses</th>
<th>Trended Ultimate Capped (50K) Losses &amp; Expenses</th>
<th>Trended Ultimate Capped (75K) Losses &amp; Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Year Beginning</td>
<td>Non - Zero Reported Claim Counts</td>
<td>Incurred Losses &amp; Expenses</td>
<td>$1,265,407</td>
</tr>
<tr>
<td>2018</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>59</td>
<td>$353,579</td>
<td>$472,135</td>
</tr>
<tr>
<td>2020</td>
<td>21</td>
<td>$500,660</td>
<td>$369,393</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>$1,712,628</td>
<td>$2,444,128</td>
</tr>
</tbody>
</table>

On a total portfolio basis, the claims experience over the three-year period is significantly impacted by a few very large claims. On a Trended Ultimate Loss basis, if the County had a self-insurance program in place with a retention limit of $75,000, approximately half of the total incurred claims would have been retained by the County. The losses above this limit relate to two claims which were incurred in 2018, for a total of approximately $1.0MM prior to any trending. These large claims are the significant drivers on the program to date and have significantly reduced the profitability of the program as the combined loss ratio for the portfolio is near 100% despite claims for the 2020 policy year being largely undeveloped as of this time. During the upcoming renewal discussions for this program, based on the results we have to date, there would be flexibility to increase retention limits for the County if there are significant premium savings offered by your insurers. However, we do note that the experience on the portfolio remains limited and even with smaller per claim retention limits, there is still a material level of risk related to potential high frequency of claims either as a result of a single event (i.e. storms, fires, floods, etc.), or simply due to worse experience (i.e. bad luck) in a single year that the County would see significantly worse experience than the previous three years.

**Recommendation**

We recommend revisiting the viability of a self-insurance program when the claims experience data becomes more mature through consistent tracking of the data and longer historical periods (in 3-5 years’ time) to provide sufficient comfort on the potential range of losses for the portfolio.
Opportunity #6 – Claim Retention Levels

The occurrence of very large claims on the portfolio could result in significant losses for the self-insurance program unless self-insured losses are appropriately capped, which would limit premium savings.

As noted within Opportunity 1, the insurance program has experienced some significantly large claims (above $75K). These are detailed below, based on the current incurred amounts prior to any trending:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Policy Year</th>
<th>Coverage</th>
<th>Incurred Losses &amp; Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2018</td>
<td>Emergency Apparatus</td>
<td>$597,458</td>
</tr>
<tr>
<td>2</td>
<td>2018</td>
<td>Crime</td>
<td>$415,000</td>
</tr>
<tr>
<td>3</td>
<td>2019</td>
<td>Business Automobile (Liability)</td>
<td>$72,306</td>
</tr>
</tbody>
</table>

The County incurred two large losses in one year (2018) which totaled approximately $1.0MM. These two losses account for 60% of the total historical claims (prior to any development or trending). Without additional years of experience, it is difficult to determine the potential size of future losses or if these are more isolated events that have led to the above claims. Under a self-insurance program with larger retention limits, the impact of potential large losses would result in significant volatility of claims experience for the County and the program potentially costing more than traditional insurance. However, implementing smaller self-insurance retention limits to reduce the impact of large claims may reduce the potential premium savings for the County as additional risks are passed to the insurer.

**Recommendation**  
If a self-insurance structure were to be implemented, individual claim retention levels for the County should be set at relatively small amounts to limit the risk from large claims.
## OPPORTUNITIES FOR IMPROVEMENT – INSURANCE COVERAGE REVIEW

### Opportunity #7 – FRS Insurance Program Options

The County should look for opportunity to further reduce insurance premiums considering the consolidated policies for the following lines of coverage:

- Package Policy that includes the General Liability, Commercial Auto, Commercial Property, lines of coverage)
- Crime policy (for 8 locations)
- Inland Marine policy for Apparatus/Equipment
- Inland Marine policy for Hull protection
- Accident & Sickness policy
- Umbrella policy

Prior to the current FRS insurance policy structure, each FRS location secured their own insurance policies for the above lines of coverage. After the assessment, it was determined that consolidating policies to a single blanket policy would be more efficient, provide consistent limits, and reduce premiums. While losses have an impact on insurance policy prices, other risk factors can also influence premium amounts (e.g., risk locations). Additionally, insurance carriers may adjust their rating factors, which can influence insurance premium amounts. So, it is prudent to re-assess the financial impact of maintaining insurance policies that consolidate coverage across all FRS locations, or if there is a benefit to purchasing different policy structures.

### Recommendation

Risk & Wellness should continue to work with their FRS insurance broker to analyze insurance policy options to identify best option or combination of options for optimizing premium payments such as securing insurance policies by (a) individual FRS locations, (b) package policies, and (d) other self-insurance options for specific lines of coverage (as adequate data becomes available per the self-insurance recommendations).
# Management Response to Opportunities

## Management Response

Management concurs with the recommended opportunities. The following actions have been taken by Risk & Wellness Services:

- Risk & Wellness is working with the Acting Fire & Rescue System (FRS) Chief and the Executive Committee of the FRS to implement a claims process to ensure all incidents are reported to the County’s Risk & Wellness Office.
- Risk & Wellness reviewed the silent coverages with the new insurance broker to ensure there are no gaps in coverage and ensure coverages that are silent or excluded are coverages that do not create an exposure. In addition, the new insurance broker reviewed the policies and forms of both carriers that provide this coverage to ensure the County had the best coverage available.
- Risk & Wellness is working with the FRS on the governance of the insurance program and will continue to look for opportunities for enhanced coverage, lower deductibles, and premium savings.
- Risk & Wellness will review the insurance broker proposal to ensure accuracy and align with the policies.
- Risk & Wellness along with the insurance broker will continue to analyze, evaluate, and look for options with coverages, deductibles, and self-insured retentions to provide program savings and reduce administrative costs.
APPENDIX A: ACTUARIAL REVIEW DATA

Data

The analysis was completed utilizing loss runs prepared by McNeil and provided by PWC that encompass all claims on the above noted Casualty Blanket coverages for policy years 2018-2019 (policy year “2018”) to 2020-2021 (policy year “2020”). The following graphs provide a quick overview of these losses based on current incurred amounts (prior to any development or trending):

For policy year 2020, a significant increase to the deductible from $500 to $10,000 per claim on the Inland Marine line of coverage was implemented. This increase significantly reduces the number of small claims reported in policy year 2020 as evidenced in the above chart. For policy years 2018 and 2019, Inland Marine accounted for approximately 63% of the total incurred claims under $10,000. The County has indicated that there is no process in place to track the occurrence of incidents that are not directly reported to the insurer. Implementing a strict process to keep track of these incidents, especially given the following, will be extremely beneficial in determining the true cost of the insurance program, and developing a complete understanding of potential losses:

1. With the increased deductibles on inland marine coverages, there will be a number of incidents that are smaller in nature and would not be expected to exceed the deductible resulting in the claim potentially not being submitted to the insurer and currently not tracked.

2. In analyzing the cost/benefits of changes to the insurance program, including the implementation of a self-insurance program, understanding the total amount of claims/incidence can be very beneficial in targeting appropriate insurance changes and retention limits.

The largest driver for incurred claims experience in policy years 2018 to 2020 has been large claims incurred on the portfolio with two (2) claims occurring in the 2018 policy year accounting for approximately 60% of the total claims experience across the three (3) years. Due to the limited claims data currently available for the portfolio, it is difficult to predict the frequency that these large claims will occur and the potential size of any individual large claim. If the program were to be fully insured through a self-insurance program, there is a significant level of risk that large claims could result in significant losses for the program. Therefore, if a self-insurance structure were to be implemented it is recommended that the individual claim retention levels for PWC be set at relatively small amounts to limit the risk and exposure from these large claims.
APPENDIX B: TRENDED ULTIMATE LOSSES

Individual Lines

Appendix B reviews the individual coverage lines for the County.

### Commercial Property

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3</td>
<td>$17,463</td>
<td>$22,288</td>
<td>$19,740</td>
<td>$22,288</td>
<td>$22,288</td>
</tr>
<tr>
<td>2019</td>
<td>3</td>
<td>$19,601</td>
<td>$23,826</td>
<td>$18,792</td>
<td>$23,826</td>
<td>$23,826</td>
</tr>
<tr>
<td>2020</td>
<td>2</td>
<td>$38,982</td>
<td>$45,811</td>
<td>$12,126</td>
<td>$45,811</td>
<td>$45,811</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>$76,047</td>
<td>$91,925</td>
<td>$50,658</td>
<td>$91,925</td>
<td>$91,925</td>
</tr>
</tbody>
</table>

Portion of Total claims covered by Retention Limit: 55.1% 100.0% 100.0%

For commercial property, the data is limited, and the largest historical claim is approximately $37K. Since the County has over $62MM of insured values under the property coverage, the County has the exposure of a much larger loss. While the experience to date has been very positive, the loss profile above is incomplete. Due to the limited loss experience data, it is not credible enough to develop a full understanding of the downside risk on the property coverage despite the low loss experience to date.

### Inland Marine (Portable Equipment, and Emergency Apparatus)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>29</td>
<td>$796,034</td>
<td>$1,064,263</td>
<td>$163,377</td>
<td>$314,479</td>
<td>$339,488</td>
</tr>
<tr>
<td>2019</td>
<td>28</td>
<td>$199,860</td>
<td>$261,337</td>
<td>$158,028</td>
<td>$261,337</td>
<td>$261,337</td>
</tr>
<tr>
<td>2020</td>
<td>5</td>
<td>$14,713</td>
<td>$70,147</td>
<td>$70,147</td>
<td>$70,147</td>
<td>$70,147</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>$1,010,607</td>
<td>$1,395,746</td>
<td>$391,551</td>
<td>$645,963</td>
<td>$670,971</td>
</tr>
</tbody>
</table>

Portion of Total claims covered by Retention Limit: 28.1% 46.3% 48.1%

For 2020, the inland marine deductible limits were increased from $500 to $10,000. This change has resulted in a significant decrease in the number of non-zero claims reported to the insurer and an overall decrease to the claims experience. For the 2018 and 2019 policy years, the deductible amount accounts for approximately 25% of the total claims on the business. This includes a large emergency apparatus claim of approximately $600K incurred in 2018. Without this individual claim, the $10,000 deductible limit would account for approximately 60% of the trended ultimate claims from policy years 2018 and 2019.
APPENDIX B: TRENDED ULTIMATE LOSSES - CONTINUED

For business automobile, the data is slightly less limited, and the largest historical claim is approximately $72K. Business automobile coverage includes third party liability and medical payments. These two sub-coverages are highly volatile and are very long tailed (i.e., claims can develop upwards for many years). Similarly, like above, due to the inherent volatility of the coverage and limited data, self-insurance for this coverage is not recommended.

For the remaining coverages that had been included in the casualty blanket (crime, general liability, and umbrella coverage) the data is very limited. Crime coverage was only included in policy year 2018 and was removed following the incidence of a large claim of approximately $415K. While the crime coverage is currently not included in the casualty blanket as a result of the insurer removing the coverage, we would recommend not including the crime coverage in a future self-insurance program without ensuring a reduced risk from significantly large claims.

For General Liability, the data is very limited, and the largest historical claim is approximately $1K. Since the County has a $1MM limit and General Liability is a very long-tailed line of business (i.e., claims can develop upwards for many years), the County has the exposure of a much larger loss, therefore, the loss profile above is incomplete. Self-insurance for this coverage above any material limits would not be recommended. Similarly for the umbrella coverage, it is also a very long tailed and volatile line of business.

<table>
<thead>
<tr>
<th>Policy Year Beginning</th>
<th>Non - Zero Reported Claim Counts</th>
<th>Incurred Losses &amp; Expenses</th>
<th>Trended Ultimate Uncapped Losses &amp; Expenses</th>
<th>Trended Ultimate Capped (10K) Losses &amp; Expenses</th>
<th>Trended Ultimate Capped (50K) Losses &amp; Expenses</th>
<th>Trended Ultimate Capped (75K) Losses &amp; Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>19</td>
<td>$35,324</td>
<td>$47,284</td>
<td>$42,338</td>
<td>$47,284</td>
<td>$47,284</td>
</tr>
<tr>
<td>2019</td>
<td>19</td>
<td>$134,118</td>
<td>$186,972</td>
<td>$84,409</td>
<td>$145,097</td>
<td>$175,384</td>
</tr>
<tr>
<td>2020</td>
<td>14</td>
<td>$39,944</td>
<td>$190,435</td>
<td>$140,756</td>
<td>$190,435</td>
<td>$190,435</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>$209,386</td>
<td>$424,691</td>
<td>$267,504</td>
<td>$382,816</td>
<td>$413,083</td>
</tr>
<tr>
<td>Portion of Total claims covered by Retention Limit</td>
<td>63.0%</td>
<td>90.1%</td>
<td>97.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX C: 2022-23 PROGRAM YEAR INSURANCE COVERAGE OVERVIEW

Insurance Protection – All Lines of Coverage

<table>
<thead>
<tr>
<th>Policy Type</th>
<th>Line of Coverage</th>
<th>Liability*</th>
<th>Insured/1st Party*</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>Property</td>
<td></td>
<td>$79,372,718</td>
<td>$643,253</td>
</tr>
<tr>
<td>Master</td>
<td>General Liability</td>
<td>$22,105,00</td>
<td></td>
<td>Incl.</td>
</tr>
<tr>
<td>Master</td>
<td>Auto</td>
<td>$1,000,00</td>
<td>$1,010,00</td>
<td>Incl.</td>
</tr>
<tr>
<td>Umbrella</td>
<td>Commercial Liability</td>
<td>$20,000,00</td>
<td></td>
<td>$127,587</td>
</tr>
<tr>
<td>Inland Marine</td>
<td>Apparatus &amp; Equipment</td>
<td>$20,000</td>
<td></td>
<td>$360,987</td>
</tr>
<tr>
<td>Inland Marine</td>
<td>Hull &amp; PI</td>
<td>$1,659,634</td>
<td></td>
<td>$16,697</td>
</tr>
<tr>
<td>Accident &amp; Sickness</td>
<td>Accident &amp; Sickness</td>
<td></td>
<td>$3,159,190</td>
<td>$174,749</td>
</tr>
<tr>
<td>Crime (8 locations)</td>
<td>Crime (8 locations total)</td>
<td>$37,000,00</td>
<td></td>
<td>$28,968</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$81,784,634</td>
<td>$83,541,908</td>
<td>$1,352,241</td>
</tr>
</tbody>
</table>

*Claims payouts for all lines of coverage are subject to insurance carrier review and claims determination.