October 31, 2019

Questions and Answers Report

Mayor Steve Adler
Mayor Pro Tem Delia Garza, District 2
Council Member Natasha Harper-Madison, District 1
Council Member Sabino "Pio" Renteria, District 3
Council Member Gregorio Casar, District 4
Council Member Ann Kitchen, District 5
Council Member Jimmy Flannigan, District 6
Council Member Leslie Pool, District 7
Council Member Paige Ellis, District 8
Council Member Kathie Tovo, District 9
Council Member Alison Alter, District 10
The City Council Questions and Answers Report was derived from a need to provide City Council Members an opportunity to solicit clarifying information from City Departments as it relates to requests for council action. After a City Council Regular Meeting agenda has been published, Council Members will have the opportunity to ask questions of departments via the City Manager’s Agenda Office. This process continues until 5:00 p.m. the Tuesday before the Council meeting. The final report is distributed at noon to City Council the Wednesday before the council meeting.

QUESTIONS FROM COUNCIL

Item #10: Authorize negotiation and execution of an interlocal agreement with Austin Community College to provide matching funds for the Austin Community College’s Innovative Manufacturing Prototype Acceleration Central Texas Lab i6 challenge grant awarded by the U.S. Economic Development Authority in partnership with the Austin Technology Incubator with the University of Texas at Austin to foster and incubate economic development in priority target industries and promote job creation in an amount not to exceed $50,000 annually for three years.

COUNCIL MEMBER FLANNIGAN’S OFFICE

1) Please provide a list of what other entities are contributing local match for this program, and how much each entity is providing.

Below is a list of other “community partners” included in their proposal for the IMPACT lab EDA i6 grant at ACC: Austin Technology Incubator (ATI), Austin Regional Manufacturing Association (ARMA), Texas Manufacturing Assistance Center (TMAC), City of Austin, Travis County, Austin Community College (ACC), and Workforce Solutions Capital Area. Below is a breakdown of each of their specific match commitments, in-kind donations and support.

Table 3: Partnerships Category Partner(s) Status:

Incubation
● Austin Technology Incubator (ATI)
● Support: 2 incubation slots/year ● Provide 2,500sf co-working space, conference rooms, and classroom space. ● Match Commitment: $50,000/year of in-kind work spaces and consulting

Community Building
● Austin Regional Manufacturing Association (ARMA) ● Texas Manufacturing Assistance Center (TMAC)
● Convene the manufacturing community and provide linkages to workforce supply and demand. ● Provide specific training and expertise around manufacturing and operations. ● Provide connections for incubator companies to continue manufacturing locally at greater scale.

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● Austin Community College (ACC) ● Workforce Solutions
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Lab Facilities
• Austin Community College (ACC)
• 5,000sf of Prototype Lab Space ● 2,500sf of Classroom, coworking, design, and community event space. ● Match Commitment: $150,000/year of in-kind spaces

Education
• ACC ● ATI ● ARMA ● City of Austin
• Degree Programs ● Manufacturing Industry Training ● Business Training ● Equipment and Safety Training

**Item #13:** Approve negotiation and execution of an automatic aid agreement with Travis County Emergency Service Districts (ESDs), Williamson County ESDs, and the cities of Leander, Cedar Park, Round Rock, and Georgetown to provide services that are mutually beneficial to the fire service agencies and residents in their respective jurisdictions, for an initial term of one year with up to nine additional one-year terms.

COUNCIL MEMBER ALTER’S OFFICE

1) **Under the new agreement: if AFD is first on the scene to a call, what procedures will they follow?**
   
   If the incident occurs within the Austin Fire Department’s (AFD) jurisdiction, then AFD will follow the standard operating procedures of A101 (see Appendix A). If the incident is occurring in another jurisdiction, the authority having jurisdiction (AHJ) procedures would apply.

2) **Please identify key areas where SOPs differ in proposed agreement as compared to SOPs under the existing auto aid agreement.**
   
   The key areas that A101 differs from other standard operating procedures (SOPs) are:
   • Number and type of units responding to an incident
   • Initial assignment/responsibilities of each of the units
   
   For example, according to AFD’s A101 for a structure fire, four engines, two aerial companies, and a rescue unit will be dispatched. The first arriving engine company will assume the role of fire attack. The second engine will assume the role of back up. The third and fourth engines will stage at a hydrant. The first arriving aerial or rescue shall assume inside division and the second arriving of that group will assume outside division. These resources and assignments work well for AFD because units are placed strategically around the city to facilitate an arrival order of these units. However, in the county these resources are not readily available. For example, AFD Rescue units do not respond outside the City of Austin. Additionally, the County has fewer aerial companies.
   
   **Williamson County Incident Command System Regional Procedure #06** (see Appendix B) allows for the first arriving company officer to assign later arriving units to specific duties, regardless of unit type (engine versus aerial). This assignment is more conducive for the County.

3) **In the backup material distributed to council offices by AFD (dated Aug 16), AFD indicated that there are characteristics and circumstances that differentiate jurisdictions and impact which SOP is best. A clear**
example was provided at the bottom of page 2 on AFD’s document. Please provide additional examples of conditions that vary by jurisdiction and how those variations might influence the best incident action plan or SOP implementation.

Factors that may result in a different response between the incidents occurring within the city versus the county include, but are not limited to:

a. High rise and mid-rise construction in core of the city requires more resources and different response than incidents that occur within the county.

b. The county is more rural and as a result distance from water supply could potentially impact how units are assigned to an incident.

c. Additionally, since the county has more rural areas than the core of the city, getting specific resources in a timely manner maybe more challenging. In the event of a large catastrophic event, time is a factor. Within A101, units are pre-assigned to have specific tasks based on order of arrival and resources. However, within Regional Procedure #06, pre-assignments do not exist therefore the incident commander is able to use their judgement on assigning units to particular tasks. The flexibility within Regional Procedure #06 works better in the county when specific resources and units may be further away from the incident.

4) How exactly do the Williamson County agencies’ common operating guidelines differ from AFD’s A101?

The main difference between Williamson County Incident Command System Regional Procedure #06 (based off Blue Card) and AFD’s A101 is the number and types of units on the initial assignment. A101 has pre-established assigned roles based upon order of arrival and unit type. However, Williamson County Regional Procedure #06 allows for the first arriving company officer to assign later arriving units to specific duties, regardless of unit type. This flexibility allows each jurisdiction to determine the best resource assignments for their particular area.

5) Page three of AFD’s provided document indicates that existing policy allows for optional cross-jurisdictional response by BCs. How often has this practice been implemented in the last several years?

Number of Battalion Chief (BC) Self-Assignments

<table>
<thead>
<tr>
<th>Year</th>
<th>BC Runs into County</th>
<th>BC Runs “Self-Assigned” into County</th>
<th>Percentage of BC “Self-Assigned” into County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>193</td>
<td>24</td>
<td>12%</td>
</tr>
<tr>
<td>2014</td>
<td>186</td>
<td>32</td>
<td>17%</td>
</tr>
<tr>
<td>2015</td>
<td>190</td>
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<tr>
<td>2018</td>
<td>403</td>
<td>98</td>
<td>24%</td>
</tr>
<tr>
<td>2019 (YTD- 9/26)</td>
<td>238</td>
<td>63</td>
<td>26%</td>
</tr>
</tbody>
</table>

*Self-assignment is determined If the “assigned by” field shows a Mobile device rather than automatic dispatch

6) Which jurisdictions do not adopt A101?

Currently, all Williamson County agencies operate under one incident management system (IMS) policy. The majority of Travis County agencies have agreed to operate under A101. Currently Emergency Service District 2 and Emergency Service District 8 are operating under hybrid models.
7) Please redline changes between the current auto aid agreement and the draft new agreement.

See Appendix C for:

a. Current Automatic Aid Agreement
b. Proposed Automatic Aid Agreement
c. Red-line of paragraph in Automatic Aid Agreement
d. Red-line draft of Operating Guidelines

8) Per the second paragraph of page 2 of the draft agreement, will any future proposed revisions come to council?

Future revisions to the ILA require approval of the Council and participating agencies’ governing bodies, with the exception of Exhibit A. The Terms section (page 2, second paragraph) of the proposed ILA provides for an annual review of Exhibit A by the participating Fire Chiefs. Revisions to Exhibit A may be adopted if at least 75% of the Fire Chiefs agree with the revision. The current existing ILA has a similar provision within Terms (page 2, first paragraph).

Exhibit A contains Automatic Aid Operational Guidelines that cover the following:

- Response
- Staffing
- Training
- Certifications of Personnel
- Reimbursement
- Equipment and Apparatus
- Dispatch Protocols
- Funding for Training and Certifications

9) What is the process for AAA amendments?

Proposed amendments to the Agreement are sent to the Capital Area Fire Chiefs Association (CAFCA). CAFCA will then call a meeting of all the Fire Chiefs participating in the Automatic Aid Agreement to review the proposed amendments. If the amendments are within Exhibit A, CAFCA has the authority to approve and enact the changes if at least 75% of all participating parties agree to the changes. However, if the amendments are for the Interlocal Agreement, then all of the Chiefs are required to take the changes back to their respective governing bodies (i.e. City Council, Commissioners).

The Agreement will automatically renew for a one-year period (subject to other termination provisions of this Agreement) on October 1st of each successive year (a "Renewal Date") as to each party that does not provide written notice to all other parties of an intention not to renew not later than thirty (30) days prior to the applicable Renewal Date.

Each year, the Auto-Aid Operational Guidelines (Exhibit A) are reviewed and may be revised annually by the Fire Chiefs participating in the Automatic Aid Agreement.
**Item # 21:** Authorize negotiation and execution of a 60-month lease renewal with 724 Bastrop Hwy LLC, to commence on November 1, 2019 and terminate October 31, 2024, for 1,000 square feet of office/warehouse space for the Environmental Resource Management Division of the Watershed Protection Department, located at 720 Bastrop Highway, Suite 218, Austin, Texas, for a total amount not to exceed $72,000.

COUNCIL MEMBER FLANNIGAN’S OFFICE

*Is this type of lease space (warehouse) included in the city’s strategic facilities master planning?*

  The recent Administrative Occupancy Plan did not take into consideration warehouse facilities. Although this lease space does contain a small area used as an office, the majority of this space is a warehouse, and it was not considered with the overall administrative plan and recommendations. The Strategic Facilities Governance Team plans on moving forward in FY20 with a service yard and warehouse study to help provide recommendations on an overall plan regarding those facilities.

**Item # 25:** Authorize negotiation and execution of a Multiple Use Agreement with the Texas Department of Transportation for placement of trash receptacles in the State right-of-way beneath overpasses and under bridges.

COUNCIL MEMBER FLANNIGAN’S OFFICE

*Please provide a list of locations currently serviced by the Violet Bag Project Pilot, and locations being analyzed for the receptacle program.*

  The Watershed Protection Department (WPD) worked with the Office of Design and Delivery (ODD), Austin Resource Recovery (ARR), Public Works (WPD), Parks and Recreation Department (PARD), the Integral Care PATH team, and 311 to test the pilot, conduct outreach, and collect data at four sites: Highway 183 and Ohlen Road; Highway 290 and Cameron Road; Interstate 35 and 6th Street; and Highway 290/71 and Packsaddle Pass area.

  The pilot sites were initially selected based on the volume of garbage-related complaints located at those sites. We use 311 data to gauge our impact and hoped to see complaints decrease in this time frame. ODD and 311 have developed a process to analyze the call notes and look for patterns in the frequency of the terms used in a call which will be used in Phase 2 of the program to measure the effectiveness of the trash receptacles and bags.

  Site residents were very receptive to the project in Phase 1. During the seven-week period, we tested 12- to 16-gallon, 1.5-millimeter thick violet bags. Approximately 1,700 bags were distributed, and we estimate that 50-80% of the bags were picked up by ARR on a weekly route. Based on interviews and other evidence we believe the remaining bags were primarily used to collect and dispose of garbage in other locations.

  The second phase of the project is testing larger trash bags and working to modify trash collection methods to allow Austin Resource Recovery to use semi-automated trucks for collection, as opposed to collecting trash bags by hand. Following the conclusion of the second
phase, staff will provide recommendations as to how to expand the program across the City.

The sites selected for permanent facilities will be determined following completion of the second phase. We will work with City Legal and TxDOT to afford flexibility in the Multiple Use Agreement (MUA) to make adjustments based on the data we receive in Phase 2.
Authorize negotiation and execution of an interlocal agreement with Austin Community College to provide matching funds for the Austin Community College’s Innovative Manufacturing Prototype Acceleration Central Texas Lab i6 challenge grant awarded by the U.S. Economic Development Authority in partnership with the Austin Technology Incubator with the University of Texas at Austin to foster and incubate economic development in priority target industries and promote job creation in an amount not to exceed $50,000 annually for three years.

**QUESTION/ANSWER:** Council Member Flannigan’s Office

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INNOVATIVE MANUFACTURING PROTOTYPE ACCELERATION CENTRAL TEXAS (IMPACT) LAB:
EDA REGIONAL INNOVATION STRATEGIES i6 COMPETITION

1.0 Executive Summary & Problem Statement

“US manufacturing is not what it was a generation ago. Its contraction has been felt by firms, suppliers, workers and entire communities.” This is from the 2017 McKinsey & Company report: “Making it in America: Revitalizing US Manufacturing.” Small and midsize firms have been disproportionately affected. The report noted that the lack of small firms limits industry agility. This was identified by manufacturers as one of the largest threats. In particular, the cost of commercialization was seen as the greatest deterrent to innovation.

The Austin manufacturing industry employs over 57,000 people. However, there is significant under-investment in manufacturing innovation. Austin’s manufacturing employment is roughly one-fifth the size of Dallas and Houston. The next wave of manufacturing will require a paradigm shift to advanced digital firms which Austin is uniquely qualified to capture. IMPACT Lab will build a strong ecosystem of innovative, digital-ready small and midsize manufactures prepared to disrupt the sector.

IMPACT Lab is Austin’s first innovation center focused on physical product development and manufacturing. This initiative is modeled after the Austin Bioscience Incubator (ABI), a cluster innovation collaboration between Austin Community College (ACC), Austin Technology Incubator (ATI), the City of Austin, and industry stakeholders. These partners have a history of success in innovative economic development and ecosystem building. IMPACT Lab fosters connections between manufacturers, college graduates, university researchers, entrepreneurs, and investors. By galvanizing these connections, IMPACT Lab ensures that the region’s manufacturing industry continues to grow, lead, and reduce the cost and barriers to entry for physical product innovation.

2.0 Project Region and Location

The IMPACT Lab Cluster will be located in and impart most of its benefit on Austin, Texas. The majority of the city of Austin is located in Travis County (FIPS: 48453), with portions extending into Williamson County (FIPS: 48491) and Hays County (FIPS: 48209). More broadly, we expect the impact to extend to Bastrop County (FIPS: 48021) and Caldwell County (FIPS: 48055), which encompass the remainder of the Austin-Round Rock Metropolitan Statistical Area. The MSA’s background and assets will be explored in more detail below in Section 3: "Why Austin."

The IMPACT Lab will be located on the Austin Community College Highland Learning Campus which is located adjacent to a cluster of census tracts identified as vulnerable to gentrification (See Appendix A). The location was selected to provide the greatest and easiest access to vulnerable populations. The objective is to spur manufacturing economic activity within the tracts identified to provide middle skill jobs and associated wages in an effort to prevent gentrification and preserve population diversity.
3.1 Project Description

Execution: How we will build the IMPACT Lab cluster

We are building the IMPACT Lab Cluster based on learnings from our successful cluster development efforts with the Austin Bioscience Incubator. We anticipate that this effort, beginning 10/01/2019 will take 3-years to achieve sustainability. The IMPACT Lab Cluster has three elements:

1. **Rapid Prototyping Lab**: create test, validation, and demonstration resources to allow physical product development for the scaling enterprises
2. **Incubation**: cultivate breakthrough innovations into scalable companies funded by the private capital markets
3. **Ecosystem building**: catalyze a rich network of talent, for-profit partners, and not-for-profit/government partners to undergird the cluster.

1. **Rapid Prototyping Lab**: create test, validation, and demonstration resources to allow physical product development for the scaling enterprises

ACC has a long-term commitment to community economic success. ACC is organized to support industry and uses an entrepreneurial approach to drive business partnerships. Over the past several years, the ACC Biotechnology Program piloted biotech acceleration services with local start-ups. Companies utilized ACC interns and equipment, saving time and money during product development. ACC aims to expand on previous successes by establishing a permanent advanced manufacturing and prototyping lab facility and business incubator to accelerate Central Texas’ manufacturing economy while training a skilled workforce.

A major barrier to the adoption of advanced manufacturing infrastructure innovations is access to professional prototyping, testing, and advance manufacturing resources; including equipment, facilities, skilled labor, consulting, and mentoring. Our successful work in both the cleantech and bioscience sectors, where similar dynamics apply, has validated the importance of an explicit "demonstration" component to cluster formation. A valuable strategy to help de-risk the decision to try a new innovation is to explicitly demonstrate physical product performance in a scenario as close to the real-life as possible.

This is a critical step. Startups do not have the financial resources to pay for these prototype, testing, and demonstration projects, especially in an industry as capital-intensive as advanced manufacturing. The IMPACT Lab Cluster's demonstration capacity will effectively become a shared facility for the use of startups and select large companies. The IMPACT Lab Cluster will employ a varied pricing model for access to the demonstration facility - large companies will pay market prices while startups will pay highly discounted rates, and in some cases, will receive grants to perform the work.

ACC is providing 5,000sf of space at the ACC Highland Learning Campus to house the initial footprint of the IMPACT Lab. In addition, ACC and ATI will be providing access to an additional
10,000sf of classrooms, conference rooms, and coworking space to augment the lab facilities. This location is also home to the Austin Bioscience Incubator and Austin Fashion Incubator. There are tremendous opportunities to leverage the capabilities and cross-disciplinary skills of these co-located incubators.

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Deliverable(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify specific space to be built-out for the IMPACT Lab rapid prototyping center and develop architectural plans.</td>
<td>Design / Architectural Plans</td>
</tr>
<tr>
<td>Develop final equipment plan and budget. Once the architectural plan is set, the appropriate equipment can be sized and located within the plan.</td>
<td>Equipment Plan</td>
</tr>
<tr>
<td>Construction – Tenant Improvements. ACC is renovating building spaces as part of the Phase II site development. The IMPACT Lab will be included in this phase.</td>
<td>Completed Prototyping Lab space</td>
</tr>
<tr>
<td>Order &amp; Install Prototyping Equipment – Equipment will be installed during and after the tenant improvement phase.</td>
<td>Installed Equipment</td>
</tr>
<tr>
<td>Interview and hire a shop manager. The lab will need a manager to operate, maintain, and train on the prototyping equipment. This individual will also develop and implement the safety plan.</td>
<td>Hire Individual</td>
</tr>
<tr>
<td>Identify the additional facility assets (classrooms, coworking space, computer labs, etc.) accessible to IMPACT Lab users.</td>
<td>Facility Plan</td>
</tr>
</tbody>
</table>

2. **Incubation: cultivate breakthrough innovations into scalable companies funded by the private capital markets**

Following the successful model jointly developed and implemented for ABI, the IMPACT Lab will utilize the following elements to provide valuable business incubation services.

Business Development - Entrepreneurs enjoy an IP-free environment where they keep 100% of their ideas. Start-ups have a large company feel with access to a conference room, internet access, package reception, and secure 24/7 access. Full-time IMPACT Lab staff are on-site to provide strategic consulting, common lab management, and operations support.

Partnerships - We have partnered with the Austin Technology Incubator to give member companies access to ATI business incubation services and interns. ATI focuses on helping startups compete successfully in the capital markets and has a 25-year track record of helping founding teams achieve success.

ACC Faculty & Internships - Engage with experienced faculty members, many of which have significant industry expertise. ACC student interns are also available to increase the technical workforce and provide research support.

Contract Research - Our contract service organization (CSO) helps entrepreneurs advance their
businesses by providing the expertise and tools they need to turn their discoveries into commercially viable solutions. Companies can outsource projects to ACC faculty and students who provide research support on a contract basis, saving time and money. CSO is a low-risk option that enables entrepreneurs to explore new ideas. Work is conducted on-site under the supervision of IMPACT Lab staff. Students gain real-world experience while providing valuable services to companies.

Entrepreneurship Education - Industry partnerships, educational workshops, and continuing education programs bring together the larger biotech community to create a critical mass of expertise for navigating the research to product cycle.

ATI is the longest-established venture incubator in the nation (Source: Xconomy), and is a recognized national leader in startup incubation, specifically in the incubation of impact-driven startups that attract private capital and create jobs and wealth:

- Under the incubator's current leadership, ATI startups have raised $892 million in investor capital. ATI companies have realized over $750 million in value and have another $1.5-2 billion in value still unrealized, translating into -3X return for investors.
- ATI alumni startups have created over 6,500 jobs (source: Bureau of Business Research.)
- ATI startups have created over $880 million in economic impact for Central Texas.

ATI also has an unrivalled track record of identifying promising university innovation and translating that innovation into startups that create wealth and jobs. Metrics produced by our program include:

- Our summer student accelerator - called SEAL, for Student Entrepreneur Acceleration and Launch - has produced companies that have raised over $30 million in investor capital.
- 94% of the capital raised by Texas startups with UT-Austin tech licenses (nearly $200 million) has been raised by ATI companies.
- 31% of the awards from the UT System Horizon Fund, which covers 14 institutions including UT-Austin, have gone to ATI companies.

As part of this incubation process, the project will provide access to ATI's network of professional service (e.g., law firm) and technology (e.g., hosting) partners at appropriate stages in the startups' development. This access, critically, includes intellectual property (IP) support. The value of this access is not priced as match into this grant application, as it is delivered on a case-by-case basis. However, historically the value of such services, if fully priced, has often been tens of thousands of dollars. Both ATI and Austin Community College will provide co-working capabilities in addition to the prototyping lab, which will extend to IMPACT Lab Cluster. This allows the incubation team to focus on value-added services and support.

<table>
<thead>
<tr>
<th>Table 2: Incubation Tasks and Deliverables</th>
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<tbody>
<tr>
<td>Task Description</td>
</tr>
<tr>
<td>Form IMPACT Lab Advanced manufacturing Advisory Board to provide expert leverage and perspectives</td>
</tr>
</tbody>
</table>
Implement startup recruitment, due diligence selection and acceptance process based on nationally recognized ATI best practices | 3-5 accepted member companies/year

Meet with member companies on a regular basis to assess strategic needs and to provide corresponding input and actions to advance companies towards growth | Quarterly activity reports

Ensure that member companies engage industry, investors, pilot test facilities, commercial deployment partners, and potential team members | Quarterly activity reports

Assist member companies to gain access to partners' data, hardware and software capabilities. | Quarterly activity reports

3. Ecosystem building: catalyze a rich network of talent, for-profit partners, and not-for-profit/government partners to undergird the cluster

Previous experience suggests that using the "excuse" of supporting emerging startups is a highly effective way to get such a diverse set of academic, non-profit, government and corporate partners to work together - not just to help a specific startup, but to work directly with each other on additional programs, business opportunities, technology development, thought leadership, etc. This is the IMPACT Lab Cluster's role in building the ecosystem - convening and priming the pump in order to jump-start the broader cluster activity. Our initial cluster partners, and their functions, are listed in Table 3 below.

At Austin Community College, students in the Design, Manufacturing, Construction, and Applied Technologies Area of Study receive practical, hands-on training in numerous areas. With decades of experience in fields as diverse as computer-aided design and robotics, ACC instructors will help engineer a career plan that works for the Austin community.

The Austin Regional Manufacturers Association (ARMA) mission is to strengthen the Central Texas manufacturing community through advocacy, workforce development, and networking. ARMA also addresses skill gaps in the industrial workforce by working with Austin Community College. ARMA also hosts workshops and seminars to expand the members technical expertise-
like supervisor development, quality, or lean enterprise. There is a focus on small and medium size companies and offer peer groups that regularly meet to share best practices and insight.

ARMA’s goals are to:
- Ensure that city officials and policy makers understand what’s important for manufacturers to thrive.
- Promote manufacturing in schools and in the community.
- Examine the workforce with the aim to ensure that companies get great applicants, that employed workers have the opportunity for professional development, and that in the next ten to fifteen years, that the labor pool will have the skills necessary to support growth in industry.
- Host events that provide relevant information on key issues affecting business and create forums to build relationships across companies and industries.
- Solve problems and inform members in the following areas: Workforce, Lean Manufacturers (comprised of professionals dedicated to continuous improvement), Energy, Programs, and Membership.

### Table 3: Partnerships

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- Degree Programs
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**Table 4: Ecosystem Building Tasks & Deliverables**

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<td>Convene regular executive networking events for cluster partners</td>
<td>Quarterly activity reports</td>
</tr>
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<td>Position cluster partners for prominent positions at industry gatherings (e.g., speaking at conferences), including those programs occurring outside of Austin, TX</td>
<td>Partners on stage or seen in industry leadership roles</td>
</tr>
<tr>
<td>Help identify and support joint funding opportunities</td>
<td>Grant applications and/or other funding proposals</td>
</tr>
<tr>
<td>Identify and support mutual projects to support a startup or work directly with each other</td>
<td>Quarterly activity reports</td>
</tr>
</tbody>
</table>

**Project Team**

The IMPACT Lab Cluster will be leanly staffed. Our experience from building successful clusters in the cleantech and biotech sectors has been that the clusters achieve greatest impact and sustainability when the cluster catalyst acts as a convener of other ecosystem participants, rather than as the "CEO" of the cluster. In the case of IMPACT Lab, this means seeding the core project staff with stakeholders who will have alignment to carry forward the cluster after grant funding ends.

**Core Project Staff**

Project Lead
- ACC – TBD
- ACC – Shop Manager. This position will be a new hire supported directly through the grant award.

ATI Team Support
c. Mark Sanders. Mark is the director of the Circular Economy incubator at ATI. The incubator has significant overlap with the IMPACT Lab cluster in the areas of product design, manufacturing resources, re-manufacturing, manufacturing materials. For this project, in addition to providing direct incubation support, he will ensure that the rest of ATI supports and reinforces the IMPACT Lab Cluster.

Scope of Work

<table>
<thead>
<tr>
<th>Table 5: Scope of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rapid Prototyping Lab</strong></td>
</tr>
<tr>
<td>Identify specific space to be built-out for the IMPACT Lab</td>
</tr>
<tr>
<td>Develop final equipment plan and budget.</td>
</tr>
<tr>
<td>Construction – Tenant Improvements.</td>
</tr>
<tr>
<td>Order &amp; Install Prototyping Equipment</td>
</tr>
<tr>
<td>Interview and hire a shop manager.</td>
</tr>
<tr>
<td>Identify the additional facility assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Incubation</strong></th>
<th><strong>Timing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Form IMPACT Lab Advisory Board</td>
<td>M1-6</td>
</tr>
<tr>
<td>Recruit student Associates</td>
<td>M12-36</td>
</tr>
<tr>
<td>Implement startup recruitment, due diligence selection</td>
<td>M1-9</td>
</tr>
<tr>
<td>Meet with member companies on a regular basis</td>
<td>M6-36</td>
</tr>
<tr>
<td>Ensure that member companies engage industry, investors, pilot test facilities, commercial deployment partners, and potential team members</td>
<td>M12-36</td>
</tr>
<tr>
<td>Assist member companies to gain access to partners' data, hardware and software capabilities.</td>
<td>M12-36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ecosystem Building</strong></th>
<th><strong>Timing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Convene regular executive networking events for cluster partners</td>
<td>M1-36</td>
</tr>
<tr>
<td>Position cluster partners for prominent positions at industry gatherings (e.g., speaking at conferences)</td>
<td>M12-36</td>
</tr>
<tr>
<td>Help identify and support joint funding opportunities</td>
<td>M1-36</td>
</tr>
<tr>
<td>Identify and support mutual projects to support a startup or work directly with each other</td>
<td>M9-36</td>
</tr>
</tbody>
</table>

Why Austin

*Austin knows how to build technology clusters*

Over the past 25 years, Austin has become known as a center for technical innovation, especially in clean energy, software, hardware and biotechnology. Austin has a deep bench of technical talent - it was number 1 on Kauffman's list of entrepreneurial centers and ranks highly in most technology listings. It also has a strong sense of community and mission-focus, which contribute to the sustainability of its sector clusters.

*Austin allows a focus on underrepresented populations*
The City of Austin, Travis County, and the State of Texas are each minority-majority. In 2015, the City of Austin shifted its city council representation from at-large to district-based with the mayor elected at-large. This has had the impact of increasing City focus on some subpopulations that had been historically underrepresented in Austin politics. The partnership between ATI and the City on this cluster project, expressed as cash match and resource access, ensures that the proposed cluster will serve all Austin constituencies, including the historically underrepresented.

Sustainability, Risks, and Risk Mitigation

Austin Community College and the Austin Technology Incubator have long histories of sustained operations. The cluster built in cleantech has grown for 18 years since first investment in 2001, and the cluster in biotechnology for 10 years since 2008. The clusters have cultivated diverse sources of funding, including government grants, private foundation funding, university support, membership fees, equity donations, and corporate sponsorships. This proposal is receiving matching financial support from diverse members of the regional ecosystem. The team is highly confident of continuing support.

The team has thought through four risks that we view as critical and has developed mitigation strategies to address each.

<table>
<thead>
<tr>
<th>Table 6: Risks and Mitigation Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Execution</strong></td>
</tr>
<tr>
<td>• Leverage team that successfully delivered past EDA projects and the Austin Bioscience Incubator</td>
</tr>
<tr>
<td>• Staff project with highly experienced leads and support</td>
</tr>
<tr>
<td>• Use best-practices from Bioscience Incubator and cleantech cluster</td>
</tr>
<tr>
<td><strong>Partner Alignment</strong></td>
</tr>
<tr>
<td>• Over-invest up front in generating alignment of key partners</td>
</tr>
<tr>
<td>• Ensure that partner interests are served by project rollout</td>
</tr>
<tr>
<td>• Regular (weekly or monthly) communication</td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
</tr>
<tr>
<td>• Execute to produce value for stakeholders and potential funders</td>
</tr>
<tr>
<td>• Ensure visibility of effort to potential funders nationally</td>
</tr>
<tr>
<td>• Structure programs to allow equity participation / giveback</td>
</tr>
<tr>
<td><strong>Inclusivity for Underrepresented Populations</strong></td>
</tr>
<tr>
<td>• Work with City of Austin to identify and reach out to key populations</td>
</tr>
<tr>
<td>• Partner with community advocates and workforce development organizations to reach underrepresented populations.</td>
</tr>
</tbody>
</table>

4.1 Impact & Metrics

ACC and ATI devote significant time and resources to tracking and reporting and have experience reporting to local, state, federal, and foundation partners. For this project the IMPACT Lab has developed a two-tiered system to collect and report data under this project:

- We will manually collect community and event metrics and metrics pertaining to highly publicized events (for example company mergers and acquisitions or initial public offerings) and report on these quarterly. Reporting quarterly, will enable better monitoring on the part of the EDA and allow for course correction, if necessary.
- Additionally, we will work with a third party, the University of Texas Bureau of Business
Research (BBR), to conduct a yearly independent economic impact assessment of the program’s startup portfolio each year. Outsourcing the economic impact study will allow us to achieve objectivity and a much more sophisticated level of analysis.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Who Collects?</th>
<th>Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs created (including indirect and induced jobs)</td>
<td>BBR</td>
<td>Annual</td>
</tr>
<tr>
<td>Capital raised (including source and number of investors)</td>
<td>BBR</td>
<td>Annual</td>
</tr>
<tr>
<td>Revenue earned (including grant funding)</td>
<td>BBR</td>
<td>Annual</td>
</tr>
<tr>
<td>Economic output generated (at MSA and state level)</td>
<td>BBR</td>
<td>Annual</td>
</tr>
<tr>
<td>Number of patents (filed and issued)</td>
<td>BBR</td>
<td>Annual</td>
</tr>
<tr>
<td>Startups Reviewed</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Startups admitted and incubated</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Pilot projects conducted</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Events held (including number of participants)</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>New partnerships formed (regionally, statewide and national)</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Startup exits (mergers, acquisitions and IPOs)</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Business failures (number of incubated companies that have ceased operating)</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Number of entrepreneurs and interns from under-represented innovator populations</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Progress against all stated deliverables &amp; milestones above</td>
<td>ACC</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>
Council Question and Answer

Related To | Item #13 | Meeting Date | October 31, 2019
--- | --- | --- | ---

Additional Answer Information

Approve negotiation and execution of an automatic aid agreement with Travis County Emergency Service Districts (ESDs), Williamson County ESDs, and the cities of Leander, Cedar Park, Round Rock, and Georgetown to provide services that are mutually beneficial to the fire service agencies and residents in their respective jurisdictions, for an initial term of one year with up to nine additional one-year terms.

**QUESTION/ANSWER:** Council Member Alter’s Office

1) Under the new agreement: if AFD is first on the scene to a call, what procedures will they follow?
   
   If the incident occurs within the Austin Fire Department’s (AFD) jurisdiction, then AFD will follow the standard operating procedures of A101 (see Appendix A). If the incident is occurring in another jurisdiction, the authority having jurisdiction (AHJ) procedures would apply.

2) Please identify key areas where SOPs differ in proposed agreement as compared to SOPs under the existing auto aid agreement.

   The key areas that A101 differs from other standard operating procedures (SOPs) are:
   - Number and type of units responding to an incident
   - Initial assignment/responsibilities of each of the units

   For example, according to AFD’s A101 for a structure fire, four engines, two aerial companies, and a rescue unit will be dispatched. The first arriving engine company will assume the role of fire attack. The second engine will assume the role of back up. The third and fourth engines will stage at a hydrant. The first arriving aerial or rescue shall assume inside division and the second arriving of that group will assume outside division.

   These resources and assignments work well for AFD because units are placed strategically around the city to facilitate an arrival order of these units. However, in the county these resources are not readily available. For example, AFD Rescue units do not respond outside the City of Austin. Additionally, the County has fewer aerial companies.

   Williamson County Incident Command System Regional Procedure #06 (see Appendix B) allows for the first arriving company officer to assign later arriving units to specific duties, regardless of unit type (engine versus aerial). This assignment is more conducive for the County.

3) In the backup material distributed to council offices by AFD (dated Aug 16), AFD indicated that there are characteristics and circumstances that differentiate jurisdictions and impact which SOP is best. A clear example was provided at the bottom of page 2 on AFD’s document. Please provide additional examples of conditions that vary by jurisdiction and how those variations might influence the best incident action plan or SOP implementation.

   Factors that may result in a different response between the incidents occurring within the city versus the county include, but are not limited to:
   - High rise and mid-rise construction in core of the city requires more resources and different response than incidents that occur within the county.
b. The county is more rural and as a result distance from water supply could potentially impact how units are assigned to an incident.

c. Additionally, since the county has more rural areas than the core of the city, getting specific resources in a timely manner maybe more challenging. In the event of a large catastrophic event, time is a factor. Within A101, units are pre-assigned to have specific tasks based on order of arrival and resources. However, within Regional Procedure #06, pre-assignments do not exist therefore the incident commander is able to use their judgement on assigning units to particular tasks. The flexibility within Regional Procedure #06 works better in the county when specific resources and units may be further away from the incident.

4) How exactly do the Williamson County agencies’ common operating guidelines differ from AFD’s A101?

The main difference between Williamson County Incident Command System Regional Procedure #06 (based off Blue Card) and AFD’s A101 is the number and types of units on the initial assignment. A101 has pre-established assigned roles based upon order of arrival and unit type. However, Williamson County Regional Procedure #06 allows for the first arriving company officer to assign later arriving units to specific duties, regardless of unit type. This flexibility allows each jurisdiction to determine the best resource assignments for their particular area.

5) Page three of AFD’s provided document indicates that existing policy allows for optional cross-jurisdictional response by BCs. How often has this practice been implemented in the last several years?

<table>
<thead>
<tr>
<th>Year</th>
<th>BC Runs into County</th>
<th>BC Runs “Self-Assigned” into County</th>
<th>Percentage of BC “Self-Assigned” into County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>193</td>
<td>24</td>
<td>12%</td>
</tr>
<tr>
<td>2014</td>
<td>186</td>
<td>32</td>
<td>17%</td>
</tr>
<tr>
<td>2015</td>
<td>190</td>
<td>28</td>
<td>15%</td>
</tr>
<tr>
<td>2016</td>
<td>169</td>
<td>26</td>
<td>15%</td>
</tr>
<tr>
<td>2017</td>
<td>317</td>
<td>89</td>
<td>28%</td>
</tr>
<tr>
<td>2018</td>
<td>403</td>
<td>98</td>
<td>24%</td>
</tr>
<tr>
<td>2019 (YTD-9/26)</td>
<td>238</td>
<td>63</td>
<td>26%</td>
</tr>
</tbody>
</table>

*Self-assignment is determined if the “assigned by” field shows a Mobile device rather than automatic dispatch

6) Which jurisdictions do not adopt A101?

Currently, all Williamson County agencies operate under one incident management system (IMS) policy. The majority of Travis County agencies have agreed to operate under A101. Currently Emergency Service District 2 and Emergency Service District 8 are operating under hybrid models.

7) Please redline changes between the current auto aid agreement and the draft new agreement.

See Appendix C for:

a. Current Automatic Aid Agreement
b. Proposed Automatic Aid Agreement
c. Red-line of paragraph in Automatic Aid Agreement
d. Red-line draft of Operating Guidelines

8) Per the second paragraph of page 2 of the draft agreement, will any future proposed revisions come to council?

Future revisions to the ILA require approval of the Council and participating agencies’ governing bodies, with the exception of Exhibit A. The Terms section (page 2, second paragraph) of the proposed ILA provides for an annual review of Exhibit A by the participating Fire Chiefs. Revisions to Exhibit A may be adopted if at least 75% of the Fire Chiefs agree with the revision. The current existing ILA has a similar provision within Terms (page 2, first paragraph).

Exhibit A contains Automatic Aid Operational Guidelines that cover the following:
9) What is the process for AAA amendments?

Proposed amendments to the Agreement are sent to the Capital Area Fire Chiefs Association (CAFCA). CAFCA will then call a meeting of all the Fire Chiefs participating in the Automatic Aid Agreement to review the proposed amendments. If the amendments are within Exhibit A, CAFCA has the authority to approve and enact the changes if at least 75% of all participating parties agree to the changes. However, if the amendments are for the Interlocal Agreement, then all of the Chiefs are required to take the changes back to their respective governing bodies (i.e. City Council, Commissioners).

The Agreement will automatically renew for a one-year period (subject to other termination provisions of this Agreement) on October 1st of each successive year (a "Renewal Date") as to each party that does not provide written notice to all other parties of an intention not to renew not later than thirty (30) days prior to the applicable Renewal Date.

Each year, the Auto-Aid Operational Guidelines (Exhibit A) are reviewed and may be revised annually by the Fire Chiefs participating in the Automatic Aid Agreement.
Appendix A: A101

AUSTIN FIRE DEPARTMENT

Policy and Procedure

A101.4

Subject: Standard Operating Guideline: Fireground Operations

Effective Date: 09-01-2016

Rescinds: A101.3

Page: 1 of 27

Application: Operations Personnel

Authorized by: Rhoda Mae Kerr, Fire Chief

I. Purpose

To serve as an introduction to Policies and Standard Operating Guidelines concerning operations on the fireground, and to standardize certain procedures for fireground operations and other emergency scenes; including incidents involving automatic aid partners. It is the intent of the AFD operations guidelines to simplify decision-making requirements under potentially stressful situations.

II. Background

Information contained in this policy is to be considered an overview of firefighting and emergency operations. Tactical, safety and emergency response considerations for specific incident types are also referenced in other Policies and Procedures/Standard Operating Guidelines and in other documents specific to the circumstance.

A concept that is described in this Standard Operating Guideline is the ventilation-controlled fire state, which occurs when a structure fire’s growth is limited by the available oxygen. At this point, the fire will increasingly produce more smoke and fuel vapor, the products of incomplete combustion in this state. The opening of any doors or windows will provide the needed additional oxygen and the fire growth will increase, possibly leading to rapid fire progression. Most structure fires will be in a ventilation-controlled state when firefighters arrive. Nationally, firefighters die each year due to the hazards associated with ventilation-controlled fires. AFD has also experienced “close calls,” and AFD firefighters have been seriously injured when performing operations in a ventilation-controlled environment. Firefighters must understand and recognize ventilation-controlled fire situations so that an appropriate risk/benefit analysis can be conducted. The explanation of this concept will be discussed in greater detail in the guidelines section.
III. Policy

A. All Fireground Operations will be conducted under an Incident Management System (IMS).

B. Incident Priorities - All firefighting operations and emergency scene operations shall be conducted with fire service incident priorities as the overall focus of incident operations.
   1. Life Safety – The First Priority for scene operations. Life safety refers to those activities and operations necessary to ensure emergency personnel life safety as well as civilian life safety. Fire extinguishment, evacuation of occupants and the search for and rescue of trapped and threatened civilians are integral components of the life safety priority.
   2. Incident Stabilization – The Second Priority. Incident Stabilization refers to those activities and operations necessary to bring an incident under manageable control.
   3. Property Conservation – The Third Priority. Property Conservation refers to those activities and operations aimed at reducing property and environmental damage.

C. Unless there is an immediate need for rescue, no interior operations will begin until there are two firefighters available outside the structure that can attempt rescue of firefighters, if necessary.

The following guidelines should be followed at all firefighting and emergency scene operations, except where deviation can be justified by Fire Officers. Any significant deviation should be communicated to responding/on-scene units as soon as possible.

IV. Guidelines

A. When referring to fireground operations, the following terms shall apply:
   1. Aerial Apparatus – A vehicle equipped with an aerial ladder or aerial platform (Ladder or Quint).
   2. Apparatus Capability – Having the mechanical ability, equipment, and personnel required for a tactical function.
   3. Backup Team – A team of at least two firefighters who are in the same level of protective equipment as the fire attack team, who have deployed a backup hose line, and are in position to provide protection and/or rescue a downed firefighter.
   4. Blitz Attack – Using a solid or straight stream to quickly knock down a fire from the exterior prior to an interior attack.
   5. Captain – A Captain or Acting Captain assigned to a Ladder, Quint or Rescue.
6. Chief – A Battalion Chief or Acting Battalion Chief assigned to a Command Vehicle.

7. Command – The person in charge at an incident who is responsible for all incident activity, normally the highest-ranking officer on scene.

8. Flow Path – The path between an inlet opening and an exhaust opening that allows the movement of heat and smoke from a higher-pressure area within the fire area towards lower-pressure areas accessible via doors, windows and other openings.

9. Inside Division – Inside the fire area of the structure. This area would be the entire interior of a typical single-family dwelling. However, in a multi-family, commercial, or high-rise structure, this area may only be a portion or a floor of the structure. The tactical functions of fire attack, Inside Truck Work, backup lines, overhaul, and secondary search are performed in this area. This IMS assignment will normally be assumed by the Captain or Company Officer performing Inside Truck Work.


11. Lieutenant – A Lieutenant or Acting Lieutenant assigned to an Engine or other assigned apparatus.

12. Outside Division – Outside the fire area of the structure. This area would be the entire exterior of a structure of a typical single-family dwelling. However, in a multi-family, commercial, or high-rise structure, this area may also include sections or floors of the structure that are out of the fire area. The tactical functions of Outside Truck Work, exposure protection, water supply, RIC, and defensive operations readiness are performed in this area. This IMS assignment will normally be assumed by the Captain or Company Officer performing Outside Truck Work.


14. Pumping Apparatus – A vehicle equipped with a fire pump and hose for fire attack and water supply (Engine or Quint).

15. Team – A subset of a single Company comprised of two or more individuals who have been assigned a common task, are in communication with each other, coordinate their activities as a work group and support the safety of one another.

16. Standby – To place an apparatus at a designated location, perform any needed activities associated with standing by at that location and maintain a state of readiness until an assignment is received.

17. Rescue Unit – A utility apparatus that carries specialized rescue tools and equipment and is staffed with four members who maintain advanced levels of training and expertise in technical rescue disciplines.
18. Ventilation-Controlled Fire – The point in a fire’s growth when the size of the fire becomes limited due to the available oxygen.

B. Strategy and Tactics

1. All firefighting operations and emergency scene operations shall be conducted utilizing strategy and tactics. Strategies and tactics should be designed with the incident priorities as the overall focus for emergency operations.

2. A strategy shall be developed and shall center on satisfying the following objectives:
   a. Rescue – of trapped or threatened individuals.
   b. Exposure – ensuring exposure protection through protective hose lines, confinement, extinguishment or through moving the exposure.
   c. Confinement – of the fire or hazard to the smallest geographic area possible.
   d. Extinguishment – ensures all fire is extinguished.
   e. Overhaul – sitting through fire debris and extinguishing all traces of fire and ensuring complete fire extinguishment.
   f. Ventilation – the systematic removal of heat and smoke from an enclosed area to assist in fire attack and rescue operations, and to reduce property damage.
   g. Salvage – efforts made to save the occupants’ personal property and reduce the amount of fire and fire control damage.

3. These objectives are most often addressed simultaneously.

4. All strategies and tactics shall remain aligned and consistent with incident priorities. Life safety is the number one priority and simultaneous strategies may be employed to address this priority. A fundamental focus on firefighter safety must permeate all strategies and the tactic of occupant evacuation must always remain a viable option to address life safety.

C. Incident Management System

1. All firefighting operations and emergency scene operations shall be conducted under the direction of an Incident Commander (Command). An Incident Management System in accordance with the National Incident Management System (NIMS) will be established for all incidents.

2. The first Company Officer on scene shall assume Command and announce this event over the radio. Command shall normally be transferred to the next arriving Officer of higher rank or Officer of similar rank if that Officer is in a better position to manage the incident. All multiple alarm incidents shall have a Chief Officer as the Incident Commander. An Acting Battalion Chief shall not be in command of a multiple alarm incident. All transfers of Command must be announced on the fireground radio channel.

3. The jurisdiction in which the incident occurs ultimately retains the responsibility for that incident. For ongoing incidents, Command will be transferred to a Chief Officer of the home jurisdiction at a point deemed appropriate by the Incident Commander and a Chief Officer from the home jurisdiction.
4. The Incident Commander shall be responsible for expanding the Incident Management System to adequately manage the incident and address the incident priorities. Due consideration shall be given to filling the Command Staff (especially the Safety Officer) and the General Staff (especially the Operations Chief) positions.

5. As an incident escalates, the need for assigning Chief Officers to key functions becomes increasingly important. Incident Commanders should consider assigning Chief Officers to critical roles such as Operations and Planning. Experienced Company Officers should be utilized in other key roles such as Branch Directors and Division and Group Supervisors.

6. Incidents should be geographically divided as early in an incident as possible. The Incident Commander and/or the Operations Chief shall ensure the incident is adequately divided (refer to Section IV. M. of this SOG) and that Division Supervisors are assigned. The Division Supervisor can be the first arriving Company Officer in a particular Division.

7. Unified Command may be utilized during multi-agency/multi-jurisdictional incidents (refer to NIMS).

D. Size-Up

1. Size-up is the rapid mental evaluation of factors that affect an incident.

2. Size-up is a continuous process of evaluating current conditions by all on scene Officers.

3. The Incident Commander uses size-up information to select a strategy, determine tactics, and formulate an action plan.

4. The preferred method of sizing-up an emergency scene is to perform a “hot lap.” A hot lap is an exterior reconnaissance of the structure, performed while using a TIC, with the main goal of locating the fire, giving the Officer a 360° view of the incident. A hot lap of a structure fire will allow the Officer to size-up the fire location and size, smoke conditions, building size and layout, possible victim location, as well as other relevant information. The time spent correctly sizing-up the incident during a hot lap will be regained during interior operations led by an Officer with thorough knowledge of the emergency scene. Officers should use judgment in balancing the time spent on the hot lap due to building size or obstructions and the size-up information that may be gained. When practical, a 360° hot lap of the structure should be performed, but at a minimum three sides of the building including the fire location side should be observed for an accurate size-up.

5. When attempting to determine the fire location, the Officer should read the smoke conditions to identify the seat of the fire, especially if no flames are showing. The Officer should also consider if a blitz attack is possible and what method would be best for the blitz attack. Additionally, the Officer should consider the ventilation method to be utilized and what flow paths will be created by the opening of doors and/or windows (refer to AFD SOG A102 Ventilation).
6. The first-in Company Officer is responsible for providing an initial radio report of size-up conditions. Subsequent transfers of command between Incident Commanders should be accompanied by radio size-up reports.
   a. Size-up should address the following 3 basic questions:
      i. What do I have?
      ii. Where is it going?
      iii. What can I do to control it?
   b. The initial size-up radio report should contain the following elements:
      i. Assumption of command.
      ii. Announcement of fireground channel.
      iii. Summary of current conditions.
      iv. Current actions being taken.
      v. Directions for incoming companies

E. Risk Management

1. All incident operations require a risk management approach to ensure the highest probability for successful outcome without unwarranted risk to personnel.

2. All Incident Commanders should undertake a proper risk/benefit analysis. A risk/benefit analysis is a technique that compares the relative risk associated with a particular strategy or tactic with the expected gain or benefit of employing such a strategy or tactic. This risk/benefit analysis assists the Incident Commander in the formulation of the action plan. High risk/low benefit operations should be avoided and alternative strategies developed.

3. Because most structure fires will be in a ventilation-controlled state when firefighters arrive, a risk/benefit analysis must be performed before entering into a structure with a working fire inside. Firefighters should not be placed in a ventilation-controlled environment for fire attack due to the associated high risks, such as high heat, low visibility, a toxic IDLH atmosphere and the very likely possibility of rapid fire progression with the addition of oxygen from any opening. Instead, actions should be taken to remove the ventilation-controlled environment before entry for fire attack. These actions include proper ventilation, cooling with hose streams from the exterior and/or changing the fire attack entry point. If the decision is made to place a firefighter in a ventilation-controlled environment due to an imminent threat to life, the firefighter must close an interior door to prevent the creation of a flow path from the fire toward the firefighters' entry point.

4. The AFD Rule of Thumb for risk/benefit analysis is characterized by the following phrase:
   a. We will risk a lot, within a structured plan, to save a savable life.
   b. We will risk a little, within a structured plan, to save savable property.
   c. We will risk nothing to save nothing (lives or property that cannot be saved).
F. Placement of Apparatus

1. General – Unless otherwise directed, apparatus shall not block a roadway in the vicinity of a fire, nor will it block hydrants, intakes or other apparatus. Additionally, apparatus should not block access to entrances at large apartment, commercial, educational and industrial complexes. Blocking access for later arriving companies could have a detrimental impact on operations. The principal attack point should be left open and free of equipment as much as possible. Possible collapse zones must be considered when positioning apparatus.

2. Command Vehicle/Command Post (CP) – The Battalion Chief should park their vehicle in a location that affords the most advantageous observation of the emergency scene. They should take into account factors such as wind direction, topography, ease of being located and weather protection. The Battalion Chief's vehicle should leave sufficient room for activities and not block access to the scene. The CP should normally be at the “front” of the incident where the main action is taking place. Once established, the location of the CP should be reported to Fire Dispatch over the radio and the green-colored Command Post beacon should be activated.

3. Aerial Apparatus – The first due aerial apparatus should position for best use of the aerial ladder for rescue, if necessary. Other vehicles should not be placed immediately behind or next to the aerial apparatus so as not to hinder removing ladders or extending the stabilizers. Later arriving aerial apparatus should consider exposure protection and potential aerial apparatus use (rescue, elevated streams or observation) when positioning the apparatus. Aerial apparatus should be spotted close enough to structures to effectively deploy the aerial if needed. Consideration of placing aerial apparatus in the most advantageous position is of prime importance. It is a good practice to place the aerial apparatus so as to access more than one side of a structure (corner spots), or to spot the aerial apparatus between structures for exposure protection.

4. Pumping Apparatus – The first arriving Engine should position the apparatus completely past the attack entrance in order to observe additional sides of the structure, and also to clear the front of the structure for possible aerial operations and deployment of additional hose lines. The pumping apparatus that assumes the back up team function at an offensive fire attack should usually position to transfer tank water to the first pumping apparatus and to be used as a RIC dedicated water supply.

Pumping apparatus have greater flexibility than aerial apparatus in regard to placement. Pumping apparatus companies can be positioned further from an entrance and still effectively deploy hose lines, whereas aerial apparatus have the limiting factor of reach with the aerial. Later arriving pumping apparatus should standby at an appropriate hydrant and report their location to Command unless directed by Command to do otherwise. On the occasion that an Engine is assigned an aerial apparatus tactical function, the Engine should position near but not blocking the scene so that their tank water can be utilized if needed.
5. Quint – Usually, for multiple Company response incidents, a Quint will respond
and position as an aerial apparatus. When possible, Quints should position so
that two tactical functions could be accomplished with the apparatus. All other
apparatus positioning near a Quint should allow enough area for stabilizer
deployment on the sides and ground ladder removal from the rear. On the rare
occasion that a Quint is assigned only a pumping apparatus tactical function, the
Quint may position as a pumping apparatus.

6. Other Apparatus – Specialized apparatus should be located based on the
function to be performed. For example, at night the Rescue Unit should be
located so that its equipment can best be used to light the emergency scene, if it
can do so without blocking other apparatus. Other apparatus and vehicles should
be parked out of the way and in secure areas when left unattended.

G. Modes of Operation

1. One of the first decisions that must be made by the first-in Company Officer is
selecting the mode of operation. This mode of operation will be used to assign
the appropriate tactics and establish a command structure. The Incident
Commander should announce the mode of operation and any changes in the
mode of operation on the designated fireground radio channel.

a. Investigation Mode – Although not traditionally a mode of operation, often a
first arriving Company Officer will arrive on scene and need to investigate
further before selecting a mode of operation or giving tactical assignments.
In the initial radio report, the Officer shall communicate to all responding units
that the Company will be investigating.

i. Initial Tactical Assignments – The first pumping apparatus, first aerial
apparatus, Rescue and the Battalion Chief will respond to the scene to
investigate. The second pumping apparatus will respond to the scene
and prepare to establish a backup team for the firefighters inside the
structure in case the mode changes to offensive, while remaining at their
apparatus. The second aerial apparatus will standby at a location where
they could reposition if needed. Again, the crew should remain at their
apparatus. All other apparatus will standby, with pumping apparatus
locating hydrants, checking hydrants and announcing their location to
Command.

ii. Initial Command Structure – The first-in Company Officer shall assume
Command. If the first-in Officer is a Lieutenant, Command will transfer to
the Captain upon arrival of the aerial apparatus or Rescue responding to
the scene. Upon arrival, Command will then transfer to the Battalion
Chief. Command will be transferred to a Chief Officer of the home
jurisdiction at a point deemed appropriate by the Incident Commander
and a Chief Officer from the home jurisdiction.
b. Offensive Mode – Offensive Operations are characterized by aggressive interior activities. These operations are generally high risk as personnel are operating in the hot zone or interior of a structure fire. A blitz attack before interior entry can significantly reduce the risk to firefighters and any potential victims. Interior hose lines used for fire attack on the seat of the fire are associated with offensive operations. Unless there is an immediate need for rescue, no interior operations will begin until there are two personnel available outside the structure who can function as the outside team (refer to AFD SOG A104 Two-In/Two-Out). An offensive attack will be assumed at most standard structure fires. If Command believes that offensive operations cannot be carried out in safety, Command will declare a defensive attack mode.

i. Initial Tactical Assignments – The first arriving pumping apparatus and the first arriving Ladder/Quint/Rescue company will normally respond to the scene, conduct a scene size-up, perform a blitz attack when possible and timely, determine the ventilation method including establishing proper flow paths and then, when safe to enter, begin inside operations. When the first arriving pumping apparatus performs a blitz attack from a location which would significantly delay interior attack, the fire attack and backup assignments may need to be switched. The first Captain on scene of an offensive fire attack will ensure that the primary tactical functions of fire attack, backup, Inside Truck Work (forcible entry, horizontal ventilation, primary search, checking for fire extension, salvage) and water supply are assigned. Additional tactical functions such as evacuation, additional fire attack hose lines and exposure protection may be assigned as needed.

The second arriving pumping apparatus should respond to the scene and deploy a second hose line from the first pumping apparatus that will be used to establish a backup team for the firefighters inside the structure or, if necessary, assist with fire attack. The main reason for the second pumping apparatus responding directly to the scene is to position the backup team early in the incident for firefighter Safety. The secondary reason is to set up as a dedicated RIC Engine. Transferring tank water to the first pumping apparatus is a tactic that is used to extend tank water supply to the attack team until a hydrant supply can be established. The second pumping apparatus operator’s primary responsibility is to ensure an adequate water supply to the first pumping apparatus and the dedicated RIC Engine. The second pumping apparatus operator may choose to help set up the hydrant supply instead of transferring tank water to the first pumping apparatus if there is a hydrant close (approximately 50 feet or less) to the first pumping apparatus or if another pumping apparatus is in the process of laying a hydrant supply line to the first pumping apparatus. On the occasion where conditions require more than tank water for extinguishment or result in difficulty positioning apparatus due to limited access, the Incident Commander may deem it appropriate
to order the second arriving apparatus to lay a supply line from a hydrant

to the first arriving apparatus.

If a company has already been assigned as Inside Truck, the next arriving
Ladder or Quint company should normally respond to the scene and begin
outside operations as the Outside Truck. Additional pumping apparatus
should stay in standby at a hydrant, check the hydrant, and announce their
location to Command. A Rescue arriving after the Inside Truck has been
assigned will report on scene and stand by for assignment. Ladders or
Quints arriving after Inside and Outside Trucks have been assigned will
also report on scene and stand by for assignment. These companies will
be inserted into the Incident Action Plan by the Incident Commander
based on the needs of the incident. Possible roles include, but are not
limited to: assisting the Inside or Outside Divisions, RIC team
development, Division or Group Supervisor, Command Post
assistance/resource tracking, etc.

ii. Initial Command Structure – The first-in Company Officer shall assume

Command. If the first-in Officer is a Lieutenant, Command will transfer to
the first arriving Captain. Command will then transfer to the Battalion Chief
upon arrival. Command may be transferred laterally, between Officers of
the same rank, if it is beneficial for the incident. Any Officer in Command
may pass Command laterally if needed, as long as both Officers
acknowledge the transfer and exchange pertinent information. Command
will be transferred to a Chief Officer of the home jurisdiction at a point
deemed appropriate by the Incident Commander and a Chief Officer from
the home jurisdiction.

The first Captain will enter the structure and direct all inside operations
such as fire attack, primary search, horizontal ventilation, backup lines,
overhaul, salvage, etc. Upon transfer of Command, the Captain inside the
structure will assume Inside Division, and will direct all operations inside
the structure unless the interior is further divided.

As the incident progresses, it becomes advantageous for Command to
operate from the exterior of the fire building. Therefore, the first Captain
may pass Command to the second arriving Captain, if arriving before the
Battalion Chief. This Captain should remain outside the structure and
direct outside operations including Outside Truck Work (consisting of
laddering the building, vertical ventilation, utility control, additional forcible
entry, and salvage), exposure protection, water supply, RIC, defensive
operations readiness and any other tactical operations outside the fire
structure. Upon transfer of Command, the Captain outside the structure
will assume Outside Division, and will direct all operations outside the
structure unless the exterior is further divided. The second arriving
Captain will normally be assigned as an Outside Division Supervisor if
arrival is after the Battalion Chief.
All Offensive Operations will be under the direct supervision of and closely monitored by Division/Group Supervisors, the Operations Chief and/or the Incident Commander.

c. Defensive Mode – Defensive Operations are conducted when the risk/benefit analysis indicates that unacceptable risks to firefighters would result from offensive operations. These defensive operations are primarily characterized by exterior activities to confine and extinguish the fire, which are not necessarily passive but are designed to minimize risk to personnel. However, depending on circumstances, certain tactics used in the defensive mode may require entry into the structure such as VEIS and cut-off line placement. Defensive strategies should focus on personnel safety and incident stabilization. Special consideration should be given to keeping personnel out of collapse zones. The utilization of unmanned master stream devices (monitors, deck guns and aerial nozzles) should be considered in the defensive mode. In the initial radio report, the Incident Commander shall communicate to all responding units that they will be operating in the defensive mode.

i. Initial Tactical Assignments – The first pumping apparatus and the first aerial apparatus will respond to the scene and begin exterior operations. Consideration for positioning apparatus outside of the collapse zone should be conducted before LDH lines are laid and charged. The second pumping apparatus should respond to the scene and prepare to establish a large flow water supply. Consider a reverse lay to a nearby hydrant, and pumping from the hydrant back to the scene. The second aerial apparatus and Rescue should standby until given direction by Command. Additional pumping apparatus should standby, locating and checking hydrants, and announce their location to Command. The Battalion Chief will respond to the scene.

The first Captain on scene of a defensive fire attack will ensure that the primary tactical functions of exposure protection and water supply are assigned. Additional tactical functions, such as rescue, evacuation, cut-off lines and salvage may be assigned as needed. Achieving the necessary fire flow is a high priority at a defensive fire. Consideration shall be given to correctly setting up the water supply by directing such activities as positioning pumping apparatus at hydrants, relay pumping, or assigning a Water Supply Group Supervisor.

ii. Initial Command Structure – The first-in Company Officer shall assume Command. If the first-in Officer is a Lieutenant, Command will transfer to the first arriving Captain. Command will then transfer to the Battalion Chief upon arrival. Command may be transferred laterally, between Officers of the same rank, if it is beneficial for the incident. Any Officer in Command
may pass Command laterally if needed, as long as both Officers acknowledge the transfer and exchange pertinent information.

If arriving before the Battalion Chief, the first arriving aerial apparatus Captain on scene of a working structure fire with a defensive attack will assume Command and direct exterior operations. Upon transfer of Command, the Captain will normally be assigned to the Division in front of the structure. Command will be transferred to a Chief Officer of the home jurisdiction at a point deemed appropriate by the Incident Commander and a Chief Officer from the home jurisdiction.

The second arriving aerial apparatus Captain will normally be assigned to the rear of the structure and direct all activities in that Division.

d. Transitional Mode – Transitional Operations are those operations conducted as the incident strategy is switched from offensive to defensive or defensive to offensive. Any change in operational strategies shall be carefully communicated to all firefighters on the fireground.

i. Transitional Operations are undertaken when the continuing risk/benefit analysis indicates that a change in strategy is necessary, whether offensive or defensive.

ii. In order to ensure personnel safety, close coordination and supervision is necessary during Transitional Operations.

iii. A Personnel Accountability Report (PAR) shall be conducted anytime an incident strategy goes from offensive to defensive attack mode.

H. Company Level Accountability

1. The Company Officer must always be accountable for the location of all assigned firefighters. When a Company Officer divides a Company into one or more teams, the following conditions must be met for the Company Officer to maintain accountability:

a. The team must have a radio and a radio designation given by the Officer (Q27 Salvage Team, Q3 Search Team, etc.)

b. The team must be given a task level assignment only. (For example, the Officer develops the tactic of Fire Attack and assigns the task of advancing a hose line and extinguishing fire to the team.)

c. The team must report to the Company Officer Task Benchmark information so the Officer can measure task progress.

d. The team must report back to the Company Officer after the task is complete.

e. If the team were assigned to a different Division than their Company Officer, the team should check in with the Division Supervisor and report Task Benchmark information to that Division Supervisor. After the task is complete, the team should report back to the Division Supervisor and request permission to return to their Company Officer.
I. Benchmarks

1. Benchmarks are points of reference from which measurement toward the achievement of the Incident Priorities can be made. Any Company that is given a tactical assignment, whether by Standard Operating Guideline or by Command, must announce on the fireground radio channel their radio designation and the tactical function(s) they will perform.

   a. Tactical/Task Benchmarks: In order to allow measurement of progress, companies and teams must provide information to the Officer issuing the assignment. Information that should be communicated includes:

      i. Assumption or acknowledgment of assignment
      ii. Completion of assignment
      iii. Inability to complete assignment
      iv. Any significant delay in completing assignment
      v. The need for more resources to complete an assignment.

   The following are examples of tactical assignment benchmarks that should be communicated: “E1 is assuming Fire Attack,” “E1 on hydrant water supply,” “third floor evacuated,” “exposure B protected,” “not able to search second floor due to fire conditions,” etc. All communications must be acknowledged; a message not acknowledged is a message not received.

   Command Benchmarks: Command must also report benchmarks to Fire Dispatch for documentation in the incident record. The following benchmarks should be reported by Command to indicate progress in achieving the Incident Priorities.

      i. Life Safety (Firefighter)

         a) Outside Team Established – When the Outside Team is in place to monitor the safety of the Interior Team.

         b) Entry Size-Up – When firefighters prepare to make entry into a structure for fire attack, a report must be given of the interior conditions the firefighters will enter to advance towards the fire. The assessment of the interior conditions should be made with a TIC when possible.

         c) Backup Team Established – When a backup team is in place to protect the firefighters inside the structure. The location of the backup team should also be reported.
d) RIC Team Established – When the RIC team is in place with the RIC equipment and a hose line for firefighter rescue has been identified. The location of the RIC team should also be reported.

e) Safety Officer Assigned – When the assignment of Safety Officer is given. The person given the assignment should also be reported.

ii. Life Safety (Civilian)

   a) Primary Search Complete – When the initial search for victims in the fire area is complete. Whether any victims were found or not should also be reported.

   b) Secondary Search Complete – When the second, more thorough search of the fire area is completed by a Company other than the Company that completed the primary search. Whether any victims were found or not should also be reported.

iii. Incident Stabilization

   a) Fire Knocked Down – When the initial fire stream is applied to the main body of fire significantly reducing the flame and heat production. This includes when a blitz attack is used to knock down the fire from the exterior. Although knocking down a fire indicates significant progress toward incident stabilization, the hazards associated with a structure fire may still exist including the possibility of the rapid return of fire.

   b) Fire Under Control – When the forward progress of the fire is stopped, no additional units will be required and there is no imminent danger to firefighters.

   c) Fire Extinguished – When overhaul/extension search has confirmed that all fire is extinguished.

iv. Property Conservation

   a) Salvage Complete – When property damage from the fire and/or fire control activities is stopped.

J. Tactical Functions

   1. Fire Attack

       a. Whenever possible and timely, initial fire attack should be made on the fire from the exterior, followed by entry for an interior attack. If a fire is too large for quick knockdown, hose lines should be placed to cut-off and confine the
fire. However, in most instances, water applied to the fire can slow its progression while cutoff lines are placed. If multiple fire attacks from different directions are utilized, they must be coordinated to ensure firefighter safety.

b. Fire attack should be closely coordinated with ventilation efforts, especially in ventilation-controlled fire situations. Proper ventilation prior to hand line crew entry will make advancement to the seat of the fire faster and decrease the risk of flashover or other potentially dangerous thermal events. Proper ventilation creates a flow path from the fire attack entry point (higher pressure) towards the fire and out of the structure through an opening in the fire compartment (lower pressure). This is often most easily achieved by the use of PPV ventilation.

c. In situations where PPV ventilation cannot be used at the entry point or it is ineffective, firefighters must understand that their entry door is a ventilation opening and may cause a flow path for a ventilation-controlled fire. It is important to watch air movement before making entry. Heavy black smoke, smoke tunneling and a rapid rush of air may indicate a ventilation-controlled fire which, with the air from the opening of the door, may lead to rapid fire progression. Firefighters should not enter a ventilation-controlled fire because it places firefighters in a fuel-rich environment which may lead to rapid fire progression with any additional venting such as a window breaking or another door being opened. Furthermore, the firefighters are being unnecessarily exposed to the hazards of high heat, low visibility and a toxic IDLH environment. This type of fire attack tactic should be avoided for the life safety of firefighters. Instead, consider other options such as a different entry point, additional venting and/or aggressive cooling with fire streams from a safe location.

d. Hose line selection should be adequate for the particular strategy and tactic employed. For a hose line to be considered adequate, it must have the length and flow capabilities that are required. Careful consideration must be given to the hand line selected for deployment. The Officer in charge of fire attack should perform a hot lap of the structure to obtain information needed to make the correct hose line selection such as fire location, fire size, and structure size.

e. Preconnected hose lines are an effective tool for quick fire attack or to immediately effect rescue, protect means of egress, or protect exposures. However, the limiting factors of reach and amount of water delivered must be considered.

f. Bundles and 2½-inch hose should be considered for larger fires where greater versatility and more water are needed for rapidly escalating fire conditions. If there is not an immediate need for protecting means of egress or exposures, or the fire is beyond the control of a preconnected hose line, the first-in pumping apparatus should deploy bundles and 2½-inch hose in
order to more effectively prepare for an extended operation and probable fire extension.

g. When possible and timely, a blitz attack should be used to rapidly knock down a fire from the exterior of a structure to slow the fire growth and rate of spread in addition to creating safer conditions for interior fire attack. In order for a blitz attack to be effective, the volume of water delivered must supply greater cooling capacity than the amount of heat the fire is generating. Quickly and temporarily discharging a straight or solid stream toward the ceiling of the room containing the seat of the fire is a very effective technique for slowing fire growth and heat production and can be utilized when flames and/or heavy black smoke are issuing from a structure. A fog or “power cone” stream should not be used for a blitz attack due the negative impact it will have on the flow path of the fire, forcing the smoke and heat to move toward the interior of the structure. Rapidly moving a straight or solid stream in a circular pattern in a window can have the same negative effect and should also be avoided.

The methods used to employ a blitz attack include a deck gun, a rapid attack monitor (RAM), a preconnected hose line, or a bundle. The quick application of water on a fire from the exterior may reduce the risks associated with unimpeded fire growth and resulting structural deterioration that can occur during the preparation for an interior attack. The primary goal of the blitz attack is to hold the fire in check so that an interior attack can be made under more tenable conditions. Once an interior attack is initiated, the blitz attack should no longer be utilized. When a blitz attack is utilized, the mode of operation is normally considered to be the offensive mode.

Blitz attack may not be appropriate when:
  i. an interior attack on an incipient fire can be made safely and effectively
  ii. the rescue of a victim would be negatively impacted by a blitz attack
  iii. the location of the fire is unknown.

Blitz attack is appropriate when:
  i. a structure fire has visible flames or heavy black smoke venting from one or more openings.
  ii. in the absence of an imminent rescue, resources are insufficient to comply with “two-in/two-out.”
  iii. the time required to prepare for and make an interior attack will allow the fire to:
     a) reach a ventilation-controlled state
     b) reach flashover
     c) extend to uninvolved rooms
     d) extend to structural components
     e) extend to exposures.
h. Master streams should be employed when large volumes of water are required for control of large fires or for exposure protection. Master streams should be considered for defensive operations and anytime the risk/benefit analysis indicates hand lines pose an unacceptable risk to personnel.

i. The most widely used methods of fire attack and water application with hand lines are direct attack, indirect attack, and combination attack.

j. The direct attack is used when firefighters can locate and direct the fire stream on the seat of the fire. Solid or straight streams applied directly to the burning combustibles (the seat of the fire) generally characterize the direct attack. Direct attack is often employed when a large flow is required to counteract the high gas output of burning solid materials, thus cooling the major source of combustible gas production. Direct attack with straight or solid streams may also be effective where reach is a primary consideration. Another application of the direct attack involves ricocheting a solid or straight stream of water off an object (wall, ceiling and furnishings) onto the seat of the fire or superheated area above a fire. This ricocheting breaks up the pattern, creating water droplets that absorb heat, then turn to steam. Ricocheting also creates water droplets that should be of sufficient size to drop onto and cool the burning materials. A disadvantage of a direct attack is the possibility of increased property damage from excessive water and stream pressure damage.

k. Indirect attack is most often accomplished utilizing a fog pattern directed into an area of superheated gases and smoke above a fire. The fog pattern generates fine water droplets, which rapidly absorb heat and turn to steam. This steam expansion absorbs tremendous heat and serves to quickly cool and smother a fire. The indirect fog attack is a common method typically utilized in smaller enclosed compartment fires and should only be utilized when no firefighters or civilians are present in the compartment. An advantage of the indirect fog attack is the lessened property damage from excessive water and the preservation of the scene for investigative purposes. A possible disadvantage to an indirect fog attack is the close proximity to the fire and the subsequent generation of large volumes of steam. The steam expansion can disrupt the thermal layers and result in extreme heat conditions impacting firefighters or occupants.

l. The combination attack is used when a room is in post flashover conditions, with flames fully encompassing the room and obscuring the seat of the fire. This attack is a blend of the direct and indirect fire attack methods, with firefighters applying water to both the fuel and the atmosphere of the room. For a combination fire attack to be effective, the fire stream must penetrate the flames and heat to reach the burning material. The fire stream must also be absorbed and converted to steam by the superheated upper atmosphere. Therefore, the fire stream should be a solid, straight, or fog stream of less than 30°. This will enable the fire stream to reach the seat of the fire and still
be converted to steam. The solid and straight stream will be broken into smaller droplets as it strikes the walls and ceiling. The combination fire
stream should be applied onto the burning material and into the upper
atmosphere of the compartment. This is usually accomplished by moving the
fire stream in a Z, T, or clockwise O pattern.

m. An additional method of fire stream application is used to assist the fire attack
   team in advancing toward the seat of the fire. This technique is characterized
   by controlled nozzle bursts with a solid or straight stream directed in front of
   and overhead into the smoke and heat layer, cooling the walls and ceiling
   and potentially eliminating the likelihood of flashover. Advancement to the
   seat of the fire can continue while attempting to assure a higher degree of
   safety for the advancing hose line crew.

2. Inside Truck Work

   a. Support activities to save lives and property have traditionally been assigned
      to Ladder Companies and called “truck work.” However, any Company may
      be assigned the tactical function of truck work. When assigned Inside Truck
      Work, the following should be performed:

      i. Forcible Entry - Ensure that the fire attack team can enter the structure
          to perform an attack. Personnel shall take appropriate forcible entry
          tools to the entry door, and if necessary deliver power forcible entry
          tools from an aerial apparatus or Rescue to the scene.

      ii. Horizontal Ventilation - Ensure that ventilation is coordinated with
          the fire attack. Remove windows in the fire area to release heat and
          smoke and allow the fire attack team to move in for extinguishment.
          Use positive pressure ventilation when appropriate. Ensure a vent exit
          is made as close to the fire as possible, a fan is properly positioned at
          the entry door and running at high RPM’s and there is a clear path for
          air to flow from the entrance to the exit. (Refer to AFD SOG A102
          Ventilation.) The function may be shared with or completely assigned
          to the Outside Truck.

      iii. Primary Search - Begin primary search as soon as possible for the life
          safety of possible victims. The search should begin in the areas where
          victims are most likely located such as bedrooms, hallways, and near
          doors and windows. Conduct the search of these areas beginning at
          the place of most danger and moving toward a means of safe egress.
          Companies should “Vent for Life” as necessary while searching.
          When venting during search, use doors to isolate the search area from
          the flow path of ventilation for the fire area. Primary search includes
          both the search for victims and the search for fire extension. (Refer to
          AFD SOG A103 Search and Rescue at Fires.)
iv. Check for Fire Extension - After completing primary search, assist the fire attack team with the search for hidden fire. Open walls and ceilings, as necessary, to expose any fire extension.

v. Salvage - Take any necessary actions to protect and save as much property as possible in the fire area.

3. Outside Truck Work

a. Support activities to save lives and property have traditionally been assigned to Ladder Companies and called “truck work”. However, any Company may be assigned the tactical function of truck work. When assigned Outside Truck Work, the following should be performed:

i. Laddering the Building - Provide a secondary means of egress from the upper floors. Place aerial and ground ladders at windows on the upper floors and completely remove the window. “Turn the window into a door.” The effect of creating a ventilation opening should be considered and minimized by closing an interior door, if possible. Position ground ladders at a 60° angle with the tips of the beams just above the windowsill; this allows for the quickest and easiest exit for firefighters. A light stick or box light with a strap may be placed around the top rung and hung inside the window to identify the exit for firefighters. If needed, a search of the room may be completed. A sweep of the area under the windowsill should be performed as a minimum.

ii. Vertical Ventilation - In certain situations, the roof may have to be opened to allow the removal of smoke and heat. The roof type and condition must be identified before any roof operations begin. Once it is determined that roof operations are needed and safe to perform, a hole should be cut large enough to release the products of combustion. Vertical ventilation must be coordinated with fire attack. Immediately after the hole is cut, the firefighters should exit the roof. (Refer to AFD SOG A102 Ventilation.)

iii. Additional Forcible Entry - Provide secondary means of egress from the building for firefighters operating inside. The more exits from the structure, the safer it is for firefighters, and the more likely it is that the firefighters will be able to evacuate the structure should interior conditions rapidly deteriorate. In residential structures, the rear door should be opened. The effect of creating a ventilation opening should be considered and the door placed in the closed position when appropriate. If the structure has security bars, they may need to be removed in the area where firefighters are working.
iv. Additional Horizontal Ventilation - Ensure that additional ventilation is coordinated with the fire attack. If necessary, remove additional windows in the fire area to release heat and smoke to allow the fire attack team to move in for extinguishment. Use positive pressure ventilation when appropriate. Ensure a vent exit is made as close to the fire as possible, a fan is properly positioned at the entry door and running at high RPM's and there is a clear path for air to flow from the entrance to the exit. The function may be shared with or completely assigned to the Inside Truck or Fire Attack.

v. Utility Control - For firefighter safety, the utilities of gas and electric should be controlled as soon as possible during a working structure fire. Water should also be turned off if it is creating additional property damage. Although any Ladder/Quint/Rescue company may be assigned Utility Control in performing Outside Truck Work, the Rescue Specialist is still the subject matter expert on utility control and may be consulted for additional information.

vi. Salvage - Take necessary actions to protect and save as much property as possible outside the fire area.

4. Two-In/Two-Out

a. According to Texas law and AFD policy, whenever an offensive attack is made on an interior structure fire, two firefighters must remain outside the IDLH atmosphere and monitor the firefighters inside the structure. (Refer to AFD SOG A104 Two-In/Two-Out). However, it is not likely that this outside team would be in position or equipped to rescue a downed firefighter. Therefore, a backup team should be established as soon as possible to be able to assist the outside team in the event of a firefighter rescue.

5. Backup Team

a. The backup team should be in the same level of personnel protective equipment as the fire attack team, breathing SCBA air if necessary. A backup hose line should be deployed to the same entrance that the fire attack team entered and positioned to best protect the fire attack team, usually just outside the IDLH atmosphere. As long as the outside team personnel are in place, the backup team may position inside the IDLH atmosphere, if this will best protect firefighters. If the backup team must enter the IDLH atmosphere for firefighter rescue, the hose line can be used for protection. The Officer of the backup team should determine if the hose line should be charged prior to entry or after advancement to the desired location within the structure. Backup lines should be positioned to protect the firefighters working inside the structure and their means of egress. Protection of the interior stairways should be a high priority, especially when search
teams are above the fire floor without a hose line. If a hose line that was deployed as a backup line is used for any other reason, Command must be notified and another line should be deployed as a backup line.

6. Exposure Protection

a. Property conservation can often be achieved by quickly placing in service exposure protection hose lines. Streams from exposure hose lines should be flowed directly onto the exposure cooling the surface. Care must be taken so that the stream of water does not cause unnecessary damage. Personnel assigned to guard against fire extension via a partition wall or firewall shall not abandon the position unless they are relieved or the position becomes untenable. If they abandon the position because the conditions become untenable, Command must be notified immediately.

7. Water Supply

a. The Water Supply Group Supervisor is responsible for determining the water source and supply method to provide the necessary water for fire extinguishment. Water supply shall be adequate to meet the expected fire flow required.

b. The Fire Flow Formula to be used is as follows:

\[ \text{Fire Flow} = \frac{\text{the area involved (length x width)}}{3} \times \text{multiplied by the number of involved floors}. \]

c. For each exposure, add 25% of the calculated Fire Flow to the fire flow. This includes the exposed floor above that is not involved.

d. Fire flow is the expected maximum amount of water (stated in gallons per minute) needed to supply the various nozzles required to control and extinguish any given fire problem.

e. The fire load is the expected maximum amount of combustible material in a single fire area. It consists of the combustible structural elements and the combustible contents subject to a single fire loss; it is usually expressed in terms of weight of the combustible material per square foot of floor space.

f. Two separate water sources should be considered the minimum for any structure with evidence of fire upon arrival of AFD. Fire hydrants, pumping apparatus water tanks and static sources such as lakes or ponds are examples of sources of water. In all cases, the water sources must be able to provide the fire flow needed to extinguish the fire. Command should consider the fire size and stage along with the structure size, construction and occupany when determining the water sources. Command should be
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notified anytime the water source is changed, such as switching from tank to hydrant water supply or from hydrant water to tank supply.

g. Use the “1000/1000 Rule” for supply lines and master streams: when flowing 1000 GPM or greater, or when the attack pumping apparatus is 1000 feet or greater from the hydrant, a pumping apparatus should be positioned at a hydrant and pump from that hydrant. Whenever connecting to a hydrant, a 2 ½” gate valve should be placed on the hydrant so that the hydrant can be maximized, if necessary.

8. Rapid Intervention Company (RIC)

a. A Rapid Intervention Company must be assigned from the first alarm complement to ensure the highest level of safety possible for the firefighters. The RIC team should obtain the RIC equipment, deploy a dry hose line or identify an existing hose line that can be used and then announce that RIC has been established and its location. The RIC team will then assume the outside team responsibilities in accordance with the Two-In / Two-Out rule. The RIC team is responsible for monitoring the fireground for firefighter safety and performing proactive functions to reduce risk to firefighters. The RIC team must remain prepared to perform firefighter rescue, if needed. (Refer to AFD SOG A105 MAYDAY and Rapid Intervention Operations).

b. At structure fires, if the fire is quickly knocked down by one fire attack hose line and the backup team is in place outside the IDLH atmosphere, the backup team may serve as the RIC team. However, due to building size and/or occupancy, smoke conditions, rescues in progress, or other higher risk situations, Command may still choose to assign a RIC team to increase firefighter safety.

K. Staging Area

1. Command should announce an Incident Base and/or Staging Area location when requesting a multiple alarm and ensure that the companies responding on the multiple alarm are provided their response location on the alternate radio channel. (Refer to AFD SOG A713 Staging at Multiple Alarms.)

L. Multiple Alarms

1. All personnel with functional area responsibilities will wear incident identification vests. Incident identification vests are located in all Battalion Chief vehicles.

2. During multiple alarms, when the last pumping apparatus is committed, another alarm should normally be sounded. A pumping apparatus should always be held in reserve at a major incident until Command is confident that the incident is
winding down and is confident that operations can be handled by on-scene companies.

3. All personnel responding on a multiple alarm (including staff personnel) must check in at the CP or Staging, unless already given an assignment by Command. This accountability is required for the safety of everyone on the fireground. (Refer to AFD SOG B103 Firefighter Accountability).

M. Branch, Division, and Group Designation

1. The incident ground is divided for quick reference and clarity. NIMS recognizes three designations to denote fireground work groups (Branch, Division, and Group). AFD had traditionally used the term “Sector” to denote either a geographical area or functional area; however, NIMS uses “Division” for geographic areas and “Group” for specific functions. AFD personnel must use NIMS terminology, especially when multi-agency or multi-discipline response is involved.

2. Branches are major components within the Operations Section, established when the number of Division/Groups exceeds the recommended span of control.

3. Divisions are operational elements that may be assigned to vertical or horizontal geographical areas. Divisions that are assigned to specific horizontal geographical areas are designated according to their relationship to the building. The address side of the building is normally Division A. The sides are then designated, in a clockwise direction from the building address side, using the letters B, C, D, and others, as needed. For clarity of communication, the phonetic designations Alpha, Bravo, Charlie, Delta, etc. should be used. Some situations do not adequately lend themselves to a dividing scheme based on the building address. When this occurs, Command must determine the dividing scheme and communicate it to all companies. When designating a dividing scheme by a means other than the address side, it is beneficial to use a point of reference that is easily seen, such as “Alpha Division is the side where we are making fire attack” or “Bravo Division is the parking lot side,” rather than compass directions which can cause confusion. It is especially critical for personnel accountability that all Division Supervisors understand the dividing scheme, their Division assignment and the companies assigned to their Division. (Refer to AFD SOG B103 Firefighter Accountability). Divisions can also represent very large areas that are often divided by physical barriers such as creeks, highways or railroads.

4. Internal areas are designated using “Division” plus the number of the floor (Example: Division 6 = sixth floor). Further designation may be made by using the letters A, B, C, D, and E (other designations may be added for irregularly shaped buildings) to indicate different portions of the interior. Basements should be designated as “Subdivisions”, and numbered downward for additional levels below grade beginning with Subdivision 1.
5. Internal and external exposures are designated by the Division in which they are located.

6. Groups are responsible for specific tactical functions such as Search Group, Vertical Ventilation Group, Evacuation Group, Water Supply Group, etc. Groups are not limited to specific geographical areas.

7. When assigning Division/Group responsibilities, the Operations Chief or Command should brief the Division/Group Supervisor on the goals of the operation and the specific objectives to accomplish in that Division or Group and ensure that the Division/Group Officer is aware of the resources assigned. The Supervisor should also be assigned a radio designation.
<table>
<thead>
<tr>
<th>Tactical Assignments</th>
<th>Investigation</th>
<th>Offensive</th>
<th>Defensive</th>
<th>Mid-Rise Offensive</th>
<th>High-Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1&lt;sup&gt;st&lt;/sup&gt; Pumping Apparatus</strong></td>
<td>Investigate</td>
<td>Fire Attack</td>
<td>Confine Fire &amp; Protect Exposures</td>
<td>Fire Attack 1</td>
<td>Fire Attack 1</td>
</tr>
<tr>
<td><strong>2&lt;sup&gt;nd&lt;/sup&gt; Pumping Apparatus</strong></td>
<td>Prepare for Backup</td>
<td>Backup and Second Water Source</td>
<td>Water Supply for Large Flow</td>
<td>Fire Attack 2</td>
<td>Fire Attack 2</td>
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<tr>
<td><strong>3&lt;sup&gt;rd&lt;/sup&gt; Pumping Apparatus</strong></td>
<td>Standby hydrant</td>
<td>Standby hydrant</td>
<td>Standby hydrant – Water Supply</td>
<td>Water Supply</td>
<td>Lobby Control</td>
</tr>
<tr>
<td><strong>4&lt;sup&gt;th&lt;/sup&gt; Pumping Apparatus</strong></td>
<td>Standby hydrant</td>
<td>Standby hydrant</td>
<td>Standby hydrant</td>
<td>Standby hydrant</td>
<td>Lobby Control</td>
</tr>
<tr>
<td><strong>1&lt;sup&gt;st&lt;/sup&gt; L/Q/R</strong></td>
<td>Investigate</td>
<td>Inside Truck</td>
<td>Position for Master Stream</td>
<td>Inside Truck</td>
<td>Inside Truck</td>
</tr>
<tr>
<td><strong>2&lt;sup&gt;nd&lt;/sup&gt; L/Q/R</strong></td>
<td>Standby for Direction from Command</td>
<td>Outside Truck</td>
<td>Standby for Direction from Command</td>
<td>Evacuation</td>
<td>Recon</td>
</tr>
<tr>
<td><strong>3&lt;sup&gt;rd&lt;/sup&gt; L/Q/R</strong></td>
<td>Standby for Direction from Command</td>
<td>Standby for Direction from Command</td>
<td>Standby for Direction from Command</td>
<td>Ventilation</td>
<td>Logistics &amp; Systems Control</td>
</tr>
<tr>
<td><strong>4&lt;sup&gt;th&lt;/sup&gt; L/R/Q</strong></td>
<td>Outside Truck</td>
<td></td>
<td></td>
<td>Interior Staging</td>
<td></td>
</tr>
</tbody>
</table>

*If a Rescue arrives second in the Offensive Mode or first in the Defensive Mode, the Rescue should report on scene and stand by for direction from Command. The next arriving Ladder or Quint will take the tactical assignment not taken by the Rescue.*

*General Order A101: Appendix A*
Investigation Mode

Command

Safety Officer

Units Standing By

Inside Division

First Pumping Apparatus

First Aerial Apparatus

Responds Directly to Scene
- First Pumping Apparatus
- Second Pumping Apparatus
- First Aerial Apparatus
- Rescue
- Battalion Chief

Primary Tactics
- Investigate Interior

Secondary Tactics
- Investigate Exterior
- Investigate Roof
- Thermal Camera Use
- Evacuation

Transfer of Command
- First Officer
- First Captain
- Battalion Chief

General Order A101: Appendix B

Offensive Mode

Command

Safety Officer

Units Standing By

Inside Division

First Pumping Apparatus
- Fire Attack
- Backup Team
- Inside Truck Work

First Aerial Apparatus
- Second Pumping Apparatus
- Second Aerial Apparatus
- Rescue
- Battalion Chief

Primary Tactics
- Fire Attack
- Outside Truck Work
- Backup Team
- Water Supply

Secondary Tactics
- Outside Truck Work
- Exposure Protection
- RIC
- Salvage
- Secondary Search
- Evacuation

Transfer of Command
- First Officer
- First Captain
- Battalion Chief

General Order A101: Appendix C
Defensive Mode

Safety Officer → Command → Units Standing By

- Division In Front
  - 1st Pumping Apparatus
  - 1st Aerial Apparatus
- Division In Rear
  - 2nd Aerial Apparatus

Responds Directly to Scene
- First Pumping Apparatus
- Second Pumping Apparatus
- First Aerial Apparatus
- Rescue
- Battalion Chief

Primary Tactics
- Exposure Protection
- Water Supply

Secondary Tactics
- Recue
- Evacuation
- 2nd Water Supply
- Cutoff Hose Lines
- Master Streams
- RIC
- Salvage

Transfer of Command
- First Officer
- First Captain
- Battalion Chief

General Order A101: Appendix D
Appendix B: Regional Procedure #06

Incident Command System
Regional Procedure #06

Adopted by:
WCFCFA
May 2018

PURPOSE
Williamson County Fire Departments respond to a wide range of emergency incidents. To effectively manage personnel and resources during an incident and provide for the safety and welfare of personnel, the Williamson County Fire Chiefs Association (WCFCFA) agree to always operate within the parameters of the Incident Command System. While each member of the WCFCFA has their own Standard Operating Procedures related to the Incident Command System, this Regional Procedure outlines the processes to be employed at a minimum in establishing the COMMAND components of the Incident Command System and applicable components of the National Incident Management System (NIMS) while utilizing the “Blue Card Hazard Zone Management System”.

BACKGROUND
The WCFCFA “Incident Command System” procedure is a cooperative effort between all members to ensure personnel and resources are effectively and efficiently managed in a like manner across Williamson County. Fire Departments must always start all emergency responses in a standard manner, basing their actions on a standard set of critical factors, in order to achieve a standard incident outcome. Every incident is different. The things that protect firefighters from these different, every time incident elements, is the command system used to manage hazard zone operations. It must be used and applied the same way, for every incident. This prevents the incident from managing the responders. When operating within Standard Operating Procedures, responders can effectively manage the incident while protecting members operating inside the hazard zone.

DEFINITIONS
Abandon the Structure: a term used to accomplish an emergency retreat where all hose lines and equipment are left in place and all personnel in the hazard zone will exit the structure as quickly as possible and report a PAR upon exit.

COMMAND: The incident commander or the incident command function.

Companies/Crews: Groups of firefighters or other responders.

Emergency Traffic: Information that must be shared immediately (trapped/lost firefighter, change in strategy, etc.).

Evacuate the Structure: An orderly, methodical withdrawal of interior lines, equipment and personnel to establish a PAR and transition to a defensive strategy. “All companies from COMMAND. Evacuate the structure. We will be transitioning to a defensive strategy.”

Exit the Structure: Used when ordering crews or divisions to accomplish task at a different location. This term is not to be used when transitioning strategies or removing crews from a hazard zone. It is NOT interchangeable with “Evacuate” or “Abandon.”
**Follow up report:** Should be given after the completion of a 360. Report should include any changes to the IAP, and any information that differs from the initial radio report/size up. If a 360 cannot be completed due to size or access, that message must be transmitted.

**Immediate Danger to Life and Health (IDLH) Atmosphere:** An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

**Initial Rapid Intervention Crew (IRIC):** A minimum of two members to provide a rapid rescue of firefighters operating in an IDLH atmosphere in the initial stage of an incident (2-in / 2-out).

**Incident Stage Fire:** A fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, Class II standpipe, or small hose systems without the need for protective clothing or breathing apparatus. Any interior structure fire beyond the incipient stage is considered to be an IDLH atmosphere.

**Level 1 Staging:** Arriving resources to stage in an uncommitted position, staged in a direction relative to the scene, but without passing the last tactical priority (i.e., hydrant/water-supply, access point, etc.).

**Level 2 Staging:** A centralized staging location, adjacent to the incident scene where later arriving resources will assemble. Often a separate radio channel, and Staging Officer will be assigned.

**On-Deck:** A forward staging position located just outside the immediate hazard zone, safely distanced from the entrance of a tactical position/SDG.

**Operation/Command Channel(s):** Radio channel designated for COMMAND to communicate with greater alarm companies, staging, rehab and the fire alarm center once an additional alarm has been requested. This channel should be designated upon the request of an additional alarm or at the request of the COMMAND.

**PAR:** A Personnel Accountability Report (PAR) involves a roll call and confirmation that all personnel assigned to a crew, or multiple crews assigned to one (1) geographic area of the hazard zone working under the supervision of one (1) tactical boss, are accounted for and have an adequate air supply to safely exit the hazard zone. Reports of PAR's should be conducted face-to-face within the SDG or company/crew and transmitted as one entire report whenever possible.

**Passport Accountability System:** When properly used, the passport accountability system will increase firefighter safety and provide the Initial Accountability Officer and SDG Supervisors with a means to track the location and function of all firefighters working in a hazard zone.

**Priority Traffic:** Information that should be shared as soon as possible (conditions, actions, needs).

**Rapid Intervention Crew (RIC):** A rapid intervention crew shall consist of at least two members and shall be available for rescue of a lost or trapped firefighter. Each RIC shall be fully equipped with protective clothing, protective equipment, SCBA, and any specialized rescue equipment that could be needed given the specifics of the operation underway.

**Reecyle:** A function to rehydrate crews and replenish breathing air supplies to prepare them to return to the work cycle while maintaining accountability to their current Division/Assignment.
Rehab: An assignment to a formal rehab location (close to the emergency scene) where companies/crews/crews will be decontaminated, medically evaluated, rehydrated, and replenished. All WCFCA members shall pass through Rehab prior to demobilization or release.

Sector/Division/Group (SDG): A smaller, more manageable unit of incident scene organization that may be assigned by their geographic location (Division) [i.e., North, South, etc.], function (Group) [i.e., Ventilation, Fire Attack, etc.], or both (SDG).

Size up report/Initial Radio Report: Should include building size/height, occupancy type, event description (conditions), action taken, and declared strategy, as well as the assumption of Command.

Tactical Channel(s): Radio channel designated for COMMAND to communicate with Division/Assignment supervisors and for Division/Assignment supervisors to communicate with crews performing tasks and tactical objectives to accomplish the IAP. Most commonly the channel the incident was dispatched on.

Type 5 Incidents: The incident can be handled with one or two single resources with up to six personnel, Command and General Staff positions (other than the Incident Commander) are not activated. No written Incident Action Plan (IAP) is required. The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene.

Type 4 Incidents: Command staff and general staff functions are activated only if needed. Several resources are required to mitigate the incident, including a Task Force or Strike Team. The incident is usually limited to one operational period in the control phase. The agency administrator may have briefings and ensure the complexity analysis and delegation of authority are updated. No written Incident Action Plan (IAP) is required but a documented operational briefing will be completed for all incoming resources. The role of the agency administrator includes operational plans including objectives and priorities.

PROCEDURE
COMAND Procedures are designed to:
A. Place the responsibility of COMMAND on a certain individual through a standard identification system, depending on the arrival sequence of members, companies/crews, and COMMAND officers.
B. Ensure that a strong, direct, and visible COMMAND will be established from the onset of the incident.
C. Establish an effective incident organization defining the activities and responsibilities assigned to COMMAND and the other individuals operating within the Incident Command System.
D. Provide a system to process information that supports incident management, planning, and decision-making.
E. Provide a system for the orderly transfer of COMMAND to subsequent arriving officers.
F. Ensure a seamless transition from a Type 5/4 incident to a Type 3/2/1 (NIMS) incidents.
Responsibilities of COMMAND
A. COMMAND is responsible for the completion of the Tactical Objectives. The Tactical Objectives are:
   1. Life Safety
   2. Incident Stabilization
   3. Property Conservation
   4. Systems Restoration

B. The Incident Command System is used to facilitate the completion of the Tactical Objectives. COMMAND is the person who drives the system towards that end. COMMAND is responsible for building a structure that matches the organizational needs of the incident to achieve the completion of the Tactical Objectives for the incident.

Functions of COMMAND
A. Standard activities that are performed by COMMAND to achieve the Tactical Objectives include:
   1. Assume and announce COMMAND and establish an effective initial COMMAND Post (CP).
   2. Rapidly evaluate the situation (size up).
   3. Initiate, maintain, and control effective incident communications.
   4. Provide and manage a steady, adequate, and timely stream of appropriate resources.
   5. Identify the incident strategy, develop an Incident Action Plan (IAP), and assign companies/crews and personnel consistent with plans and Standard Operating Procedures.
   6. Develop an effective incident organization using SDGs to decentralize and delegate geographic and functional responsibility.
   7. Review, and revise (as needed) the strategy to keep the IAP current.
   8. Provide for the continuity, transfer, and termination of COMMAND.

B. COMMAND is responsible for all these functions. As COMMAND is transferred, so is the responsibility for these functions. The first six (6) functions must be addressed immediately from the initial assumption of COMMAND.

Establishing COMMAND
A. The first fire department member or unit to arrive at the scene shall assume COMMAND of the incident. The initial Incident Commander shall remain in COMMAND until COMMAND is transferred, or the incident is stabilized, and COMMAND is terminated.
B. The radio designation “COMMAND” will be used along with the occupancy or address of the incident. This designation will not change throughout the duration of the incident. The designation of “COMMAND” will remain with the officer currently in COMMAND of the incident or with the person COMMAND was transferred to throughout the event.

C. The standard Initial Radio Report includes:

1. On-Scene Report
   a. Clear alarm;
   b. Unit designation/on the scene;
   c. Building/area description;
   d. Obvious problem/conditions;
   e. Action taken;
   f. Declaration of Strategy;
   g. COMMAND confirmation with name.

2. Follow-up Report
   a. Any immediate safety concerns;
   b. Accountability started (announce the initial accountability location);
   c. Disposition of resources (hold/add/return);
   d. Disposition of IRIC.

COMMAND Options
A. The responsibility of the first arriving unit or member to assume COMMAND of the incident presents several options, depending on the situation. If a member or unit without tactical capabilities (i.e. staff vehicle, personal vehicle, no equipment, etc.) initiates COMMAND; the establishment of a CP should be a top priority. The following COMMAND options define the Officer’s direct involvement in tactical activities and the modes of COMMAND that may be utilized.

1. Investigative Mode (Nothing Showing);

2. Fast Attack;

3. COMMAND Mode – Stationary CP that may include tactical worksheet/boards.
Transfer of COMMAND

A. COMMAND is transferred to improve the quality of the COMMAND organization. When COMMAND is transferred, it should trigger upgrades in the COMMAND structure. Using a standard routine for both establishing and transferring COMMAND creates the capability within the responding units for COMMAND to effectively and safely establish and continue COMMAND. Using a fast attack (COMMAND #1) in the initial stages of an offensive incident, and then having a subsequent arriving response (COMMAND #2) transfer, strengthens, and continues COMMAND within the IAP from an upgraded CP.

B. In certain situations, it may be advantageous for the first arriving COMMAND (i.e. Company Officer) to transfer COMMAND to the next Company on-scene. This is indicated when the initial commitment of the first arriving Company requires a full crew (i.e., high-rise or an immediate rescue situation) and another Company or COMMAND Officer is on the scene. When a Chief Officer arrives at the scene at the same time as the initial arriving Company, the Chief Officer should assume COMMAND of the incident.

   1. “Passing COMMAND” to a unit that is not on the scene creates a gap in the COMMAND process and compromises incident management and safety. To prevent this “gap”, COMMAND shall not be transferred to an individual who is not on the scene.

C. Should a situation occur where a later arriving officer cannot locate or communicate with COMMAND (after several radio attempts), they will assume and announce their assumption of COMMAND and initiate whatever actions are necessary to confirm the safety of the missing crew.

D. COMMAND will not transfer to the IMT (Type 1/2/3) unless a formal written Delegation of Authority has been signed by both the AHJ and the IMT.

E. The arrival of a ranking Officer on the incident scene does not mean that COMMAND has been automatically transferred to that Officer. COMMAND is only transferred when the Transfer of COMMAND process has been completed. The person being relieved of COMMAND will be assigned to the best advantage by the Officer assuming COMMAND.

F. A ranking Officer may elect to have a subordinate continue the role of COMMAND. In cases where an individual is working effectively at an incident, and satisfactory progress is being made to bring the incident under control, it may be desirable for that person to continue in an active COMMAND role. The ranking Officer must determine that COMMAND is completely aware of the position and function of operating companies/crews and the general status of the situation. In these cases, the arriving ranking Officer may assume a supportive role in the overall COMMAND organization.

G. The response and arrival of additional COMMAND officers strengthens the overall COMMAND organization. As the incident escalates, COMMAND should use these officers to fill SDG positions. COMMAND should consider adding a COMMAND officer to any SDG with three or more operating companies/crews.

H. When the first arriving unit is a COMMAND Officer, efforts should be automatically directed towards establishing a CP and fulfilling the COMMAND functions. COMMAND Officers should eliminate all unnecessary radio traffic while responding, unless such communications are required to ensure that COMMAND functions are initiated and completed. This requires an initial clear radio report and updated progress reports as needed.
L. COMMAND is responsible for managing the incident. The fire department empowers COMMAND with the authority to turn his/her decisions into actions (develop an IAP and assign companies/crews).

**Company/Crew Deployment**

A. COMMAND must always provide a steady, adequate stream of resources for the required tasks based on the incident’s critical factors. This model provides workers that are in the hazard zone, workers ready to go to work right outside of the hazard zone, and replacement workers waiting for an assignment in staged positions. This involves COMMAND first requesting/acquiring and then effectively and proactively assigning later arriving units to On-Deck positions while keeping a tactical reserve in staged positions.

1. First Layer - the initial arriving workers who have been assigned into and are working in the hazard zone.

2. Second Layer - After these key tactical positions have been covered, subsequent arriving units are assigned to On-Deck positions at the entry points already utilized by initial arriving Unit’s. This gives COMMAND a rapidly assignable resource and SDG support in the form of On-Deck companies/crews.

3. Third Layer - Once all of the critical tactical areas are adequately backed up with On-Deck Units, subsequent arriving units will either Level 1 or 2 Stage. These staged Units now give COMMAND the tactical reserve needed to replace companies/crews or to back fill any companies/crews addressing a sudden incident problem.

C. COMMAND and/or the SDG officer may lose direct accountability of these companies/crews while they are In-Transit. It is the responsibility of the company officer to monitor the tactical radio channel while In-Transit. Upon arrival at the assignment area the company officer must provide a radio announcement to COMMAND or report face to face with the SDG Officer that the company is intact and in the assigned area.

**On-Deck**

A. Once COMMAND has deployed units to the critical SDGs around the incident scene, COMMAND must then take a proactive aggressive approach to assigning additional resources to those SDGs. This is best achieved by assigning staged resources as On-Deck crews to those areas as soon as they arrive in staged positions. Layering On-Deck crews around the fire ground will also provide COMMAND with the tactical reserves to manage the standard work cycle or sudden and unexpected incident events.

B. Assigning On-Deck crews is done simply by contacting a staged company and directing them to go On-Deck in a specific geographic location or SDG. A crew assigned to an On-Deck position will need to park their apparatus in a manner that doesn’t block access to the scene. Crews must be intact with full PPE, forecast the need for and collect all the necessary tools/equipment and report directly to their assigned location. Upon arrival, the On-Deck company/crew must contact COMMAND or their SDG Officer and inform them that they are in position and ready to go to work.

C. On-Deck crews must remain intact, in a ready state and monitor the tactical channel at all times.
D. When an On-Deck crew is used as a relief crew, the Company Officer should do a face to face and transfer information with the officer exiting the structure.

**Recycling / Rehabilitation**

A. Companies/crews operating within a SDG will require the refilling of air bottles and fluid replacement in predictable time frames. At large scale incidents COMMAND will establish at least 1 Rehab SDG. Most of the time, crews that are assigned to rehab will be placed back in service after rehabbing.

B. If conditions permit, a company/crew work cycle could be up to 2 to 3 air cylinders. To maintain a steady stream of resource in critical SDGs, crews being relieved and exiting their SDG should recycle themselves in a timely manner. Companies/crews being relieved and recycled will remain in their assigned SDG, refill their air supply, and re-hydrate then report back to their SDG officer or the IC that they are ready to go back to work.

C. Company officers should forecast the length of time they will be working in an assigned SDG and should bring spare air cylinders if necessary. The SDG Officer may need to request additional resources to replace On-Deck crews or have recycled crews assume vacated On-Deck positions.

D. SDG and company officers are responsible to monitor the welfare of their personnel at all times and determine if SDG recycling or a formal rehab is appropriate.

E. Rehabilitation (Rehab) should operate on a MED channel and will inform the CP when they are close to the scene. COMMAND or LOGS will inform the rehab unit where to set up on the incident site. The Rehab officer is usually the individual who drove the rehab unit to the scene, but the Rehab officer should be upgraded as required. All necessary medical personnel shall be assigned to Rehab to monitor members’ welfare.

F. SDG officers and company/crew officers working a hazard zone are responsible to monitor the welfare of their personnel always and determine if SDG recycling or a formal rehab is appropriate. When a formal rehab is appropriate, the SDG officer or the company officer will notify COMMAND of a status change and the re-assignment of a Unit(s) to Rehab. The COMAMND must notify the Rehab officer of all units who are re-assigned to Rehab.

**Level 1 Staging**

A. Level 1 Staging procedures are in effect for all units dispatched on an assignment. Level 1 Staging procedures are automatically activated when the officer of the initial arriving unit clears dispatch to give their initial radio report and assumes COMMAND. This action causes all later arriving resources to Level 1 stage in an uncommitted position and announces that they are Level 1 staged in a direction related to the scene over the tactical radio channel.

**Level 2 Staging**

A. Level 2 staging procedures are used for greater alarm assignments.
COMMAND Structure

A. It is the responsibility of COMMAND to develop an organizational structure, using Standard Operating Procedures, to effectively manage the incident scene. The development of the organizational structure should begin with deployment of the first arriving fire department unit and continue through a number of phases, depending on the size and complexity of the incident. The COMMAND organization must develop at a pace which stays ahead of the tactical deployment of personnel and resources. In order for COMMAND to manage the incident, he/she must first be able to direct, control, and track the position and function of all operating Companies/crews. Building a COMMAND organization is the best support mechanism COMMAND can utilize to achieve a balance between managing personnel and incident needs. COMMAND should have more people working than Commanding.

B. The basic configuration of COMMAND includes three levels:

1. Strategic Level - Overall direction of the incident.
2. Tactical Level - Objectives assigned to SDG.
3. Task Level - Task objectives assigned to Company/Crew.

COMMAND Structure - SDG Basic Operational Approach

A. COMMAND must develop and build an organization that matches the deployment of resources to the incident scene. The IC accomplishes this by breaking the incident scene down into manageable subunits. SDG managed by SDG Officers. As SDGs are implemented, COMMAND continues to operate at the strategic level, determining the overall strategy and Incident Action Plan to deal with the incident.

B. When the number of SDG exceeds the span of control that COMMAND can effectively manage, the Incident Organization should be divided to Branches. Each Branch is responsible for several SDG and should be assigned a separate radio channel. Once effective SDG’s have been established, the IC can concentrate on the overall strategy, IAP management, evaluation, and resource allocation. Each of the SDG officers becomes responsible for the tactical deployment of the resources assigned to his/her SDG and communicating needs and progress back to COMMAND.

C. COMMAND should assign SDG’s based on the following factors:

1. When the number of assigned and operating companies/crews threatens to overload COMMANDs span of control. Direct tactical-level control should be delegated (earlier than later) to SDG officers before the ability of COMMAND to manage is exceeded.
2. When COMMAND forecasts that the situation will become a major operation, soon exceeding his/her span of control.
3. When companies/crews are involved in complex operations (Large interior or geographic area, hazardous materials, technical rescues, etc.).
4. When companies/crews are operating from tactical positions which COMMAND has little or no direct control over (i.e. out of sight).
5. When the situation presents special hazards and close control is required over operating companies/crews (i.e., unstable structural conditions, hazardous materials, heavy fire load, marginal offensive situations, etc.).

6. Name the SDG according to its function or geographical location.

D. When establishing SDG, COMMAND will assign each SDG Officer:

1. Tactical Objectives.

2. A radio designation (i.e., Roof Division, Ventilation Group, East Sector, etc.)

3. The identity of resources assigned to the SDG.

E. SDG will be regulated by the following guidelines:

1. It will be the ongoing responsibility of COMMAND to assign SDGs as required for effective emergency operations; this assignment will relate to both geographic and functional SDGs.

2. COMMAND shall advise each SDG Officer of specific Tactical Objectives. The overall strategy and plan should be provided (time permitting), so that the SDG Officer has some idea of what's going on and how his assignment fits in.

3. The number of companies/crews assigned to a SDG will depend upon conditions within that SDG. COMMAND will maintain an awareness of the number of Companies/crews operating within a SDG and the capability of that SDG Officer to effectively direct operations. If an SDG Officer cannot control the resources within the SDG, he/she should notify COMMAND so that SDG responsibilities can be split or other corrective action taken. During offensive fires five (5) companies/crews represents a reasonable maximum span of control for a SDG Officer. During defensive fires seven (7) companies/crews represents a reasonable maximum span of control.

4. SDGs assigned to specific operating areas will be designated by A, B, C, or D, pronounced: Alpha, Bravo, Charlie and Delta respectively. Alpha would be the front (street address side) of the building and the others would go clockwise around the building in alphabetical order. In multi-story occupancies, Divisions will usually be indicated by floor numbers. In some cases, the floor identification may be subdivided into geographic areas such as Division 15 East or Division 15 West depending on stairwell and floor access. Functional SDGs will be identified by the function (i.e., Loss Control, Safety, Ventilation, etc.). SDG Officers will use the SDG designation in radio communications (i.e. COMMAND from North Division, etc.).

G. In many cases, the initial SDG responsibility will be given to the Company Officer who receives the initial assignment to a basic tactical position or function (north, treatment, roof, etc.). As the incident expands, COMMAND Officers will be assigned SDG responsibilities.

1. COMMAND will assign a COMMAND Officer to assume SDG responsibilities as soon as possible.
H. Regular Transfer of COMMAND procedures will be followed in transferring SDG responsibility. In some cases, a SDG Officer may be assigned to an area/function initially to evaluate and report conditions and advise COMMAND of needed tasks and resources. The assigned Officer will proceed to the SDG, evaluate and report conditions to COMMAND, and assume responsibility for directing resources and operations within his/her assigned area of responsibility.

I. The SDG Officer must be in a position to directly supervise and monitor operations. This will require the SDG Officer to be equipped with the appropriate protective clothing and equipment for his/her area of responsibility. The SDG Officer should be readily identifiable and maintain a visible position as much as possible.

J. SDG Officers will be responsible for the following basic functions:

1. Directly supervise work in the SDG;
2. Monitor personnel safety, accountability, and welfare;
3. Develop a SDG IAP that integrates into the overall IAP;
4. Monitor work progress;
5. Redirect activities as necessary;
6. Coordinate actions with related activities, and adjacent SDGs;
7. Request additional resources as needed (On-Deck crews etc.);
8. Manage MAYDAYs within the SDG;
9. Advise COMMAND of situation status, changing conditions, progress, completion, and exception reports;
10. Re-allocate resources within the SDG;
11. Provide information for both formal and informal After-Action Reviews (critiques);
12. De-commit companies/crews as operations are completed.

K. The primary function of a Company Officer working within a SDG is to direct the operations of their individual crews in performing assigned tasks. Company Officers will advise their SDG Officer of work progress, preferably face-to-face. All requests for additional resources or assistance within a SDG must be directed to the SDG Officer. SDG Officers will communicate with COMMAND. Each SDG Officer will keep COMMAND informed of conditions and progress in the SDG through regular progress reports. The SDG Officer must prioritize progress reports to essential information only.

L. COMMAND must be advised immediately of significant changes, particularly those involving the ability or inability to complete an objective, hazardous conditions, accidents, structural collapse, etc. When a Company is assigned from Staging to an Operating SDG, the Company will be told what
SDG and which SDG Officer they will be reporting to. The SDG Officer will be informed of which particular companies/crews or units have been assigned by COMMAND.

1. It is then the responsibility of the SDG Officer to contact the assigned Company to transmit any instructions relative to the specific action requested.

2. SDG Officers will monitor the condition of the crews operating in their SDG. Relief crews will be requested in a manner to safeguard the safety of personnel and maintain progress toward the SDG objectives.

M. SDG Officers will insure an orderly and thorough reassignment of crews to Rehab SDG. Crews must report to rehab intact to facilitate accountability.

COMMAND Structure - Expanding the Organization: Branch Officers

A. The Branch level of the organization is designed to provide coordination between the SDG and COMMAND. Adding Branches to the incident organization decreases the communication load on COMMAND. Branch officers supervise and manage a number of SDG Officers, and report to COMMAND.

B. As the incident organization grows in complexity, and the span of control with SDG is maximized, COMMAND may determine that an additional intermediate level within the organization is needed. COMMAND will be working in a stationary CP has the responsibility to decide whether or not to expand the organization to include branches.

1. Strategic Level - COMMAND

2. Coordination Level - Branch Officers

3. Tactical Level - SDG Officers

4. Task Level - Companies/crews/Crews

C. Branch Officers should be utilized at incidents where the span of control with SDGs is maximized or incidents involving two or more distinctly different major management components (i.e. a large fire with a major evacuation, a large fire with a large number of patients). COMMAND may elect to assign Branch Officers as forward positions to coordinate the activities between SDG.

D. The intent of the Branch Level of the COMMAND structure is to split an incident into manageable components and reduce the span of control. Branch Officers will normally be utilized at very large scale incidents that involve two or more major components. The following types of incidents are examples where Branch Officers should be utilized:

1. A hazardous materials incident that requires a major evacuation;

2. A large-scale incident spread over a wide geographic area;

3. An incident with mass casualties and a significant hazard (for example: fire, Haz mat, plane crash, floods, etc.);
4. High-rise fires;
5. Any incident where the number of SDGs exceed the span of control that can be effectively managed by COMMAND.

E. Branch Officers manage and direct activities of SDG Officers. Branch Officers operate on the Tactical Channel when sending or receiving information from COMMAND. The radio designation of Branch Officers should reflect the function or geographic area of the Branch (for example: Fire Control Branch, Medical Branch, West Branch, etc.). When COMMAND Implements Branch Officers the IC will assign a separate radio channel (not the tactical channel) for communications within the Branch. SDG Officers should be notified by COMMAND of their new supervisor. This information should include:

1. What Branch the SDG is now assigned to;
2. The radio channel the branch (and SDG) is operating on;
3. Radio Communications will then be directed from the SDG Officer to the Branch Officer. SDG officers will still use the radio designation of COMMAND when contacting their Branch Officer. SDG Officers will relay Branch and radio channel information to the Companies/crews working in their SDG;
4. When providing radio information to the companies/crews in their SDG, SDG officers should obtain a PAR and insure that all members working in the SDG are operating on the assigned radio channel.

F. Branch Officers positions should be assigned to Chief Officers. Branch Officers operate in forward positions. They should utilize a COMMAND Officer’s vehicle as a forward Branch CP (when feasible). In these situations, COMMAND must assign Officers in the CP to monitor each Branch radio channel.

G. Branch Officers are not limited to Operations. Any of the Section Officers may implement Branches within their individual sections as needed.

COMMAND Structure - Expanding the Organization: Section Chiefs
A. As a small incident escalates into a major incident, additional organizational support will be required. As additional ranking Officers arrive on the scene, the CP organization may be expanded through the involvement of COMMAND Officers and staff personnel to fill section positions. Section Chiefs assist the COMMAND Staff with the long-term management of the incident and operate at the Strategic Level. COMMAND implements Sections as needed, depending on the situation, and priority of needs. These Sections are known as the General Staff.

B. Where the communications system permits, Section Chiefs should operate on separate radio channels and utilize the radio designation that identifies their section (PLANS, LOGS, etc.). During the initial phases of the incident COMMAND and his/her staff normally carry out these five section functions. The Fire Department’s involvement and needs at the incident scene can be divided into five sections. They are:
1. **Logistics (LOGS) Section:** The support mechanism for the organization. Logistics provides services and support systems to all the organizational components involved in the incident. COMMAND may assign LOGS its own radio channel. The LOGS Chief may establish SDGs or branches for his/her section as needed.

2. **Planning (PLANS) Section:** Responsible for gathering, assimilating, analyzing, and processing information needed for effective decision-making. Information management is a full-time task at large and complex incidents. The Planning Section serves as COMMAND's "clearing house" for information. This allows COMMAND to have a single person provide him/her with information instead of having to deal with dozens of information sources.

3. **Operations (OPS) Section:** Responsible for the tactical priorities, accountability, safety and welfare of the personnel working in the Operations Section. The Operations Section Officer uses the tactical radio channel to communicate strategic and specific objectives to SDG Officers and/or Branch Officers.

4. **Finance/Administration (FIN/ADM) Section:** Evaluates and manages the risk and financial requirements for the Fire Department's involvement in the incident potential cost recovery efforts, or litigation, including criminal charges.

5. **Safety (SAFETY) Section:** Evaluates and manages the emergency scene risk requirements which may include accountability, safety action plan, and monitoring the health and welfare of all personnel.
Appendix C: Redline Changes to Automatic Aid Agreement

Current Automatic Aid Agreement

AUTOMATIC AID AGREEMENT
BETWEEN TRAVIS COUNTY EMERGENCY SERVICES DISTRICTS AND THE CITY OF AUSTIN

STATE OF TEXAS

COUNTY OF TRAVIS

This Agreement ("Agreement") is entered into between the City of Austin ("City"), a home-rule municipal corporation, and the Emergency Service Districts ("ESDs") located in Travis County, Texas, whose signature is affixed below, to provide services and to perform functions that are mutually beneficial to the contracting parties and the residents of their respective jurisdictions.

RECITALS

Travis County ESDs and the City of Austin Fire Department ("AFD") currently provide fire protection and other types of emergency response services to local residents in their respective jurisdictions or service areas.

Travis County ESDs and the City have previously cooperated in the provision of emergency and fire protection services through mutual aid or first responder contracts.

Travis County ESDs and the City desire to augment resources and capabilities within the geographic boundaries of their respective service areas by responding to and dispatching emergency calls on an automatic assistance basis so that the nearest available unit responds to the incidents specified in this agreement, regardless of the jurisdiction involved.

Authority for entering into this Agreement is found in the Interlocal Cooperation Act, Texas Government Code Chapter 791. Each party’s monetary obligations, if any, are for the performance of governmental functions or services and are payable only from the current revenues appropriated and available for the performance of those functions or services.

TERMS

Purpose

The purpose of this Agreement is to assist the City, acting by and through AFD, and Travis County ESDs, to efficiently enhance the capabilities and coordination of each party’s ability to protect lives and property. The original partner agencies in this Automatic Aid Agreement include AFD and Travis County ESD No. 2, No. 3, No. 6, No. 9, No. 10, and No. 11, however, it is the intent of the parties hereto to include additional ESDs as they meet certain standards generally described in part 5 of the “Responsibilities” section of this Agreement, below, and request inclusion in the agreement. All ESDs with territory in Travis County are listed on this agreement although they may not be a party to this Agreement, but additional parties may join this Agreement as set forth in part 13 of the “Responsibilities” section of this Agreement.
The parties, by and through their respective fire chiefs, may establish Auto-Aid Operational Guidelines that address strategy, tactics, and performance during an emergency situation, as attached hereto as Exhibit A. The Auto-Aid Operational Guidelines will be reviewed and revised annually by the Fire Chiefs participating in the Automatic Aid Agreement.

Definitions

- “Automatic Aid” is an agreement between jurisdictions to respond the nearest available unit(s) to mitigate an emergency situation. An emergency situation is a fire, rescue, medical emergency, or other emergency in which lives or property are threatened, specifically excluding hazardous materials incidents.
- “Certified Firefighters” are certified as Structure Fire Protection - Basic (or higher) through the Texas Commission on Fire Protection (TCFP).
- “Staffing of Units” involves TCFP Commissioned Firefighters. Cadets do not count towards staffing, nor should they be riding on apparatus in any role other than as an observer (non-participant).
- “Service Areas” are shown on the maps in Attachment A.
- “Mutual Aid” is an agreement between jurisdictions to respond to an emergency situation when requested. Resources are dispatched after an official of the requesting agency asks for assistance from an official of the responding agency and the responding agency official acknowledges, determines available resources to be sent to the requestor, and accepts the request, whether under written agreement between the affected parties or other applicable law.
- “Nearest available unit” shall mean that unit of either party that meets the requirements for that type of emergency situation and is capable of responding most quickly to a call. A party shall respond only to the extent that a unit is readily available.

Term

1. The term of this Agreement is from January 1, 2013 to December 31, 2013. The Agreement may renew annually for up to nine additional terms on mutual consent.

2. If a party chooses not to renew this Agreement, that decision has no effect on the validity and continuing applicability of this Agreement on the remaining parties.

3. Should a party choose not to renew this Agreement, its legal responsibilities and obligations under this Agreement shall cease on the last day of the applicable calendar year, except for any financial obligations incurred hereunder prior to termination.

Responsibilities

1. The parties agree to automatically dispatch the nearest available unit(s) to the scene of an emergency within the automatic aid agreement service area.

2. Jurisdictions have the right to refuse a request for assistance based on current, complicated, or exceptional conditions (e.g., widespread tornado damage, wildfires, explosions).
3. Staffing of Engines and Aerials. All engines and aerials shall be staffed with a minimum of four certified firefighters at all times.

4. Time on scene – as soon as possible after the situation is stabilized, all outside jurisdictions are to be released. An automatic aid response is considered the first operational period of four hours, and after four hours, any response hereunder will be considered a mutual aid response and subject to reimbursement, as appropriate. Nothing in this Agreement shall preclude any party from seeking reimbursement of expenses from third parties, or other appropriate entities, including, but not limited to, local, state or federal government agencies, as appropriate. Nothing in this Agreement obligates a party responding to an emergency situation hereunder from remaining on scene for more than the first operational period.

5. The response of one organization into another organization’s jurisdiction is based on Auto-Aid Operational Guidelines found in Exhibit A. The guidelines cover the following:
   - Section 1: Certifications of personnel by rank.
   - Section 2: Billing for aid beyond four hours.
   - Section 3: Equipment and apparatus.
   - Section 4: Incident and response typing.
   - Section 5: Standard Operating Procedures/Guidelines.
   - Section 6: Training requirements.

6. Each party shall be responsible for injuries or death to its employees and volunteers while performing services under this Agreement. A party shall not be liable for benefits or any other compensation for injuries to or death of the other party’s employees or volunteers while performing services under this Agreement. An employee or volunteer shall be deemed to be performing services when en route to, en route from or at the scene of a call or emergency.

7. Specifically citing Texas Government Code Section 791.006(a-1), the parties agree that, for purposes of determining civil liability for non-party claims, the act of any person or persons while fighting fires, providing rescue services, providing first response EMS services, traveling to or from any type of emergency call or emergency scene, or in any manner furnishing services in accordance with this Agreement, shall be the act of the party performing such act. The payment of any and all civil or other liability, including negligence, resulting from the furnishing of services under this Agreement is the responsibility of the individual party performing such acts. This shall specifically include, but not be limited to, the payment of court costs, expenses, and attorneys’ fees resulting from any such claim or lawsuit. The parties agree that the assignment of liability described this Section is intended to be different than liability otherwise assigned under Section 791.006(a) of the Texas Government Code.

8. It is expressly understood and agreed that the entering into and execution of this Agreement does not waive, nor shall be deemed to waive, any immunity or defense that would otherwise be available to a party against third-party claims arising from activities performed under this Agreement.
9. The parties agree to comply with all applicable state, local and federal laws and regulations in providing services under this Agreement. The parties agree to cooperate in executing such further or subsidiary agreements as may be required.

10. Calls outside the service area for automatic aid shall be considered requests for mutual aid and responses may be undertaken at the sole discretion of the assisting party.

11. This Agreement supersedes any previous automatic aid agreement between the parties. Any previous statement or understanding not included in this Agreement shall be of no force or effect until executed as an amendment to this Agreement.

12. On an annual basis, each Auto Aid partner will report on its status regarding any failures to achieve the goals of this Agreement or the attached Auto Aid Operational Guidelines, along with a plan to reach compliance with the goals.

13. Should a party fail to comply with the terms and conditions of this Agreement or the attached Auto Aid Operational Guidelines, as amended from time-to-time, after ten (10) days written notice to the defaulting party, that party’s participation in this Agreement will immediately be terminated upon a majority vote of the remaining parties.

14. Upon written request by a non-party ESD, a majority of current parties, by and through their respective fire chiefs, may agree to accept the requesting ESD as a party to this Agreement, subject to approval by the requesting ESD’s governing body. Austin City Council and the governing bodies of the ESD parties need not approve acceptance of any requesting ESD to be an additional party to this Agreement.

15. A party may terminate its participation in this Agreement, with or without cause, upon not less than 120 days written notice to the other parties. A party’s decision to terminate its participation in this Agreement has no bearing on the validity and continuing applicability of this Agreement to the remaining parties. Notice shall be provided by certified mail, return receipt requested, at the following addresses:

CITY

<table>
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<tr>
<th>City Attorney</th>
<th>Chief, Austin Fire Department</th>
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<tr>
<td>City Hall</td>
<td>City of Austin</td>
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<tr>
<td>301 West 2nd Street, 4th Floor</td>
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Travis County ESD Addresses

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<td>9</td>
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<td>PO Box 1043 Del Valle, TX 78617</td>
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SIGNATURE LINES

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<tr>
<td>City of Austin</td>
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<td>Marc Ott</td>
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<td>ESD 3</td>
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<td>Jeffrey J. Witty</td>
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Proposed Automatic Aid Agreement

AUTOMATIC AID AGREEMENT
BETWEEN EMERGENCY SERVICES DISTRICTS OF TRAVIS AND WILLIAMSON COUNTIES AND THE CITIES OF AUSTIN, LEANDER, CEDAR PARK, ROUND ROCK AND GEORGETOWN

STATE OF TEXAS

COUNTY OF TRAVIS

This Agreement ("Agreement") is entered into between the Cities of Austin, Leander, Cedar Park, Round Rock and Georgetown ("Cities"), each a home-rule municipal corporation, and the Emergency Service Districts ("ESDs") located in Travis and Williamson Counties, Texas whose signatures are affixed below, (all signatories to this Agreement are hereinafter sometimes referred to as the "parties" or singularly as a "party," whether or not capitalized) to provide services and to perform functions that are mutually beneficial to the contracting parties and the residents of their respective jurisdictions.

RECITALS

The ESDs and the fire departments of the Cities currently provide fire protection and other types of emergency response services in their respective jurisdictions or service areas.

Some of the ESDs and the Cities have previously cooperated with each other in the provision of emergency and fire protection services through mutual aid or first responder contracts, and all of the ESDs and the Cities agree that the additional parties which are entering into this Agreement provide for a more comprehensive arrangement for the provision of emergency services in the metropolitan area covered by all the participating jurisdictions.

The ESDs and the Cities desire to augment resources and capabilities within the geographic boundaries of their respective service areas by responding and dispatching emergency calls on an automatic assistance basis so that the nearest available unit responds to the incidents specified in this Agreement, regardless of the jurisdiction involved.

Authority for entering into this Agreement is found in the Interlocal Cooperation Act, Texas Government Code Chapter 791. Each party’s monetary obligations, if any, are for the performance of governmental functions or services and are payable only from the current revenues appropriated and available for the performance of those functions or services.

TERMS

Purpose

The purpose of this Agreement is to provide for assistance to the Cities and the ESDs, to efficiently enhance the capabilities and coordination of each party’s ability to protect lives and
property. The original partner agencies in an Automatic Aid Agreement commenced in 2013 (the "2013 Automatic Aid Agreement") were the City of Austin and Travis County ESDs No. 2, No. 3, No. 6, No. 9, No. 10, and No. 11. However, all other emergency services districts in Travis County subsequently became parties to the 2013 Automatic Aid Agreement. It is the intent of the parties hereto to include the other ESDs and the other Cities, as they meet certain standards generally described in part 5 of the “Responsibilities” section of this Agreement, and request inclusion in this Agreement. Additional parties may join this Agreement as set forth in part 9 of the “General” section of this Agreement.

The parties, by and through their respective fire chiefs, have established Auto-Aid Operational Guidelines that address strategy, tactics, and performance during an emergency situation. The Auto-Aid Operational Guidelines agreed and in effect at the commencement of this Agreement are attached hereto as EXHIBIT A. The Auto-Aid Operational Guidelines will be reviewed and may be revised annually by the Fire Chiefs of participating parties, and agreed amendments shall be initialed and dated on behalf of each party and appended to this Agreement. At least 75% of all participating parties must agree to any changes for them to be placed into effect. In performing its obligations pursuant to this Agreement, each of the parties shall be bound to comply with the then current Auto-Aid Operational Guidelines.

Definitions

- “Automatic Aid” is an agreement between jurisdictions to respond the nearest available unit(s) to mitigate an emergency situation.
- “Emergency Situation” is a fire, rescue, medical emergency, or other emergency in which lives or property are threatened, specifically excluding hazardous materials incidents.
- “Service Areas” are shown on the maps in Attachment A.
- “Mutual Aid” is an agreement between jurisdictions to respond to any emergency situation when requested. Resources are dispatched after an official of the requesting agency asks for assistance from an official of the responding agency, and the responding agency official acknowledges the request, determines available resources to be sent to the requestor, and accepts the request, whether under written agreement between the affected parties or other applicable law.
- “Nearest Available Unit” shall mean that unit of any party that meets the requirements of that type of emergency situation and is capable of responding most quickly to call. A party shall respond only to the extent that a unit is readily available.

Term

1. The term of this Agreement is from the Effective Date (as defined below) until September 30th following the Effective Date. The Agreement will automatically renew for a one year period (subject to other termination provisions of this Agreement) on October 1st of each successive year (a "Renewal Date") as to each party that does not provide written notice to all other parties of an intention not to renew not later than thirty (30) days prior to the applicable Renewal Date.
2. If a party chooses not to renew this Agreement, that decision has no effect on the validity and continuing applicability of this Agreement on the remaining parties.

3. Should a party choose not to renew this Agreement, its legal responsibilities to and obligations under this Agreement shall cease on the day before the applicable Renewal Date, except for any financial obligations incurred hereunder prior to non-renewal. Should a party exercise its right to terminate for convenience with notice one hundred twenty (120) days prior to such termination as provided in this Agreement, its legal responsibilities to and obligations under this Agreement shall cease as of the properly noticed termination date, except for any financial obligations incurred hereunder prior to termination.

Responsibilities

1. The parties agree to automatically dispatch the nearest available unit(s) to the scene of an emergency situation within the automatic aid agreement service area.

2. Parties have the right to dispatch the nearest available unit(s) based on current, complicated, or exceptional conditions (e.g., widespread tornado damage, wildfires, explosions).

3. Time on Scene – As soon as possible after the emergency situation is stabilized, all outside jurisdictions are to be released. An automatic aid response is considered the first operational period of twelve (12) hours, and after twelve (12) hours, any response hereunder will be considered a mutual aid response and subject to reimbursement, as provided by law or written agreement. Nothing in this Agreement shall preclude any party from seeking reimbursement of expenses from third parties, or other appropriate entities, including, but not limited to, local, state or federal government agencies, as appropriate. Nothing in the Agreement obliges a party responding to an emergency situation hereunder to remain on scene for more than the first operational period.

4. The response of one party into another party’s jurisdiction is based on Auto - Aid Operational Guidelines found in EXHIBIT A. Among other things, the guidelines may cover the following:

- Response.
- Staffing.
- Training.
- Certifications of Personnel.
- Reimbursement.
- Equipment and Apparatus.
- Dispatch Protocols
- Funding for Training and Certifications.
General

1. Each party shall be responsible for injuries or death to its employees and volunteers while performing services under this Agreement. A party shall not be liable for benefits or any other compensation for injuries to or death of any other party’s employees or volunteers while performing services under this Agreement. An employee or volunteer shall be deemed to be performing services under this Agreement when en route to, en route from, or at the scene of a call or emergency situation.

2. Specifically citing Texas Government Code Section 791.006(a-1), the parties agree that, for purposes of determining civil liability for non-party claims, the act of any person or persons while fighting fires, providing rescue services, providing first response EMS services, traveling to or from any type of emergency call or emergency scene, or in any manner furnishing services in accordance with this Agreement, shall be the act of the party performing such act. The payment of any and all civil or other liability, including liability on the basis of negligence, resulting from the furnishing of services under this Agreement is the responsibility of the individual party performing such acts. This shall specifically include, but not be limited to, the payment of court costs, expenses, and attorney’s fees resulting from any such claim or lawsuit. The parties agree that the assignment of liability described by this Section is intended to be different than liability otherwise assigned under Section 791.006(a) of the Texas Government Code.

3. It is expressly understood and agreed that the entering into and execution of this Agreement does not waive, modify or alter, nor shall be deemed to waive, modify, or alter, any immunity or defense that would otherwise be available to a party against third-party claims arising from activities performed under this Agreement.

4. The parties agree to comply with all applicable state, local and federal laws and regulations in providing services under this Agreement. The parties agree to cooperate in executing such further or subsidiary agreements as may be required.

5. Calls outside the service area for automatic aid shall be considered requests for mutual aid and responses may be undertaken at the sole direction of the assisting party.

6. This Agreement supersedes any previous automatic aid agreement between the parties. Any previous statement or understanding regarding automatic aid not included in this Agreement shall be of no force or effect until executed as an amendment to this Agreement.

7. On an annual basis, each party will report to the Capital Area Fire Chief’s Association (“CAFCA”) on its status regarding any failures to achieve the goals of this Agreement or the attached Auto-Aid Operational Guidelines, along with a plan to reach compliance.

8. Should a party fail to comply with the terms and conditions of this Agreement or the attached Auto-Aid Operational Guidelines, as amended from time-to-time, after ten (10)
days written notice from CAFCA to the defaulting party, that party’s participation in this Agreement will immediately be terminated upon majority vote of the remaining parties.

9. Upon written request by a non-party ESD or municipality, a majority of current parties, by and through their respective fire chiefs, may agree to accept the requesting ESD or municipality as a party to this Agreement, subject to approval by the requesting ESD or municipality’s governing body or city council. Approval of the city councils and the governing bodies of the current parties to the Agreement is not required for acceptance of any requesting ESD or municipality to be an additional party to this Agreement.

10. A party may terminate its participation in this Agreement, with or without cause, upon not less than one hundred twenty (120) days written notice to the other parties. A party’s decision to terminate its participation in this Agreement has no bearing on the validity and continuing applicability of this Agreement to the remaining parties. Notice shall be provided by certified mail, return receipt requested, at the following addresses:

Cities Addresses

City of Austin
City Attorney
City Hall
301 West 2nd Street, 4th Floor
Austin, TX 78701

Chief, Austin Fire Department
City of Austin
4201 Ed Bluestein Blvd
Austin, TX 78721

City of Round Rock
City Attorney, City Hall
221 East Main Street
Round Rock, TX 78664

Chief, Round Rock Fire Department
City of Round Rock
203 Commerce Blvd.
Round Rock, TX 78666

City of Leander
City Attorney, City Hall
PO BOX 319
Leander, TX 78646

Chief, Leander Fire Department
City of Leander
101 E. Sonny Drive
Leander, TX 78641

City of Cedar Park
City Attorney, City Hall
450 Cypress Creek Road
Cedar Park, TX 78613

Chief, Cedar Park Fire Department
City of Cedar Park
450 Cypress Creek Road, Building 6
Cedar Park, TX 78613

City of Georgetown
City Attorney, City Hall
808 Martin Luther King Jr. St.
Georgetown, TX 78626

Chief, City of Georgetown
City of Georgetown
5500 DB Wood Rd.
Georgetown, TX 78628
### Travis County ESD Addresses

<table>
<thead>
<tr>
<th>ESD #</th>
<th>Board President Address</th>
<th>Fire Chief Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20624 FM 1431 Suite 5 Lago Vista, TX 78645</td>
<td>20624 FM 1431 Suite 5 Lago Vista, TX 78645</td>
</tr>
<tr>
<td>2</td>
<td>203 E. Pecan St. Pflugerville, TX 78660</td>
<td>203 E. Pecan St. Pflugerville, TX 78660</td>
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<tr>
<td>3</td>
<td>4111 Barton Creek Blvd. Austin, Texas 78735</td>
<td>4111 Barton Creek Blvd. Austin, Texas 78735</td>
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<tr>
<td>5</td>
<td>PO BOX 1239 Manchaca, TX 78652</td>
<td>PO BOX 1239 Manchaca, TX 78652</td>
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<td>6</td>
<td>15304 Pheasant Ln. #100 Austin, TX 78734</td>
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<tr>
<td>8</td>
<td>801 Bee Creek Road Spicewood, TX 78669</td>
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<tr>
<td>9</td>
<td>PO Box 162170 Austin, TX 78716</td>
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<tr>
<td>10</td>
<td>353 S. Commons Ford Austin, TX 78733</td>
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<tr>
<td>11</td>
<td>PO BOX 1043 Del Valle, TX 78617</td>
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<td>12</td>
<td>PO BOX 846 Manor, TX 78653</td>
<td>PO BOX 846 Manor, TX 78653</td>
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<td>14</td>
<td>15406 FM 2769 Volente, TX 78641</td>
<td>15406 FM 2769 Volente, TX 78641</td>
</tr>
</tbody>
</table>
Williamson County ESD/ Fire Department Addresses

1  9218 Anderson Mill Road  
   Austin, TX 78729

3  PO BOX 175  
   Hutto, TX 78634

Sam Bass Fire Department  
16248 Great Oaks Drive  
Round Rock, TX 78681

11. Each of the parties agrees that in the event of a dispute arising out of this Agreement with another party, the parties shall first attempt resolution through mediation by a mediator mutually agreed among the disputing parties.

12. This Agreement supersedes the 2013 Automatic Aid Agreement, which shall no longer be in effect as of the Effective Date of this Agreement.
Entered into to be effective as to each executing party on the date (the "Effective Date") all of the Travis County ESDs and the City of Austin have executed this Agreement.

**Signature Lines**

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<tr>
<th>Jurisdiction</th>
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<tr>
<td>Sam Bass Fire Department</td>
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Automatic Aid Agreement
Travis and Williamson County Agencies
Operational Guidelines

I. PURPOSE

To establish operational guidelines that will address the basic provision of emergency service response into the designated service areas identified within the Travis and Williamson County Automatic Aid Agreement(s).

II. BACKGROUND

Each agency participating in an Automatic Aid Agreement agrees that automatic aid provides for the most efficient and effective delivery of emergency response services to the citizens of our respective jurisdictions. While all jurisdictions have common hazards and challenges, there are characteristics and circumstances that can also make them unique and set them apart. Due to this, it is further agreed that each agency listed within this agreement may adopt their own Standard Operating Guidelines (SOGs) for incident response within their respective response jurisdiction(s).

However, all agencies must operate under an Incident Command System (ICS) that is National Incident Management System (NIMS) compliant as promulgated by the U.S. Department of Homeland Security. This will enable each of the participating agencies to provide the most appropriate and efficient response within their respective jurisdictions while also addressing the safety concerns of first responders. In order for there to be a core standard when it comes to an ICS, all agencies participating in this agreement agree to utilize the “Blue Card” certification system for Incident Command qualifications.

These guidelines shall be reviewed at least annually by the participating agencies. Any revisions shall require prior notification, review, and approval from all participating agencies.
III. DEFINITIONS

- “Automatic Aid” is an agreement between jurisdictions to respond the nearest available unit(s) to mitigate an emergency situation.

- “Certified Personnel” are certified as Structure Fire Protection – Basic (or higher) through the Texas Commission on Fire Protection (TCFP).

- “Staffing of Units” involves TCFP commissioned Firefighters. Cadets do not count towards staffing, nor should they be riding in apparatus in any other role other than as an observer (non-participant).

IV. PROCEDURE

A. Response

1. Each Authority Having Jurisdiction (AHJ) shall determine the appropriate response plans for the alarm types within their jurisdiction. Per the Automatic Aid Agreement, these response plans shall be rostered with the geographically closest and most resource appropriate unit(s) based upon resource typing within the Computer Aided Dispatch (CAD) system, regardless of jurisdiction. The first responding unit, regardless of resource type or jurisdiction, shall report directly to the scene, provide a size-up, and assume Incident Command.

2. All later arriving units shall do one of the following when responding into another agency’s jurisdiction:
   
   a. Follow the SOGs for the jurisdiction to which they are responding (if known),
   b. Follow the direction of on-scene Incident Command, or
   c. Report out as staged (“staged”, “Level 1”, or “Level 2”) at an appropriate location and await assignment from Incident Command. This is the most appropriate action for a second or later arriving unit that is unfamiliar with the AHJ’s SOGs.

3. Regardless of jurisdiction, Incident Command shall have the authority to reduce/upgrade the response level (Code 1 or Code 3) of all incoming units and may cancel/upgrade the response of units based upon conditions found on scene. However, the AHJ may continue the response of a unit(s) if required by the AHJ’s SOGs.

4. When appropriate, the AHJ may assume Incident Command for all multi-unit responses. The arrival of the AHJ on the incident scene does not mean that
command should be automatically transferred to the AHJ. Command should only be transferred when the AHJ is completely aware of the position and function of crews operating at the scene and has an understanding of the overall Incident Action Plan (IAP).

5. In jurisdictions where medical emergencies are not prioritized, responses shall be handled by the geographically closest available unit. In jurisdictions where medical emergencies are prioritized, the geographically closest available unit shall only respond to priority 1 through 3 call types. Priority 4 and 5 call types shall be handled by the AHJ.

6. This automatic aid agreement shall cover only the first twelve (12) hours of an event. After twelve (12) hours the involved agencies may request reimbursement as outlined within section III E of this document.

B. Staffing

Although preferred staffing for Engine and Ladder Companies is four (4) personnel, each agency shall determine the appropriate personnel staffing numbers for their respective units. However, in order for units to be available to be resourced into the response plans of another agency’s jurisdiction, the following criteria must be met:

1. Engine Companies shall be staffed with a minimum of three (3) certified personnel per the certification requirements listed within section III D of this document.

2. Ladder Companies (aerial devices) shall be staffed with a minimum of three (3) certified personnel per the certification requirements listed within section III D of this document.

3. Units with less than three certified personnel assigned may not be resourced as an Engine or Ladder company within another agency’s response plans.

4. Squad response vehicles shall be staffed with a minimum of two (2) personnel and are resourced as medical capable response vehicles.

C. Training

Neighboring AHJs should train together as often as possible (recommended quarterly), to assure comfort and conformity with the SOGs of the other agency(s). The goal of this training is to provide consistent, efficient, effective, and safe operations on the emergency scene.
1. Agencies shall cooperatively develop and deliver continuing education (CE) appropriate to their jurisdiction
2. Participate in both formal and impromptu cross-agency multi-company drills
3. Maintain both agency and state required CEs

D. Certifications of Personnel

(AHJ shall have a clearance process for members operating in a higher class role. The credentialing of positions below is for those promoted to the specified rank.)

1. Firefighter Rank:
      Basic or higher-level certification
   b. EMT-Basic or higher-level certification
   c. Blue Card Terminology training
   d. NIMS 100, 200, 700, and 800 certifications
   e. Preferred qualifications:
      i. National Wildfire Coordinating Group (NWCG) Wildland Firefighter Type
         II

2. Driver/Apparatus Operator
   a. All lower-rank certifications and;
   b. Minimum of one (1) year experience as a full-time paid firefighter
   c. State of Texas Class A, B, or B Exempt driver’s license
   d. TCFP Driver/Operator certification
   e. Preferred qualifications:
      i. Blue Card Incident Commander certification
      ii. NWCG Wildland Firefighter Type I
      iii. NWCG Engine Operator

3. Lieutenant
   a. All lower-rank certifications and;
   b. Minimum of two (2) years’ experience as a Driver/Apparatus Operator
   c. TCFP Fire Officer I certification
   d. NIMS 300, 400, and 703 certifications
   e. Preferred qualifications:
      i. Blue Card Incident Commander certification
      ii. NWCG Engine/Crew Boss certification

4. Captain
   a. All lower-rank certifications and;
   b. Minimum of two (2) years’ experience as a Lieutenant
Exhibit A

c. TCFP Fire Officer II certification
d. Preferred qualifications:
   i. Blue Card Incident Commander certification
   ii. TCFP Structure Fire Protection – Intermediate or higher-level certification
   iii. NWCG Strike Team/Taskforce Leader certification

5. Battalion Chief
   a. All lower-rank certifications and;
   b. Minimum of two (2) years’ experience as a company officer (Lieutenant or Captain)
c. Blue Card Incident Commander certification
d. Incident Safety Officer certification (TCFP, NFA, IFSAC, etc.)
e. Preferred qualifications:
   i. TCFP Structure Fire Protection – Advanced or higher-level certification
   ii. Associates or Bachelor’s degree (fire service-related field)
   iii. NWCG Strike Team/Taskforce Leader certification

6. Incident Safety Officer
   a. Minimum rank of Lieutenant and,
   b. All Lieutenant rank requirements listed above
c. Incident Safety Officer certification (TCFP, NFA, IFSAC, etc.)
d. Preferred qualifications:
   i. Blue Card Incident Commander certification
   ii. NWCG Engine/Crew Boss certification

E. Reimbursement

1. Agencies may bill each other for extended operations (beyond twelve (12) hours) on automatic aid events. The billing documentation must follow the same guidelines used for FEMA reimbursements and may include:
   a. Labor cost for time actually assigned to the incident
   b. Overtime calculations per FLSA
   c. Fringe benefit costs
   d. Apparatus and equipment usage
   e. Costs for any materials used during the emergency event

2. Supporting documentation shall be required and standardized FEMA usage rates shall apply.
F. Equipment and Apparatus

1. Each AHJ shall standardize equipment as much as possible and should communicate any major equipment compatibility issues to their neighboring agency(s) and the Travis-Williamson County Automatic Aid Subcommittee.

G. Dispatch Protocols

1. Dispatching protocols shall be coordinated through each AHJ and their respective PSAPs. Response plans from each AHJ shall be distributed to the participating automatic aid agencies as well as to the Travis-Williamson County Automatic Aid Subcommittee.

H. Funding for Training and Certifications

1. AHJs may be eligible to receive funding for required training and certifications through CAFCA.
The parties, by and through their respective fire chiefs, have established Auto-Aid Operational Guidelines that address strategy, tactics, and performance during an emergency situation. The Auto-Aid Operational Guidelines agreed and in effect at the commencement of this Agreement are attached hereto as EXHIBIT A. The Auto-Aid Operational Guidelines will be reviewed and may be revised annually by the Fire Chiefs of participating parties. The Fire Chiefs of participating parties may amend any section of the Auto-Aid Operational Guidelines except for Sections III A.1, III A.2, III A.3, III A.7, III A.10, and III A.11, with the written agreement of and agreed amendments shall be initialed and dated on behalf of each party and appended to this Agreement. At least 75% of all the Fire Chiefs of participating parties must agree to any changes for them to be placed into effect. In performing its obligations pursuant to this Agreement, each of the parties shall be bound to comply with the then current Auto-Aid Operational Guidelines.
Automatic Aid Agreement
Travis and Williamson County Agencies
Operational Guidelines

I. PURPOSE

To establish operational guidelines that will address the basic provision of emergency service response into the designated service areas identified within the Travis and Williamson County Automatic Aid Agreement(s).

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However, all agencies must operate under an Incident Command System (ICS) that is National Incident Management System (NIMS) compliant as promulgated by the U.S. Department of Homeland Security. This will enable each of the participating agencies to provide the most appropriate and efficient response within their respective jurisdictions while also addressing the safety concerns of first responders.

In order for there to be a core standard when it comes to an ICS, all agencies participating in this agreement agree to utilize the “Blue Card” certification system for Incident Command qualifications.

These guidelines shall be reviewed at least annually by the participating agencies. Any revisions shall require prior notification, review, and approval from all participating agencies.
III. PROCEDURE

A. Response

1. Until common Standard Operating Guidelines (SOGs) can be established that incorporate all of the safety elements found within the current SOGs of all AHJs that ensure use of common terminology, standard definitions, common strategies and tactics, and standardized procedures and incident management, AHJs residing within Travis County agree to continue adhering to the following previously agreed upon Standard Operating Procedures/Guidelines:
   a. A101 - Fire Around Operations
   b. A104 - Two In and Two Out
   c. A105 - Mayday and Rapid Intervention Company
   d. B402 - Emergency Terminology
   e. B104 - Lost Firefighter Strategies
   f. A110 - Light Box Alarms
   g. A201 - High Rise Fires
   h. A202 - Mid-Rise Fires
      i. A708 - Response to Alarm Activations
   j. A610 - Response to Active Shooter Incidents
   k. A401 - Wildland Fire Response

2. Until common Standard Operating Guidelines (SOGs) can be established that incorporate all of the safety elements found within the current SOGs of all AHJs that ensure use of common terminology, standard definitions, common strategies and tactics, and standardized procedures and incident management, AHJs residing within Williamson County agree to continue adhering to the following previously agreed upon Standard Operating Procedures/Guidelines:
   a. Regional Procedure #1 - County Resource Coordination Guidelines
   b. Regional Procedure #2 - Fire Investigation Team
   c. Regional Procedure #4 - Rapid Intervention Crew
   d. Regional Procedure #5 - Firefighter Accountability
   e. Regional Procedure #6 - Incident Command System
   f. Lost, Trapped, or Missing Firefighter (Mayday)

3. AHJs which reside along the contiguous borders of Travis and Williamson County may opt to use either County’s Standard Operating Procedures/Guidelines, but must declare this with all other participating AHJs.
4.4 Each Authority Having Jurisdiction (AHJ) shall determine the appropriate response plans for the alarm types within their jurisdiction. Per the Automatic Aid Agreement, these response plans shall be rostered with the geographically closest and most resource appropriate unit(s) based upon resource typing within the Computer Aided Dispatch (CAD) system, regardless of jurisdiction. The first responding unit, regardless of resource type or jurisdiction, shall report directly to the scene, provide a size-up, and assume Incident Command.

2-5 All later arriving units shall do one of the following when responding into another agency's jurisdiction:

a. Follow the SOGs for the jurisdiction to which they are responding (if known),
b. Follow the direction of on-scene Incident Command, or
c. Report out as staged ("staged", "Level 1", or "Level 2") at an appropriate location and await assignment from Incident Command. This is the most appropriate action for a second or later arriving unit that is unfamiliar with the AHJ's SOGs.

3-5 Regardless of jurisdiction, Incident Command shall have the authority to reduce/upgrade the response level (Code 1 or Code 3) of all incoming units and may cancel/upgrade the response of units based upon conditions found on scene. However, the AHJ may continue the response of a unit(s) if required by the AHJ's SOGs.

7 Any AHJ may respond a command element on a response into another jurisdiction when that department has units assigned to an incident. If the Auto Aid department command element responds into a jurisdiction that operates under the other county's SOGs, they shall report to the Command Post upon arrival and will confer with Command regarding the current Incident Action Plan (IAP) for the incident. The Auto Aid department's command element shall then be assigned to an IMS role that best affords the management and supervision of the assisting jurisdiction's units. Examples of possible assignments include: Unified Command, Operations, Safety Officer, Branch Director, Division/Group Supervisor, or a Single Resource Unit Leader. If the Auto Aid command element does not concur with the IAP due to unsafe acts, orders or conditions he/she has the authority to remove that jurisdiction's units from an IDLH atmosphere or other unsafe assignment.

8 Any firefighter, company officer, or chief officer on the emergency scene, regardless of assignment, has a duty to immediately stop an unsafe act or to communicate an unsafe condition to Command. The firefighter, company officer, or chief officer who stops the unsafe act, including the removal of
firefighters from an IDLH atmosphere, must immediately communicate their actions to Command.

9. When appropriate, the AHJ may assume Incident Command for all multi-unit responses. The arrival of the AHJ on the incident scene does not mean that command should be automatically transferred to the AHJ. Command should only be transferred when the AHJ is completely aware of the position and function of crews operating at the scene and has an understanding of the overall IAP Incident Action Plan (IAP).

10. Any Auto Aid department may limit resources in their response plan which respond into other jurisdictions to ensure the maintenance of coverage in their home jurisdiction.

4-11. A Post-Incident Review (PIR) should be conducted on any working structure fire where automatic aid units were utilized on the fireground. The PIR will include units and command elements from all assisting jurisdictions.

6-12. In jurisdictions where medical emergencies are not prioritized, responses shall be handled by the geographically closest available unit. In jurisdictions where medical emergencies are prioritized, the geographically closest available unit shall only respond to priority 1 through 3 call types. Priority 4 and 5 call types shall be handled by the AHJ.

6-13. This automatic aid agreement shall cover only the first twelve (12) hours of an event. After twelve (12) hours the involved agencies may request reimbursement as outlined within section III E of this document.

B. Staffing

Although preferred staffing for Engine and Ladder Companies is four (4) personnel, each agency shall determine the appropriate personnel staffing numbers for their respective units. However, in order for units to be available to be resourced into the response plans of another agency’s jurisdiction, the following criteria must be met:

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3. Units with less than three certified personnel assigned may not be resourced as an Engine or Ladder company within another agency’s response plans.
**Council Question and Answer**

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<th>Meeting Date</th>
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Authorize negotiation and execution of a 60-month lease renewal with 724 Bastrop Hwy LLC, to commence on November 1, 2019 and terminate October 31, 2024, for 1,000 square feet of office/warehouse space for the Environmental Resource Management Division of the Watershed Protection Department, located at 720 Bastrop Highway, Suite 218, Austin, Texas, for a total amount not to exceed $72,000.

**QUESTION/ANSWER:** Council Member Flannigan’s Office

1) *Is this type of lease space (warehouse) included in the city’s strategic facilities master planning?*

   The recent Administrative Occupancy Plan did not take into consideration warehouse facilities. Although this lease space does contain a small area used as an office, the majority of this space is a warehouse, and it was not considered with the overall administrative plan and recommendations. The Strategic Facilities Governance Team plans on moving forward in FY20 with a service yard and warehouse study to help provide recommendations on an overall plan regarding those facilities.
Authorize negotiation and execution of a Multiple Use Agreement with the Texas Department of Transportation for placement of trash receptacles in the State right-of-way beneath overpasses and under bridges.

**QUESTION/ANSWER:** Council Member Flannigan’s Office

1) *Please provide a list of locations currently serviced by the Violet Bag Project Pilot, and locations being analyzed for the receptacle program.*

The Watershed Protection Department (WPD) worked with the Office of Design and Delivery (ODD), Austin Resource Recovery (ARR), Public Works (WPD), Parks and Recreation Department (PARD), the Integral Care PATH team, and 311 to test the pilot, conduct outreach, and collect data at four sites: Highway 183 and Ohlen Road; Highway 290 and Cameron Road; Interstate 35 and 6th Street; and Highway 290/71 and Packsaddle Pass area.

The pilot sites were initially selected based on the volume of garbage-related complaints located at those sites. We use 311 data to gauge our impact and hoped to see complaints decrease in this time frame. ODD and 311 have developed a process to analyze the call notes and look for patterns in the frequency of the terms used in a call which will be used in Phase 2 of the program to measure the effectiveness of the trash receptacles and bags.

Site residents were very receptive to the project in Phase 1. During the seven-week period, we tested 12- to 16-gallon, 1.5-millimeter thick violet bags. Approximately 1,700 bags were distributed, and we estimate that 50-80% of the bags were picked up by ARR on a weekly route. Based on interviews and other evidence we believe the remaining bags were primarily used to collect and dispose of garbage in other locations.

The second phase of the project is testing larger trash bags and working to modify trash collection methods to allow Austin Resource Recovery to use semi-automated trucks for collection, as opposed to collecting trash bags by hand. Following the conclusion of the second phase, staff will provide recommendations as to how to expand the program across the City.

The sites selected for permanent facilities will be determined following completion of the second phase. We will work with City Legal and TxDOT to afford flexibility in the Multiple Use Agreement (MUA) to make adjustments based on the data we receive in Phase 2.