Development of Sustainable Strategies Supporting Transportation Planning and Conservation Priorities across the West

Digital wildlife information plays an increasingly important role in transportation planning and project implementation. One example is the Crucial Habitat Assessment Tool (CHAT) developed by the Western Governors’ Association (WGA). The online tool provides a high-level overview of crucial habitat for project pre-planning across 16 Western states.

WGA and the Federal Highway Administration (FHWA), in recognition of the growing importance of this information, entered into an agreement in 2013 to identify opportunities to increase the transportation sector’s use of state and regional digital wildlife data.

The result of that collaboration is the report, “Development of Sustainable Strategies Supporting Transportation Planning and Conservation Priorities across the West.”

Highlights of the report:

• More than 90% of respondents indicated that their agencies consider fish and wildlife in transportation planning and projects, but many were unaware of CHATs.

• “Investment in innovative technologies, research and monitoring” was one of the top eight ‘best practices’ cited to integrate the needs of fish and wildlife into transportation plans.

• Only 4 of the 16 state Departments of Transportation who filled out an ‘Opportunities Matrix’ now use the regional CHAT, but 10 identified opportunities to increase use of it.

• CHAT digital wildlife data can be used as an input within the framework of Eco-Logical, the FHWA’s ecosystem-based approach to transportation planning.
Questionnaire

State department of transportation (DOT) leaders from all 16 states in the regional CHAT, and representatives of five federal agencies, responded to a questionnaire six months after the regional CHAT was launched. An analysis of the responses revealed several major findings, including:

- **92% of respondents** report that their agencies consider fish and wildlife in transportation planning and projects. But many, including the majority of federal respondents, were unaware of or unfamiliar with CHATs.

- **State CHATs** were used more often and ranked more highly for usefulness than the regional CHAT. Over half of the respondents said they do not use the regional CHAT because it does not meet their specific data needs.

- **More funding and early integration into planning** would be the best ways to increase transportation professionals’ attention to wildlife.

Best Practices

The report describes eight best management practices (BMPs) for using CHATs to assure the greatest consideration for fish and wildlife in transportation planning and programs:

- **Incorporate** wildlife information before budgets are set.

- **Set** joint transportation and wildlife priorities.

- **Employ** a transportation-wildlife liaison.

- **Expand** the role of wildlife biologists.

- **Use** CHATs in mitigation planning.

- **Invest** in innovative technologies, research and monitoring.

- **Increase** use and understanding of CHAT websites.

- **Use** FHWA’s Eco-Logical approach to improve cooperation.

The BMP section includes 11 case studies demonstrating such practices and concludes by suggesting five potential future priorities to increase use of CHATs, including more regular data updates, development of finer-scale data, improved integration of CHAT websites and other wildlife data sources, aligning highway safety and wildlife priority areas, and expanding outreach about the online tool.

Opportunities Matrix

The report explores opportunities to expand use of regional and state CHATs, as well as other digital wildlife data, by transportation professionals. The opportunities were evaluated by DOT representatives from the 16 states involved in the regional CHAT effort and compiled into an “Opportunities Matrix.” Notable results:

- Although only 4 state DOTs of the 16 filling out the matrix now use the regional CHAT, 10 identified opportunities to increase the use of regional CHAT information, particularly in pre- and post-State Transportation Improvement Program processes.

- While 6 of the 16 state DOTs filling out the “Opportunities Matrix” now use state CHAT data (there are currently 10 state CHATs), there was near
consensus that there is the potential to use state CHAT data in nearly all transportation processes in the future.

- All 16 state DOTs use non-CHAT digital wildlife data for nearly all the transportation processes evaluated and 15 of the 16 state responded that opportunities exist for the continued use, or increased use, of non-CHAT digital wildlife data.

**Eco-Logical**

Eco-Logical is FHWA’s ecosystem-based approach to transportation planning. The report notes that Eco-Logical provides an overarching framework to facilitate collaborative planning, while CHATs provide spatially explicit, digital wildlife data that can be used as an input within that framework. The report identifies four steps within the Eco-Logical framework where regional or state CHATs could be used to better inform transportation infrastructure and conservation planning:

- Characterize resource status and integrate natural environment plans.
- Create a Regional Ecosystem Framework (REF).
- Develop a crediting system.
- Update the REF and plan.

The report also identifies five opportunities for strengthening the nexus between CHATs and Eco-Logical: case studies, webinars, peer learning exchanges, conferences and meetings, and annual reports and other documentation.
Increasing Use of Digital Wildlife Data

The report concludes with ideas to increase the use of CHATs and digital wildlife data, including:

- **Increase** outreach to raise awareness of CHATs among federal and tribal land managers, and state and municipal transportation staff.

- **Explore** data refinements to state and regional CHATs.

- **Assess** whether CHATs should be modified to meet more user needs in other sectors, such as energy and transmission.

- **Strengthen** the nexus between CHATs and Eco-Logical by illustrating the benefits of incorporating CHATs into the Eco-Logical framework.

- **Overcome** cultural barriers to consideration of wildlife by elevating wildlife values within transportation planning and project processes.

*Read, download the complete report on the Western Governors’ Association website*