



NATALIE A. HUBLEY  
PRESIDENT

COMMONWEALTH AUTOMOBILE REINSURERS

101 Arch Street, Suite 400 Boston, Massachusetts 02110  
www.commauto.com 617-338-4000

## NOTICE OF MEETING

### INFORMATION TECHNOLOGY ADVISORY COMMITTEE

A meeting of the Information Technology Advisory Committee will be held at the Automobile Insurers Bureau Conference Center at 101 Arch Street, 7<sup>th</sup> Floor, Boston, on

**THURSDAY, JUNE 13, 2019 AT 11:00 A.M.**

### MEMBERS OF THE COMMITTEE

Mr. Steven Aronson – Chair  
Aronson Insurance Agency, Inc.

Mr. Paul Brady  
Mr. Paul Luongo  
Mr. Christopher Smith  
Mr. Angelos Spetseris

Arbella Insurance Group  
Plymouth Rock Assurance Corporation  
Safety Insurance Company  
MAPFRE U.S.A. Corporation

### AGENDA

#### ITAC

##### 17.01 Records of Previous Meeting

The Records of the Information Technology Advisory Committee meeting of June 13, 2017 should be read and approved.

#### ITAC

##### 19.03 CAR Conflict of Interest Policy

The Chair will read a statement relative to CAR's Conflict of Interest Policy.

#### ITAC

##### 19.04 Mainframe Equipment Replacement

CAR's current mainframe hardware, which was acquired in late 2011, has reached or is soon approaching its end of service date, which is when this equipment is no longer supported by the manufacturer. Over the past year, CAR staff has performed an assessment of its current infrastructure model and has evaluated various options to replace the aging equipment. A summary of staff's assessment and its recommendation is attached. (Docket #ITAC19.04, Exhibit #1)

The Committee should be prepared to discuss the attached summary and prepare a recommendation for Governing Committee consideration.

**ITAC**

**19.05 Personal Computer Acquisition**

The personal computers and laptops at CAR will be nine years old in September 2019. These devices run the Windows 7 operating system which will no longer be supported by Microsoft in early 2020. Further, the processors in the PCs and laptops are not supported for any recent version of the Windows operating system. Accordingly, staff is recommending replacing approximately 85 devices at a cost of approximately \$125,000. This expense will be partially offset by a maintenance cost savings on the existing equipment. Therefore, the acquisition will require a budget allocation not to exceed \$110,000.

Staff is requesting that the IT Advisory Committee recommend Governing Committee approval of the acquisition. If adopted, staff expects to include a request in its FY2020 budget proposal that FY2019 surplus funds be used for this purchase.

**Other Business**

To transact any other business that may properly come before this Committee.

**Executive Session**

The Information Technology Advisory Committee may convene in Executive Session in accordance with the provisions of G.L. c. 30A, § 21.

PETER MCCABE  
Vice President of Technical Operations

Attachment

Boston, Massachusetts  
May 31, 2019

## Commonwealth Automobile Reinsurers IT Infrastructure Planning

Like most organizations, CAR's current IT infrastructure model employs a mixed platform environment. In order to meet the needs of both the statistical agent and residual market functions, Staff manages the CAR and MAIP websites, along with their accompanying web applications, on the distributed(x86) platform and executes batch COBOL programs on the mainframe. This model yields an appropriate balance, as the mainframe has the capability, stability and scalability required to process, store, and access large amounts of data, while the web applications provide an intuitive GUI experience for all users, both external and internal.

Since CAR's current mainframe is nearing its end of service date, where hardware maintenance and firmware code updates from IBM are no longer available, CAR staff undertook an assessment of the current model in order to develop a recommended strategy for replacing this equipment. The goal was to consider the appropriate platforms to best serve CAR's business plan objectives to deliver cost effective service with maximum efficiency. Factors considered include, but are not limited to, hardware and software costs, resource costs relating to migration, availability of staffing skill sets, reliability of computing tools, and expectations with respect to vendor trends.

### Mainframe Segment of CAR's Infrastructure Model: Cost Effective Solution that Ensures Scalability and Stability

As statistical agent, CAR collects, edits, and accumulates hundreds of millions of rows of Member Company data annually. This data is used for more than ten years to service both the MAIP and commercial residual market functions. The mainframe runs in excess of 3500 batch COBOL programs on a daily, weekly, monthly or annual basis to support all of CAR's business operations. This platform has the capacity to efficiently process and store the data used for both the statistical agent and residual market functions. An equally beneficial advantage of our mainframe infrastructure is the stability of this platform. The manufacturer ensures backward compatibility for its systems software updates. That is, all COBOL batch programs function as well or better under a newer version, without the need to modify the original code. This is in sharp contrast to the distributed(x86) platform, in which operating system updates often require applications to be rewritten or extensively modified for each new version.

CAR's current IBM mainframe server is the smallest available at 88 MIPS (millions of instructions per second; the speed of the processor). This allows CAR to employ the least costly infrastructure while providing suitable processing power for its business needs. Further, CAR runs the operating system VM/VSE, which is the lowest priced mainframe operating system available, and stores and accesses data using the cost effective CA/Datacom suite of software. In essence, we have a very efficient environment which would be difficult to replicate on any other platform in a cost effective manner. While cutting edge features for this technology are often slower to be introduced to this platform, CAR has successfully met its business plan objectives with this design. Still, CAR incorporates enhanced tools when they become available and when they provide a cost justified benefit to our Member Company and agency customers.

### Distributed(x86) Segment of CAR's Infrastructure Model: Intuitive Web Applications for External and Internal Users

CAR manages most of its residual market functions, and many statistical agent functions which interface with member companies, on a distributed(x86) platform. Those servers support CAR's websites which afford Member Companies and agents secure access to the MAIP application, as well as to reports and data related to both private passenger and commercial business. On this rapidly improving platform, CAR enables maximum user efficiency through such applications as session reporting and statistical data correction. In addition, CAR is able to quickly respond to immediate industry needs by efficiently developing interactive web applications such as the Ineligible Risk Database and the Large Loss Pre-Notification system.

### Assessment of CAR's Infrastructure Model and Recommendation for Mainframe Equipment Replacement

Staff consulted with our IT partners to compare the processing capabilities and ongoing annual costs of its current mixed-platform model to that of alternative configurations. Staff also consulted with its IT Committee members to consider the models employed by other organizations with somewhat similar data processing needs. Based on the information gathered, Staff concluded that the current model continues to deliver the optimal solution for CAR. Exorbitant migration costs aside, the mainframe continues to offer the most cost-effective platform for performing batch data processing; providing affordability, scalability, and dependability far exceeding those of distributed(x86) and other Unix-based systems. In regard to CAR's websites and their resident web-based applications, distributed systems(x86) continue to be the best platform for providing the easy-to-use, interactive applications used by member company and agency personnel.

As noted, all of CAR's mainframe hardware, which was acquired in late 2011, has reached or is soon approaching end of service. That is, the hardware is no longer supported by the manufacturer. For the disk drive component, Staff has temporarily negotiated with the manufacturer to extend the maintenance arrangement through 2019. CAR's z114 mainframe will no longer be supported after 2020. In addition, CAR is not able to update its VM operating system to the latest release, as the new version is not supported on CAR's current hardware. After considering a number of alternatives, including third party maintenance and mainframe hosting, Staff is recommending the replacement of its mainframe hardware as the most cost-effective solution to ensure uninterrupted service of its statistical agent and residual market functions.

To that end, Staff is requesting that the IT Advisory Committee endorse CAR's infrastructure model and consider a recommendation to the Governing Committee to replace CAR's mainframe equipment in Fiscal Year 2020. If approved, CAR will solicit bids and consider financing arrangements in order to include an appropriate allocation in its Fiscal Year 2020 budget proposal, for review by the Budget Committee in September. At this time, it is expected that the acquisition costs will offset some currently budgeted maintenance costs, and we anticipate a budget impact of approximately \$30,000 annually, which is 6% of CAR's current mainframe operations budget.