Planning in Response:

A Toolkit for Integrating Urban Planners into County-Level Emergency Management Operations

Zach Gerras

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Executive Summary

This report asks: under what conditions can urban and community planners be selectively integrated into county-level emergency response operations without interfering with incident command, slowing operational tempo, or creating additional coordination burden?

County emergency response systems are designed to protect life, stabilize hazards, and preserve clear authority during fast-moving and high-pressure incidents. At the same time, many decisions made during response have consequences that extend far beyond the immediate operational period. Choices about damage assessment, access, temporary housing, debris management, infrastructure restoration, public communication, and documentation shape what later becomes possible in recovery, mitigation, and redevelopment.

This report evaluates whether selective planner integration into response operations is institutionally feasible. The findings indicate that permanent planner presence in response environments is neither practical nor supported by practitioners. However, there is consistent support for conditional involvement when incidents create downstream consequences related to infrastructure repair classification, access and redevelopment implications, damage documentation, temporary land use decisions, or cross-jurisdiction coordination.

To operationalize this approach, this report introduces the Planning Office Emergency Support Toolkit. The toolkit establishes defined activation triggers, bounded roles, and structured outputs designed to align with the Incident Command System and the Emergency Operations Center. It is intended to translate planning expertise into usable support functions without expanding planning authority into command space.

The report concludes that selective, trigger-based planner integration is feasible when it remains advisory, condition-based, and operationally disciplined.

Introduction

County emergency response systems are built to protect life, stabilize hazards, coordinate resources, and preserve clear lines of authority during fast-moving incidents. Those priorities are essential, but response decisions rarely affect only the immediate crisis. In practice, choices about access, infrastructure restoration, temporary housing, debris clearance, public messaging, and documentation standards often shape what counties can realistically pursue during recovery, mitigation, and redevelopment.

This creates a practical governance challenge. Emergency management systems are organized around command clarity, operational tempo, and role discipline. Planning offices, by contrast, focus on land use, infrastructure, hazard mitigation, development review, and long-range community change. These systems serve different purposes, yet they are not fully separate in practice. Response decisions often create path dependencies for recovery, while recovery outcomes depend heavily on how information was gathered, classified, and acted on during response.

Planners cannot simply be inserted into emergency operations without regard for command structure, legal authority, and incident tempo. Across the interviews, respondents

consistently emphasized that any workable integration model would require planners to understand Incident Command System (ICS) procedures and Emergency Operations Center (EOC) operations, operate within clearly bounded advisory roles, and provide information in forms usable under incident conditions. The central concern was not whether planning knowledge has value during emergencies, but whether it can be introduced in ways that support decision-making without creating confusion, duplication, or new burdens for command staff. Respondents also stressed that agencies are more likely to collaborate effectively when those relationships are defined before an incident rather than during one.

This report asks: *under what conditions can planners be selectively integrated into county-level emergency response operations without disrupting ICS authority, increasing liability exposure, or imposing additional burdens on already strained county systems?* The issue is not whether planners should replace emergency managers or remain permanently embedded in every EOC. Rather, it is whether there are bounded circumstances in which land use and planning expertise can improve documentation continuity, situational understanding, and recovery alignment during consequential incidents.

The argument advanced here is that planner integration is feasible only when it is procedural rather than structural. Planners should not be treated as a standing operational presence. Instead, they should be activated under defined conditions when incidents create downstream planning, regulatory, infrastructure, documentation, or mitigation consequences. As shown in Figure 1, the four-phase emergency management cycle situates this project within the broader mitigation, preparedness, response, and recovery framework while underscoring that these phases remain operationally connected. This matters not only administratively, but also from a public-service standpoint: response-phase decisions influence equity, access, and long-term recovery outcomes for affected communities.



Figure 1: Four phases of emergency management.

2. Methodology

This project uses a qualitative, practitioner-informed research design that combines targeted literature review with semi-structured interviews. Its purpose is not to produce a predictive statistical model, but to assess whether selective planner integration into county-level emergency response is institutionally feasible under real-world conditions of authority, staffing, and operational pressure.

The literature review draws from scholarship on disaster governance, resilience, emergency management, collaborative governance, and public administration. This body of work frames several core issues: the relationship between response and recovery, the importance of institutional coordination, the risks of poorly defined interorganizational roles, and the operational demands of emergency management systems. It also provides a basis for evaluating whether planning input can be introduced into response in ways that support rather than disrupt established emergency management practice.

The interview sample was intentionally designed to reflect variation in institutional roles, operational responsibilities, and jurisdictional context. Rather than relying on a single professional viewpoint or one county setting, the project includes perspectives from emergency management, fire service, land use, and legal-administrative functions across Door County, Douglas County, Waukesha County, and Wisconsin Emergency Management at the state level. This structure was meant to capture differences in capacity, scale, and operational context across rural, mid-sized, and more urbanized jurisdictions, while also accounting for the broader state system that supports local response.

Interviews were conducted with Jeb Saelens, Adam Olson, Alex Freeman, Chad Atkinson, Jeff Kussow, Karyn Behling, and Chief Kalin Montevideo (see References for titles and affiliations).

Collectively, these interviewees provided insight into incident tempo, command structure, documentation practices, EOC workflows, infrastructure and land use implications, and the practical limits of interdepartmental integration. Their perspectives helped identify where planning-related input can add value during response without disrupting established authority, workflows, or decision-making processes.

Interview questions focused on operational realities rather than abstract preferences. Discussions addressed response tempo, documentation practices, damage assessment, interdepartmental coordination, infrastructure decisions, and the conditions under which outside expertise becomes useful or burdensome. Responses were analyzed for recurring themes related to timing, bounded roles, usability, and institutional fit.

3. The Response–Recovery Gap in Disaster Governance

3.1 Response-Phase Path Dependency

The Sendai Framework’s emphasis on preparedness for effective response and on building back better during recovery reflects the connection between these phases (Sendai Framework 2015). Ahern (2011) provides a useful planning lens: resilience depends not only on

resistance and control, but also on “safe-to-fail” thinking that anticipates disruption and supports adaptation. In county settings, this means decisions made under incident pressure can shape documentation quality, mitigation opportunities, redevelopment trajectories, and future infrastructure choices, even when those implications are not immediately obvious (Adger 2006; OECD 2014).

Respondents from state and county emergency management emphasized that the timing and method of repairs can affect reimbursement, public assistance pathways, improvement eligibility, and later recovery flexibility. One county emergency management respondent noted that decisions made for immediate operational reasons can later create pinch points when a county tries to transition into recovery or mitigation without the information or flexibility it needs. Another described the pressure to restore infrastructure quickly even when more resilient improvements may be difficult to fund or implement in the same moment (Atkinson interview; Freeman interview; Olson interview).

This does not mean every response decision carries major long-term consequences. One county emergency management respondent noted that such moments are hopefully uncommon and often limited in scale. Still, the possibility is significant enough to justify a structured mechanism for preserving information and flagging consequence points during incidents that exceed routine complexity. That logic is especially strong when incidents involve multiple parcels, substantial infrastructure damage, prolonged operations, or conditions in which weak documentation could undermine later funding, mitigation, or redevelopment decisions (GAO 2020; Wisconsin Emergency Management 2022; Freeman interview; Atkinson interview).

3.2 Institutional Separation Between Planning and Response

Planning and emergency management remain institutionally separate for valid reasons. Emergency management prioritizes speed, coordination, operational discipline, and clarity of authority. Planning prioritizes regulation, development patterns, hazard mitigation, permitting, infrastructure, and long-term spatial consequences (FEMA 2021; Sylves 2020). That separation reflects real differences in professional culture and legal responsibility, not merely bureaucratic dysfunction.

The interviews reinforced that divide. Respondents from county emergency management and land use administration described planning offices as more involved before or after incidents through hazard mitigation, mapping, permitting, and records than during active response. The problem, then, is not separation itself. It is that counties often lack a disciplined mechanism for bridging the two systems when an incident makes that connection necessary (Saelens interview; Behling interview; Kussow interview; Ansell and Gash 2008; Emerson and Nabatchi 2015; Kapucu and Garayev 2011).

4. Operational Realities at the County Level

4.1 ICS Structure and Authority Constraints

Any proposal to integrate planners into response must begin with ICS and EOC authority. FEMA doctrine stresses unity of effort through clearly defined roles and coordinated structures, and the interviews showed that authority clarity is nonnegotiable in active incidents. County emergency management and fire service respondents emphasized that planners need ICS understanding before entering response operations. They also stressed that planners fit best in a planning-related support role within ICS rather than in a vague advisory position. What matters is not simply whether planning staff are available, but whether they understand county processes and can operate in ways that support rather than complicate decisions. Respondents further emphasized that support depends on agencies understanding one another's roles before an incident rather than trying to define them during one. The conclusion is: planners may be useful as advisors, mappers, synthesizers, and consequence flaggers, but not as parallel decision-makers or informal operational authorities. Their value lies in bounded support.

4.2 Capacity and Staffing Limitations

Staffing capacity is one of the strongest constraints on planner integration. A county emergency management respondent described the realities of smaller jurisdictions bluntly: some communities rely on limited staff and need tools that are short, simple, and usable under pressure. He also emphasized that emergency management in smaller settings often depends on overlapping responsibilities and improvisation rather than ideal organizational structures. Another respondent pointed to bandwidth as a persistent coordination challenge even in a capable county environment. A state emergency management respondent added that some counties have full-time emergency managers while others do not, and that training and experience affect how well counties navigate documentation, funding, and recovery-related decisions. He also noted recurring training and funding constraints. These conditions cut against constant planner embedding but strengthen the case for selective support. Where staff are small, a bounded planning support function may help preserve documentation continuity and consequence awareness without requiring a permanent operational unit. Uneven capacity across Wisconsin therefore makes a flexible model more realistic than one-size-fits-all integration.

4.3 Documentation and Information Gaps

One of the clearest themes across the interviews was documentation discontinuity. A county emergency management respondent described how counties and municipalities often gather data in different systems and formats, making it difficult to build a common picture and share it in usable form. A state emergency management respondent emphasized that documentation quality matters for public assistance, reimbursement, and related funding pathways. From the land use side, a land use and legal respondent explained that her office may have no record of a parcel experiencing flood or wind damage unless the homeowner later sought a permit or otherwise triggered land use review. She noted that a system allowing parcel

files to carry some notation of prior hazard impact could be useful for future landowners and county awareness. A county planning respondent's perspective on floodplain, wetlands, and downstream consequences likewise underscored that land use implications emerge after the immediate emergency moment has passed. The toolkit is meant to address that gap by preserving incident information that has later value for land use, parcel history, mitigation, infrastructure follow-up, and recovery handoff.

4.4 Practitioner Perspectives from Wisconsin Counties

Taken together, the interviews show conditional openness rather than blanket support. Respondents from county emergency management, fire service, and land use administration saw value in ICS-aligned planning support when it remains simple, compatible with existing systems, and tied to functions such as mapping, documentation, communication, parcel knowledge, GIS support, infrastructure consequences, and recovery coordination. At the same time, they stressed role clarity, interdepartmental communication, and operational practicality. The through-line is that planners do not need a seat in every EOC for every incident. Counties do, however, need a structured way to involve planning expertise when an incident creates multiparcel, infrastructure, documentation, GIS, housing, access, or recovery consequences that will matter later. That is the institutional space the toolkit occupies.

5. Conditions for Feasible Planner Integration

5.1 Trigger Thresholds

Planner integration should be conditional, not automatic. Respondents emphasized that not every incident requires every role and that severity, population exposure, duration, seasonal context, and downstream consequence matter more than the mere existence of an event (Saelens interview; Olson interview; Chief Montevideo interview). Appropriate triggers include incidents affecting multiple structures or parcels, requiring sustained operations across periods, creating major access or infrastructure disruptions, intersecting with floodplain or related land use concerns, or generating documentation demands that could shape later funding or recovery decisions (Atkinson interview; Freeman interview; Behling interview). Literature also supports a threshold-based model, suggesting that collaboration works best when participation is purposeful and that institutions must remain adaptive without becoming indiscriminate under uncertainty (Ansell and Gash 2008; Emerson and Nabatchi 2015; Comfort 1999; Comfort 2007).

5.2 Authority Boundaries

Planners may advise, synthesize, map, and flag downstream implications, but they should not direct operations, commit resources, or blur reporting lines. Respondents from emergency management and fire service consistently stressed this point (Saelens interview; Freeman interview; Chief Montevideo interview). This principle is consistent with FEMA doctrine and collaborative emergency management literature, which emphasize role clarity, coordination, and structured decision-making rather than ambiguous participation (FEMA 2021; Kapucu and

Garayev 2011; Sylves 2020). The value of planners in this model lies in consequence awareness and continuity support, not operational command.

5.3 Output Discipline

Another condition is that planning outputs must match incident tempo. Respondents indicated that any toolkit intended for county use should be short, simple, electronic when possible, and usable under pressure rather than dependent on long binders or paper-heavy systems (Olson interview; Freeman interview; Chief Montevideo interview). Planner contributions during response should remain tightly scoped: short situational notes, GIS layers, decision comparisons, recovery-relevant observations, and consequence flags. They should not become long-form plans or policy essays during active operations. This aligns with crisis management literature emphasizing communication, coordination, and control under uncertainty and time pressure (Comfort 2007).

5.4 Legal and Governance Constraints

The final condition is that planner involvement must not create new burdens or regulatory confusion. Respondents from land use administration and county emergency management stressed the importance of clear role definition, information-sharing boundaries, and avoiding duplication across departments, while also noting that parcel-level and zoning-related knowledge can be useful if integrated properly (Behling interview; Olson interview). This supports a legally and administratively contained model: planners may contribute information and consequence awareness, but the toolkit should not function as a backdoor expansion of land use enforcement into the incident environment (Berke and Campanella 2006; Adger 2006).

6. The Planning Office Emergency Support Toolkit

6.1 Design Logic of the Toolkit

The Planning Office Emergency Support Toolkit operationalizes the project’s central conclusion: planners should be integrated selectively, not continuously, and only through bounded advisory mechanisms. The toolkit is procedural rather than structural. It does not create a standing EOC position for planners. Instead, it gives counties a way to determine when planning support is warranted, what that support may consist of, and how planning-relevant information can be preserved without undermining ICS discipline. This design reflects practitioner requests for concise, compatible, usable tools rather than large standalone planning products. Figure 2, the toolkit flow chart, illustrates this logic by showing how the process moves from activation and role clarification to bounded outputs, documentation continuity, structured decision support, and downstream consequence awareness without creating an open-ended planning function in practice.

The toolkit’s design is also supported by collaborative governance and disaster resilience literature. Ansell and Gash, Emerson and Nabatchi, and Kapucu and Garayev all suggest that collaboration works best when it is structured, bounded, and connected to decision-making

needs. Berke and Campanella, Ahern, and OECD similarly suggest that resilience depends on linking short-term action to longer-term consequences. The toolkit attempts to do exactly that without disrupting emergency management's operational core.

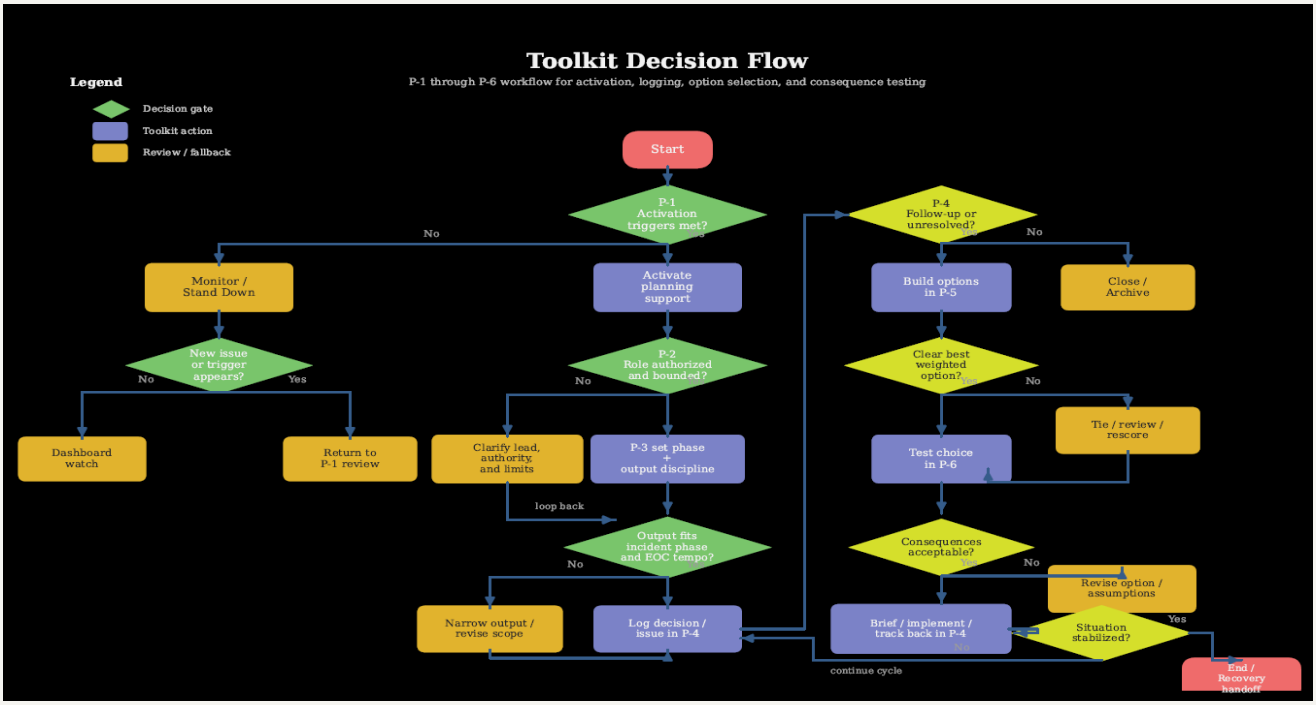


Figure 2: Toolkit decision flow chart.

6.2 Activation Control (Form P-1)

P-1 functions as the threshold screen. Its purpose is to determine whether an incident has crossed into territory where planning support is justified. This responds directly to practitioner concerns that not every incident requires every role and that situational factors such as duration, scale, season, affected population, and downstream consequence shape complexity. From a governance standpoint, P-1 transforms informal judgment into a more transparent trigger process. That matters because collaborative arrangements are more durable when participation is explicit and justified rather than ad hoc. It also aligns with Wisconsin hazard mitigation practice, which emphasizes identifying risk conditions and planning for consequence management before disasters occur.

6.3 Authority Clarification (Form P-2)

P-2 clarifies what the planner may and may not do. This addresses authority concerns raised across the interviews and helps prevent a vague advisory role from drifting into operational ambiguity. FEMA doctrine and collaborative governance literature both stress the importance of explicit institutional boundaries in complex environments. P-2 therefore serves as one of the toolkit's most important safeguards by reinforcing that planners may support analysis,

mapping, synthesis, and consequence awareness without directing operations, committing resources, or altering reporting lines.

6.4 Output Discipline and Tempo Alignment (Form P-3)

P-3 ensures that outputs match incident tempo. The interviews were clear that counties need bullet-point clarity, quick guides, and concise usable products rather than expansive documents. This form disciplines planning contributions so they remain operationally appropriate. In high-pressure events, even useful information becomes unhelpful if it is too slow, too detailed, or detached from immediate decisions. P-3 therefore narrows planning input to short situational notes, GIS products, issue flags, and recovery-relevant observations that can be absorbed within operational rhythms.

6.5 Recovery Continuity Log (Form P-4)

P-4 serves as the recovery continuity log and the main bridge between incident response and later planning or recovery functions. Its value is strongly supported by interview findings on missing parcel-level disaster history, incompatible data systems, and the importance of documentation quality for funding and assistance. This function aligns closely with literature on recovery governance, documentation, and institutional memory. P-4 is not merely a recordkeeping sheet; it is the toolkit's central operational log and assumption-translation tool. Its purpose is to convert evolving field conditions into a structured set of planning-relevant variables that can be carried forward into later decision-support forms. In design terms, P-4 creates a disciplined bridge between raw incident observations and downstream analysis by standardizing how conditions are logged, categorized, prioritized, and updated across operational periods.

6.6 P-5 Decision Matrix

P-5 adds structured comparison. That matters because planners are most useful when they translate complexity into usable choices rather than simply adding narrative. Interview respondents identified decision matrices, coordination-support outputs, and common usable formats as valuable ways to translate complexity into operationally legible options. The logic also draws support from collaborative decision-making literature, which emphasizes transparent comparison and structured reasoning under uncertainty. In practical terms, P-5 helps make planner input legible to emergency managers and county leaders by comparing options, clarifying tradeoffs, and preserving the reasoning behind follow-on choices.

6.7 P-6 Downstream Consequence Assessment

P-6 Downstream Consequence Assessment extends the toolkit into forward-looking consequence awareness. It is not prediction in a strict statistical sense. Instead, it is a structured way to ask what current incident conditions are likely to mean for housing, access, infrastructure, parcels, mitigation, documentation, and recovery if left unaddressed. Interview findings on later pinch points, funding-sensitive decisions, and long-term land and water consequences all support

this function. The model is intended as a structured forecasting aid rather than a predictive engine. It takes incident conditions and option inputs identified in earlier forms, translates them into weighted indicators of system stress, and combines them into a composite pressure estimate. That estimate is then adjusted through assumptions about timing, operational phase, and consequence severity to generate outputs such as consequence score, projected recovery difficulty, and planning recommendations. Its value lies less in numerical precision than in making the logic of consequence assessment explicit, comparable, and discussable while counties still have time to preserve options.

6.8 Why the Toolkit Remains Bounded

Collectively, the toolkit is designed to keep planner participation advisory, bounded, and useful. It does not expand permitting power, change command relationships, or impose new obligations on homeowners during an incident. That design choice responds directly to practitioner concerns about role clarity, practical usefulness, and keeping the tool simple enough for real county use. It is also what makes the toolkit consistent with the literature. Collaborative governance does not require institutional fusion; it requires workable coordination under defined conditions. Likewise, resilience-oriented planning does not require planners to take over emergency response; it requires institutions to recognize how short-term decisions shape long-term consequences.

7. Implementation Pathway

Implementation should begin before incidents occur, not during them. Respondents consistently emphasized that successful coordination depends on preexisting relationships, role familiarity, buy-in, and knowledge of ICS procedures. These are preparedness tasks, not disaster-day fixes (Chief Montevideo interview; Freeman interview; Saelens interview).

Counties should therefore begin with orientation, role identification, and exercise-based testing rather than immediate formal adoption. Tabletop exercises can test trigger thresholds, reporting relationships, documentation procedures, and form usability without creating operational risk. They also allow counties to adjust the toolkit to local hazard profiles, staffing levels, and institutional structures before a real event. This recommendation is consistent with emergency management doctrine and Wisconsin mitigation planning practice, both of which emphasize preparedness, training, and local adaptation (FEMA 2021; Wisconsin Emergency Management 2022).

Hazard mitigation planning is also a logical institutional home for early implementation. Respondents from county and state emergency management and land use administration described planning offices as already participating, to varying degrees, in mitigation-related work. That makes mitigation planning a practical place to define trigger logic, notification protocols, documentation practices, and interdepartmental expectations before an emergency occurs (Saelens interview; Olson interview; Atkinson interview; Behling interview).

Implementation should remain incremental. Some counties may use only the activation, role, output, and continuity forms, while others may adopt the decision matrix and P-6 Downstream Consequence Assessment as well. The goal is compatibility with local practice, ICS integrity, and county capacity.

8. Conclusion

This project began with a practical planning question: can planners be brought into county-level emergency response in a way that adds value without creating confusion, delay, or administrative burden? The interviews suggest that the answer is yes, but only under limited and clearly defined conditions. Disaster governance literature shows that crisis decisions often shape later recovery and redevelopment, while planning and resilience scholarship shows that those downstream consequences matter for vulnerability, equity, and adaptation (Comfort 1999; Comfort 2007; Adger 2006; Berke and Campanella 2006; Tierney 2007). Emergency management doctrine, however, makes clear that response systems depend on authority clarity, coordination, and operational discipline (FEMA 2021; Sylves 2020). These bodies of thought are not incompatible, but they require careful institutional translation.

The interviews did not support permanent planner embedding. Instead, respondents emphasized ICS understanding, proper role placement, simplicity, communication, local practicality, compatibility with existing systems, documentation awareness, training, parcel knowledge, GIS capacity, clearly defined expectations, situational awareness, and attention to the long-term consequences of reactive decision-making (Saelens interview; Olson interview; Freeman interview; Atkinson interview; Behling interview; Chief Montevideo interview; Kussow interview).

Taken together, those perspectives support a meaningful conclusion: selective planner integration is feasible when it is trigger-based, advisory, trained, simple, and administratively contained. Counties do not need planners in every activation. They do need a way to preserve and interpret information easily lost when response and planning remain disconnected. The Planning Office Emergency Support Toolkit is proposed as that bridge.

Its contribution to planning practice is not the creation of a new permanent command function. Rather, it is the design of a coordination mechanism that helps counties connect immediate response decisions to longer-term recovery, mitigation, and land use consequences. In that sense, the toolkit advances a practical planning role within disaster governance: not command, not regulation during crisis, but structured consequence awareness and continuity support. That is a limited claim, but it is also realistic and useful overall.

References

Literature and Policy Sources

Adger, W. N. 2006. “Vulnerability.” *Global Environmental Change* 16 (3): 268–281.

Adams, H., Southard, M., Forbes, S., Leinweber, B., & Nix, D. K. (2022). Effective training improves disaster response. *Opflow, 48*(1), 10–14. https://doi.org/10.1002/opfl.1632

Ahern, Jack. 2011. “From Fail-Safe to Safe-to-Fail: Sustainability and Resilience in the New Urban World.” *Landscape and Urban Planning* 100 (4): 341–343.

Ansell, Chris, and Alison Gash. 2008. “Collaborative Governance in Theory and Practice.” *Journal of Public Administration Research and Theory* 18 (4): 543–571.

Berke, Philip R., and Thomas J. Campanella. 2006. “Planning for Postdisaster Resiliency.” *Annals of the American Academy of Political and Social Science* 604 (1): 192–207.

Comfort, Louise K. 1999. *Shared Risk: Complex Systems in Seismic Response*. Oxford: Pergamon.

Comfort, Louise K. 2007. “Crisis Management in Hindsight: Cognition, Communication, Coordination, and Control.” *Public Administration Review* 67 (S1): 189–197.

Cutter, Susan L., Bryan J. Boruff, and W. Lynn Shirley. 2008. “Social Vulnerability to Environmental Hazards.” *Social Science Quarterly* 84 (2): 242–261.

Emerson, Kirk, and Tina Nabatchi. 2015. *Collaborative Governance Regimes*. Washington, DC: Georgetown University Press.

European Urban Planning Platform (EUP). n.d. “Natural Hazards Mitigation Planning.” Accessed 15 March 2026. https://www.eup-planning.org/natural-hazards-mitigation-planning/

Federal Emergency Management Agency (FEMA). 2021. *National Response Framework*. 4th ed. Washington, DC: U.S. Department of Homeland Security.

Government Accountability Office (GAO). 2020. *Disaster Recovery: FEMA Should Improve Documentation and Decision-Making Processes*. Washington, DC: U.S. Government Accountability Office.

Kapucu, Naim, and Vener Garayev. 2011. “Collaborative Decision-Making in Emergency Management.” *International Journal of Public Administration* 34 (6): 366–375.

Mileti, Dennis S. 1999. *Disasters by Design: A Reassessment of Natural Hazards in the United States*. Washington, DC: Joseph Henry Press.

Organisation for Economic Co-operation and Development (OECD). 2014. *Resilient Cities: Policy Highlights*. Paris: OECD Publishing.

Sendai Framework for Disaster Risk Reduction 2015–2030. 2015. United Nations Office for Disaster Risk Reduction.

Sylves, Richard T. 2020. *Disaster Policy and Politics: Emergency Management and Homeland Security*. 2nd ed. Washington, DC: CQ Press.

Tierney, Kathleen. 2007. “From the Margins to the Mainstream? Disaster Research at the Crossroads.” *Annual Review of Sociology* 33: 503–525.

Wisconsin Emergency Management. 2022. *Wisconsin Hazard Mitigation Plan*. Madison, WI: Wisconsin Department of Military Affairs.

Interviews

Atkinson, Chad. Mitigation Section Supervisor, Wisconsin Emergency Management. Interview by Zach Gerras. February 5, 2026.

Behling, Karyn. Director/Assistant Corporation Counsel, Door County Land Use Services. Interview by Zach Gerras. February 11, 2026.

Freeman, Alex. Emergency Management Coordinator, Waukesha County Emergency Management. Interview by Zach Gerras. February 6, 2026.

Kussow, Jeff. Planner, Door County Planning Department. Interview by Zach Gerras. February 9, 2026.

Montevideo, Kalin. Fire Chief, Sturgeon Bay Fire Department. Interview by Zach Gerras. February 5, 2026.

Olson, Adam. Emergency Management and Communications Director, Douglas County Emergency Management. Interview by Zach Gerras. February 12, 2026.

Saelens, Jeb. Emergency Management Director, Door County Emergency Management. Interview by Zach Gerras. February 5, 2026.

Appendix 1. Form P-1 Activation Trigger

Threshold screen used to determine when planning support should activate.

FORM P-1 — Planning Office Emergency Support Activation Trigger	
Purpose: Determines when the Planning or Community Development Office should engage in emergency response support due to emerging spatial, access, equity, or recovery-relevant decisions.	
Incident Information	
Incident Name / Description:	
Jurisdiction(s):	
Date / Time:	
Operational Period (if known):	
Activation Conditions (one or more triggers activation)	
Trigger	**Flag (Yes/No)**
Forecasted or slow-onset hazard affecting land use, access, or services	No
Pending evacuation, re-entry, closure, siting, or access decisions	No
Infrastructure decisions with long-term planning implications	No
Multi-jurisdictional coordination affecting communities	No
Early recovery, documentation, or mitigation signals emerging	No
Activation Decision	
Auto Recommendation (based on # of triggers flagged Yes):	Stand Down
Final Decision (override if needed):	
Planning Office Lead:	
Activation Time:	
Next Review Time:	

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 2. Form P-2 Role and Authority Confirmation

Defines what the planner may and may not do during emergency operations.

FORM P-2 — Planner Role & Authority Confirmation (Emergency Context)

Purpose: Defines authorized planner role and limits during emergency response.

Planner Assignment

Planner(s) Assigned:

Planning Office:

Reports To (EM / ICS / Liaison):

Authorized Planner Functions (May Do)

Function	Applies? (Yes/No)
Synthesize spatial and community-relevant information	No
Translate response options into community impacts	No
Identify downstream planning, equity, or recovery implications	No
Flag decisions that may constrain future recovery or mitigation	No

Explicitly Excluded Functions (May Not Do)

Function	Applies? (Yes/No)
Direct field operations	No
Set response priorities	No
Commit resources or expenditures	No
Conduct independent policy or development analysis	No

Planning Office Lead Signature / Date:

EM or ICS Acknowledgment (if applicable):

Note: Planner input is advisory only and does not alter ICS decision authority.

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 3. Form P-3 Output Discipline

Aligns planning outputs to incident phase and operational tempo.

FORM P-3 — Planning Output Discipline by Incident Phase

Purpose: Ensures planning outputs match incident tempo and decision-maker capacity.

Select Current Incident Phase:	Early / Initial
Permitted Outputs (auto):	Minimum-fact synthesis; access and service continuity issues; immediate tradeoffs; vulnerability flags
Not Permitted (auto):	Long-range plans; design concepts; comprehensive reports; policy recommendations
Compatibility note:	B6/B7 now use INDEX/MATCH so the sheet works in older Excel versions too.

Phase	Permitted Planning Outputs	Outputs Not Permitted
Early / Initial	Minimum-fact synthesis; access and service continuity issues; immediate tradeoffs; vulnerability flags	Long-range plans; design concepts; comprehensive reports; policy recommendations
Sustained Operations	Decision comparisons; cumulative impacts; coordination notes; recovery observations	Long-range plans; design concepts; comprehensive reports; policy recommendations
Stabilization / Transition	Unresolved gaps; temporary measures; mitigation opportunities; recovery handoff notes	Long-range plans; design concepts; comprehensive reports; policy recommendations

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 4A. P-4 Log: incident and issue fields

Incident identifiers, timing, summary, and decision category fields.

P4-Recovery Log					
Incident Name	**Incident ID**	**Date Logged**	**Operational Period**	**Decision / Issue Summary**	**Decision Category**
Highway 42 Washout	DC-01	3/2/26	Initial	Highway 42 section washed out after storm surge	Infrastructure Restoratio
Washington Island Ferry Delay	DC-02	2026-02-15	Sustained	Ferry service suspended due to ice damage	Access Control
Fish Creek Marina Flooding	DC-03	2026-04-07	Initial	Marina parking and boat launch flooded	Regulatory Threshold
Sturgeon Bay Power Outage	DC-04	2026-01-28	Initial	Substation failure causing power loss	Utility Restoration
County E Temporary Closure	DC-05	2026-03-10	Sustained	Downed trees blocking rural roadway	Debris Removal
Baileys Harbor Shoreline Damage	DC-06	2026-04-02	Initial	Storm surge damaged shoreline protection	Regulatory Threshold
Peninsula State Park Access Restriction	DC-07	2026-05-14	Sustained	Park road closure due to storm debris	Access Control
Egg Harbor Utility Line Damage	DC-08	2026-03-21	Initial	Utility pole collapse during high winds	Utility Restoration
Door Bluff Trail Landslide	DC-09	2026-04-19	Initial	Trail and bluff erosion after heavy rain	Access Control
Sister Bay Water System Pressure Drop	DC-10	2026-02-03	Sustained	Water main break lowering system pressure	Utility Restoration

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 4B. P-4 Log: context and redevelopment fields

Why the decision mattered, geography, access, service, and redevelopment fields.

P-4 Recovery Log					
Why This Decision Mattered	**Geographic Area**	**Access/Mobility Impact**	**Service Disruption**	**Temporary Measure Risk of Permanence**	**Land Use / Redevelopment Implication**
Critical north–south corridor for peninsula access	Ephraim / Highway 42	Yes	Yes	Yes	No
Island access disruption affecting residents and supplies	Washington Island Ferry Route	Yes	Yes	No	Yes
Impacts coastal infrastructure and tourism economy	Fish Creek Waterfront	No	Yes	Yes	Yes
Affects hospital operations and downtown businesses	Sturgeon Bay Downtown	Yes	Yes	Yes	No
Access limitation for emergency and agricultural traffic	Southern Door County	Yes	No	Yes	No
Potential long-term erosion risk and property damage	Baileys Harbor Waterfront	No	Yes	Yes	No
Impacts tourism flow and emergency evacuation routes	Peninsula State Park	Yes	No	No	No
Service interruption for businesses and homes	Egg Harbor Village	Yes	Yes	Yes	Yes
Public safety hazard for visitors	Door Bluff Headlands	No	No	Yes	No
Potential boil-water advisory affecting residents	Sister Bay Village	Yes	Yes	Yes	Yes

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 4C. P-4 Log: follow-up and responsibility fields

Regulatory, FEMA, mitigation, follow-up, office, entity, and status fields.

Floodplain / Regulatory Threshold Flag	FEMA Documentation Relevance	Mitigation Opportunity Identified	Recommended Follow-Up Type	Responsible Office	Executing Entity
Yes	Yes	No	Grant Application	Public Works	NGO / Volur
Yes	No	No	No Action Needed	Other	Private Sect
Yes	No	No	Hazard Mitigation Pl	Planning	County Forc
Yes	No	Yes	No Action Needed	Emergency Ma	State Agenc
Yes	No	No	Zoning Review	Highway	Federal Age
No	Yes	Yes	Capital Improvemen	Public Health	Private Sect
Yes	No	Yes	Community Develop	Utilities	State Agenc
No	Yes	Yes	Zoning Review	Clerk/Treasure	NGO / Volur
No	Yes	Yes	Hazard Mitigation Pl	Other	NGO / Volur
Yes	No	Yes	Zoning Review	Emergency Ma	State Agenc

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 4D. P-4 Log: status and prioritization fields

Date, follow-up, open days, and priority tracking fields.

Status	Follow-Up Date	Days Open (auto)	Needs Follow-Up? (auto)	Priority Score (auto)	Priority Class
Complete	26-Apr			8	
Assigned	2-Mar	43	Yes	7	High
Open		0	Yes	8	Critical
Under Re		61	Yes	8	Critical
Open		20	Yes	6	High
Under Re		0	Yes	5	Moderate
Complete				5	
Open		9	Yes	8	Critical
Assigned		0	Yes	4	Moderate
Open		55	Yes	10	Critical

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 4E. P-4 Dashboard Summary

Quick summary metrics generated from the recovery continuity log.

Toolkit Dashboard (P-4 Handoff Readiness)

Metric	Value
Total log entries	10
Active items (Open / Under Review / Assigned)	8
Needs follow-up (auto)	8
Critical + High priority items	6
FEMA documentation relevant	4
Mitigation opportunities noted	6
Completed items	2
Handoff completion rate	20%

Priority Class	Count
Critical	4
High	2
Moderate	2
Low	0

Use this sheet as a quick handoff readout: backlog, urgency, and documentation needs all update from P-4 automatically.

Interpretation note: P-6 is a scenario pressure check, not a forecast. Use it to structure discussion, not to claim prediction.

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 5A. P-5 Decision Matrix: inputs

Decision IDs, topics, options, and core impact criteria.

P-5 Decision Matrix — Transparent Weighted Comparison

Decision ID	Decision Topic	Option	Public Safety Impact (1-5)	Access & Mobility Impact (1-5)	Equity Impact (1-5)	Recovery Flexibility (1-5)
DC-01	Highway 42 Washout	Reopen one lane with temporary stabilization	1	3	3	4
DC-01	Highway 42 Washout	Maintain closure and detour traffic	4	4	3	3
DC-01	Highway 42 Washout	Construct temporary bypass route	5	4	2	2
DC-02	Washington Island Ferry Delay	Prioritize emergency-only ferry crossings	2	5	2	5
DC-02	Washington Island Ferry Delay	Run limited freight and resident service	3	4	3	3
DC-02	Washington Island Ferry Delay	Suspend service until full repair is complete	1	5	4	4
DC-03	Fish Creek Marina Flooding	Install temporary barriers and pumps	5	1	2	1
DC-03	Fish Creek Marina Flooding	Close marina and adjacent parking until waters recede	4	5	3	3
DC-03	Fish Creek Marina Flooding	Relocate access and functions to alternate site	2	4	4	4
DC-04	Sturgeon Bay Power Outage	Prioritize restoration to critical facilities first	3	2	5	2
DC-04	Sturgeon Bay Power Outage	Deploy backup generators to essential sites	1	4	3	3
DC-04	Sturgeon Bay Power Outage	Maintain rolling outages until repairs are complete	4	3	2	2
DC-05	County E Temporary Closure	Clear debris and reopen roadway immediately	3	4	4	3
DC-05	County E Temporary Closure	Maintain closure and route traffic to detour	2	5	4	4
DC-05	County E Temporary Closure	Restrict roadway to local/emergency access only	5	3	3	2
DC-06	Baileys Harbor Shoreline Damage	Install temporary shoreline stabilization	1	4	3	3
DC-06	Baileys Harbor Shoreline Damage	Restrict access and monitor erosion	5	4	3	3
DC-06	Baileys Harbor Shoreline Damage	Begin permanent redesign and reconstruction planning	3	3	2	2
DC-07	Peninsula State Park Access Restriction	Remove debris and reopen park access road	2	3	3	4
DC-07	Peninsula State Park Access Restriction	Keep road closed and provide alternate access guidance	4	5	4	3
DC-07	Peninsula State Park Access Restriction	Limit access to essential personnel only	1	4	3	3
DC-08	Egg Harbor Utility Line Damage	Replace damaged poles in place	4	4	4	4
DC-08	Egg Harbor Utility Line Damage	Install temporary bypass service	5	4	3	3
DC-08	Egg Harbor Utility Line Damage	Relocate damaged line segment underground	3	3	3	4
DC-09	Door Bluff Trail Landslide	Close trail and stabilize bluff area	2	4	4	5
DC-09	Door Bluff Trail Landslide	Reopen limited trail access with barriers and warnings	1	4	4	3
DC-09	Door Bluff Trail Landslide	Reroute trail to safer inland alignment	5	5	4	4
DC-10	Sister Bay Water System Pressure Drop	Repair main break and restore service	4	4	4	3
DC-10	Sister Bay Water System Pressure Drop	Issue boil water advisory and operate temporary service	3	5	4	4
DC-10	Sister Bay Water System Pressure Drop	Accelerate full replacement of damaged water line	2	4	3	3

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 5B. P-5 Decision Matrix: scoring and weights

Total score, weighted score, recommendation, and weight structure.

Cost / Feasibility (1-5)	Long-Term Planning Risk (1-5)	Total Score	Weighted Score	Recommendation
5	2	18	2.60	
4	3	21	3.60	
4	4	21	3.80	Best (weighted)
5	5	24	3.80	Best (weighted)
4	3	20	3.30	
4	2	20	3.00	
5	5	19	3.30	
3	2	20	3.55	Best (weighted)
4	4	22	3.40	
2	3	17	2.75	
4	4	19	2.85	
3	5	19	3.35	Best (weighted)
4	3	21	3.40	
3	3	21	3.35	
2	4	19	3.50	Best (weighted)
4	3	18	2.70	
4	3	22	3.90	Best (weighted)
2	5	17	2.95	
5	2	19	2.90	
3	4	23	3.95	Best (weighted)
4	5	20	3.00	
5	2	23	3.80	
4	3	22	3.90	Best (weighted)
4	4	21	3.40	
2	1	18	2.90	
4	3	19	2.80	
3	3	24	4.25	Best (weighted)
4	3	22	3.70	Best (weighted)
3	3	22	3.65	
4	4	20	3.15	

Weights

Criterion	Weight	
Public Safety	30%	
Access & Mobility	20%	
Equity	10%	
Recovery Flexibility	15%	
Cost / Feasibility	10%	
Long-Term Planning Risk	15%	
	Total Weight	100%

Notes	Weight Check
If priorities shift, update the weight table and re-review the recommendation.	

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 6A. P-6 Scenario selection and signals

Scenario setup plus auto-pulled signals from prior toolkit forms.

FORM P-6 — Scenario Consequences Check

Use P-6 to pressure-test operational, infrastructure, equity, and recovery consequences under current assumptions.

P-6 is not a forecast. It is a structured scenario check that compares the recommended P-5 option against alternatives and flags recovery implications.

Scenario Selection

Incident ID:	DC-07
Incident Name (auto):	Peninsula State Park Access Restriction
Decision Topic (auto):	Peninsula State Park Access Restriction
Recommended P-5 Option (auto):	Keep road closed and provide alternate access guidance
Alternate option to test (optional):	Keep road clos
Incident Phase:	Sustained Ope
Scenario Horizon:	0-24 hours
Scenario Posture:	Mo
Analyst Confidence:	High

Auto-Pulled Incident Signals

Current P-1 Decision:	Stand Down
P-3 permitted output note:	Minimum-fact synthesis; access and service continuity issues; immediate tradeoffs; vulnerability flags
P-4 entries logged:	1
Needs follow-up flags:	0
Access + service flags:	1
Regulatory + FEMA + mitigation flags:	2
Max P-4 priority score:	5.0
Priority class:	Moderate
Best P-5 weighted score:	3.95
Active option weighted score:	3.95

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 6B. P-6 Assumptions and outputs

Scenario assumption inputs and downstream consequence outputs.

Scenario Assumptions	Selected Value	Pts
Population exposure:	Severe	4
Critical facilities affected:	10+	4
Housing displacement pressure:	Extreme	4
Utility interdependency stress:	Severe	3
Transportation fragility:	Severe	3
Resource adequacy:	Critical	3
Public communication confidence:	High	0
Hazard persistence:	Escalating	3
Mutual aid availability:	Minimal	2
Recovery funding readiness:	Somewhat Rea	1

Weighted score gap: 0.00

Scenario Outputs	
Incident signal pressure:	7.2
Assumption stress subtotal:	27.0
Time & phase multiplier:	0.9
Baseline scenario pressure:	14.4
Active option in model:	Keep road closed and provide alternate access guidance
Scenario consequence score:	14.4
Scenario consequence class:	Low
Indicative recovery window (days):	14.0
Service interruption outlook:	Impacts likely contained if monitored.
Population / equity pressure:	Manageable community pressure if communications remain clear.
Planning recommendation:	Routine monitoring; document changes if conditions worsen.
Primary cascading risks:	utility cascades; transport access constraints; housing displacement pressure; regulatory/FEMA documentation burden;

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.

Appendix 6C. P-6 Option comparison

Cross-option comparison under current assumptions.

Monitoring cadence: Reassess if trigger conditions change.

Option Comparison Under Current Assumptions

Option	P-5 Weighted Score	Public Safety	Access & Mobility	Equity	Recovery Flexibility	Cost / Feasibility	Long-Term Planning	Scenario Score	Indicative Days	Class
Keep road closed and provide alternate access guidance	3.95	4.00	5.00	4.00	3.00	3.00	4.00	14.40	14.00	Low
Limit access to essential personnel only	3.00	1.00	4.00	3.00	3.00	4.00	5.00	23.90	19.00	High
Replace damaged poles in place	3.80	4.00	4.00	4.00	4.00	5.00	2.00	15.90	14.00	Low

Source: Author-developed Planning Office Emergency Support Toolkit workbook, 2026.