Evaluation of Highway Mitigation on the Frequency of Wildlife-Vehicle Collisions on the Highway and an Adjacent Railway in a Montane Ecosystem

by

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A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Science

in

Ecology

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Abstract

Transportation networks are expanding rapidly to meet increasing global demands to move people and cargo. These networks are essential to connect societies and economies but have several negative effects on wildlife populations including collisions with vehicles. Growing incidences and increasing awareness of wildlife-vehicle collisions have encouraged mitigation using a combination of wildlife fencing and crossing structures. Very litte attention has been paid to the problem of wildlife collisions with trains, or the effect of highway mitigation on rail mortality, despite frequent parallel alignment of roads and rails along transportation corridors. The objective of this thesis was to examine the effects of mitigating the TransCanada Highway between 1983 and 2013 on rates of wildlife-vehicle collisions on both the highway and an adjacent mainline of the Canadian Pacific railway in Banff National Park, Canada. A core motivation for this research was the recent increase in rail-caused mortality for the local population of grizzly bears (*Ursus arctos horribilis*).

I examined a dataset provided by Parks Canada of collisions with large mammals (n = 2775) that were reported on either the highway or railway between 1981-2014. I attributed collisions to nine temporal spatial mitigation sections and compared collision frequency between binary types of transportation mode (highway vs. railway), guild (ungulates vs. carnivores), mitigation status (before vs. after mitigation), and their biologically-relevant two-way interactions. I further examined three species groups with particular importance to wildlife managers, which included elk (*Cervus canadensis*) other ungulates (family Cervidae) and bears (*Ursus* spp.). I anticipated that changes in population size and distribution could confound the effects of other variables, so I included spatially-referenced measures of population size for elk, the only species for which this information was available. I examined the effects of these

variables on collision rates using generalized linear mixed models with mitigation section (road/rail segment) as a random effect and use of information theory to identify the best-supported models.

My first analysis showed that collision frequency was generally higher on the highway, higher for ungulates, and higher before mitigation occurred, but several significant interactions revealed that lower collision rates on the railway were more pronounced for carnivores (relative to ungulates) and that lower collision rates after mitigation were more prevalent on the highway (relative to the railway), and for ungulates (relative to carnivores). Taken together, the effect of highway mitigation on collision frequency was most pronounced for ungulates on the highway. The analyses that separated transportation modalities and species groups revealed that railway collisions for elk increased with population size, but declined over time and more slightly in recent years, but with no effect of mitigation. For other ungulates, rail collisions increased in relation to the timing of mitigation, but not with mitigation status. For bears, rail collisions increased over time and were higher for black bears than grizzlies, but again with no apparent effect of highway mitigation *per se* via a simple or interacting effect.

My results suggest that highway mitigation reduced the rate of collisions on the highway, mainly for ungulates, without causing increased mortality on the adjacent railway. Instead, it appears that increasing populations of all three species groups could explain increases in rail-caused mortality over time. The results of this research demonstrate the need to assess mitigation effects over long time periods and within a landscape context while emphasizing the importance of changes in wildlife population size and distribution. This holistic approach could improve the effectiveness and efficiency of mitigation intended to reduce human-caused wildlife

mortality in locations around the world, especially where multiple transportation routes and modes have interacting effects.

Preface

This thesis is an original work by Patrick S. Gilhooly. Publication is intended for Chapter 2, with co-authors S.E. Nielsen, J. Whittington, and C.C. St. Clair. Colleen Cassady St. Clair was the supervisory author and was involved with concept development and manuscript review.

Acknowledgements

My research would not be possible if it were not for the collaborative working environment established decades ago between Parks Canada and the Canadian Pacific Railway. More recently, the Canadian Pacific-Parks Canada Grizzly Bear Research Joint Action Plan, established in 2010, strengthened this collaboration. I lack a comprehensive list of all the names who were involved in collecting core data used for this thesis, but the dedication of numerous resource conservation officers, dispatch communicators, train conductors, and supporting staff in Banff National Park is greatly appreciated. In particular, I would like to thank the tremendous support from Jesse Whittington from Parks Canada, whose experience, knowledge, and support proved invaluable.

Funding was supported by the *University of Alberta Grizzly Bear Research and Mitigation Project*, which received funding from the Canadian Pacific–Parks Canada Grizzly Bear Initiative and the National Sciences and Engineering Research Council of Canada (NSERC).

I want to thank all of my friends and family who were supportive in their unique ways, including my parents Darwin and Leigh, and siblings, Taniss, David, Mike, and Ryan. Thank you, Zachary Long for providing me with a scientifically-minded sounding board over the years and Rob Gillies for not having a clue what I was talking about, but there nonetheless. My genuine appreciation goes out to the past and present members of the St. Clair lab for their support, especially Laurens Put, Sonya Pollock, Aditya Gangadharan, Jonathan Backs, Alyssa Friesen, and Jack Hopkins.

I sincerely thank committee member Dr. Scott E. Nielsen for his guidance and expertise throughout the development of this thesis. Lastly, I am truly grateful for my supervisor, Dr. Colleen Cassady St. Clair. Before becoming one of her graduate students, I was an employee of hers on another research project. I am genuinely thankful for the opportunities Colleen has provided me over the years. The experience I've gained working with her has elevated me to new heights that I never knew were possible from within. Her dedication, wisdom, and unique ability as a mentor will support new opportunities and challenges in the future. For that, I am very grateful.

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Chapter 1: General Introduction

Globalization in the twentieth century accelerated a system in which society has become more reliant on a variety of transportation modes to support a growing human population and healthy economies. Socio-economic development such as transportation infrastructure, although beneficial in many ways, can often have deleterious effects on the environment including compromising the integrity of ecosystems and wildlife populations (van der Ree, Smith & Grilo 2015a). Roads are well-known to have negative effects on wildlife that include the indirect effects of habitat loss, degradation, and fragmentation, as well as the direct effect of mortalities following collisions with vehicles. As early as the 1920's, road mortalities were recognized to impact both wildlife and humans (Stoner 1925). Wildlife mortality is currently one of the leading sources of human-caused mortality for many vertebrates worldwide (reviewed by Glista, DeVault & DeWoody 2007, 2009). It is forecasted that global road and railway infrastructure will need to expand by 60% by 2050 relative to 2010 levels to meet the demands of current globalization trends (Dulac 2013). This topic is addressed in the sub-dsicpline of road ecology, which has rapidly progressed to offer solutions that will benefit societies, economies, and ecosystems worldwide (reviewed by Spellerberg 1998; Trombulak & Frissell 2000; Coffin 2007).

Road ecology emerged as a recognized sub-discipline during the 1980s to further understand the effects of roads on ecosystems and to develop ways to decrease these unsustainable effects (Forman *et al.* 2003). Wildlife-vehicle collisions, although numerous, tend to have negligible effects on overall population size (Forman 1998; Forman & Alexander 1998). Despite this, vertebrate populations of threatened, endangered or declining species are more at risk from road mortality such as (but not limited to) tigers (*Panthera tigris)* and leopards (*Panthera pardus*; Baskaran and Boominathan 2010), Spotted Blanding's turtles (*Emydoidea blandingii*; Beaudry, deMaynadier & Hunter 2008), grizzly bears (*Ursus arctos horribilis*; Benn & Herrero 2002), Florida Key deer (*O. virginianus clavium*; Braden *et al.* 2008), Stephens' kangaroo rat (*Dipodomys stephensi*; Brock & Kelt 2004), Iberian lynx (*Lynx pardinus*; Ferreras *et al.* 1992), Florida panther (*Felis concolor coryi*; Foster & Humphrey 1995), African elephants (*Loxodonta*) and hunting dogs (*Lycaon pictus*; Drews 1995), Carnaby's Black Cockatoo

(*Calyptorhynchus latirostris*; Saunders, Mawson & Dawson 2014), Eastern massasauga (*Sistrurus catenatus*; Shepard *et al.* 2008), and Green and Golden Bell Frog (*Litoria aurea*; van de Mortel & Goldingay 1998). As road ecology became more widespread, transportation agencies and wildlife managers began implementing a variety road mitigation methods aimed at reducing wildlife-vehicle collisions (Taylor & Goldingay 2010).

Widespread application of road mitigation methods aimed at reducing collision rates has created a toolbox of opportunities (Forman *et al.* 2003; van der Ree, Smith & Grilo 2015b). A synthesis of over forty types of ungulate road mitigation methods (influencing animal or human behavior) were evaluated for their effectiveness at reducing collisions and its performance as a complete barrier to target species. Results of this synthesis suggested there were large gaps in knowledge with regards to overall effectiveness (Huijser & McGowen 2010). Wildlife fencing and crossing structures were among the most effective means examined (Huijser & McGowen 2010) and have become increasingly common internationally as a mitigation tool (Taylor & Goldingay 2010). Despite the benefits of many mitigation methods to both wildlife and humans, more information is needed to identify the most efficient and effective ways of implementing road mitigation methods (Hardy *et al.* 2003; van der Grift *et al.* 2013). Specifically lacking are long-term, multi-species studies that assess population sizes or movement behaviour before and after transportation mitigation assessments (van der Ree *et al.* 2007).

Like roads, railways have deleterious effects on wildlife. However, the degree of impact relative to roads is unclear and may be more difficult to identify (Dorsey, Olsson & Rew 2015). Railways are known to affect wildlife via direct mortality (Kušta, Ježek & Keken 2011), movement and habitat fragmentation (van der Grift 1999; Ito *et al.* 2005), and foraging ecology via vegetation, train-killed carrion, or spilled agricultural products (Gibeau & Herrero 1998; Wells *et al.* 1999). Large mammals are among the species affected by railway collisions and include species of conservation concern such as grizzly bears (Hopkins *et al.* 2014), leopards (Joshi 2010), and Asian elephants (*Elephas maximus;* Joshi & Singh 2007). Interestingly, road mitigations seldom include railways or the combination of both roads and railways despite often co-occurring on the landscape (Dorsey, Olsson & Rew 2015). Only a few studies have examined railway mortality and addressed the potential need for mitigation, but these have addressed

diverse species that include moose (*Alces alces*; Child, Barry & Aitken 1991; Andreassen, Gundersen & Storaas 2005), small mammals (Hunt, Dickens & Whelan 1987), terrestrial vertebrates (Rodriguez, Crema & Delibes 1996, 1997), and antelope (Van Riper III, Hart & Bright 2001; Baofa *et al.* 2006). The sparsity of studies addressing railway mortality demonstrates the need for more research before effective mitigation can occur (Dorsey, Olsson & Rew 2015).

One location where more information about railway mortality is badly needed is in Banff National Park, Canada (hereafter Banff). Banff was established in 1885 as the first national park in Canada immediately following the construction of the transcontinental Canadian Pacific Railway (1882-1885) that bisected the park along the Bow River. A second major transcontinental corridor, the TransCanada Highway, was constructed during the 1950's and paralleled the railway through Banff (Holroyd & Van Tighem 1983a). Banff is widely viewed as a jewel of the national parks system for pioneering wildlife preservation and management for future generations (Holroyd & Van Tighem 1983a; b). During the 1960's and 1970's, increasing societal awareness of ecology and elicited public demand for a new approach to wildlife management, which included ending predator control measures and implementing a comprehensive biophysical program aimed at standardizing data collection within and among mountain national parks (Holroyd & Van Tighem 1983a; b).

As part of this biophysical assessment, historical mortalities were compiled for all known species, including bears. In Banff, the leading source of historical human-caused bear mortalities was the destruction of problem bears related to improper garbage management. The second leading source of bear mortality was from transportation-related mortalities, with black bears (*Ursus americanus*) having 48% higher frequencies of collisions along the railway (n = 70) compared to highways (n = 43) between 1945-1978. In contrast, grizzly bear road and railway collisions were described as 'few', although records were incomplete during this era (Holroyd & Van Tighem 1983a).

For ungulate species, historical human-caused mortalities were predominately from transportation-related collisions and varied by species. For example, elk (*Cervus canadensis)* had a total of 415 road and 247 railway collisions from 1963 to 1980 with the majority of these

collisions occurring in the lower Bow Valley surrounding the town of Banff (Holroyd & Van Tighem 1983a). On the other hand, mule deer (*Odocoileus hemionus*) collisions varied greatly with 185 road and six railway collisions, compared to white-tailed deer (*Odocoileus virginianus*) which had 41 road and no recorded railway collisions from 1945-1980 (Holroyd & Van Tighem 1983a). Moose (*Alces alces*) collisions during this same period, totaled 56 road and 43 railway collisions, contributing to their decline in the region (Holroyd & Van Tighem 1983a). Wildlife mortality related to transportation was common because the Bow Valley contains high-quality wildlife habitat with productive montane vegetation that is interspersed with a high density of human infrastructure (Holroyd & Van Tighem 1983a; b; Gibeau & Heuer 1996; Gibeau & Herrero 1998). Despite the lack of population records during this era, it is evident that historical road and railway collisions affected a variety of species.

Within thirty years of highway construction during the late 1970's, vehicle collisions with ungulates, particularly elk, were concerning for wildlife managers. Increasing traffic volume and forage in the road right-of-way created significant wildlife mortality and danger to people, in turn causing managers to initiate highway mitigation (Clevenger, Chruszcz & Gunson 2001; Ford, Clevenger & Rettie 2010). Between 1983 and 2013, the highway through Banff was divided by a median and twinned, contained on both sides by a wildlife fence, and provisioned with crossing structures to support animal movement (Ford, Clevenger & Rettie 2010; Barrueto, Ford & Clevenger 2014). The effectiveness of these efforts was examined approximately halfway through the mitigation project and showed a substantial reduction in ungulate-vehicle collisions (Clevenger, Chruszcz & Gunson 2001).

Amid several concurrent large-scale management programs over the past few decades that included garbage management, prescribed fire, and infrastructure removal and securement, there was a general decline in human-caused mortality of many species, including grizzly bears. Since approximately 2000, train collisions have gradually become the leading source of mortality for grizzly bears (Benn & Herrero 2002; Bertch & Gibeau 2009) with a total of 15 collision events involving 18 individuals between 2000-2014 (no collisions have occurred in the past two years). To address this concern, a joint effort by the Parks Canada Agency and the Canadian Pacific railway, termed the Grizzly Bear Conservation Initiative, was established in 2010. The initiative seeks to identify the root cause(s) of bear-train collisions and develop methods to

reduce railway mortalities in Banff and Yoho National Parks. Several projects are supported by the initiative, the largest of which is The *University of Alberta Grizzly Bear Research and Mitigation Project*. Part of that project, in turn, includes the work contained in this thesis.

In Chapter 2, I present data collected by Parks Canada that lists wildlife collisions on the highway and railway in Banff National Park. These data stem from reports provided by parks and railway staff, as well as the public that were subsequently investigated by parks staff. The data include nine sections of the road/rail corridor with temporal and spatial differences in the timing of mitigation creating variable sample sizes of years between before vs. after highway mitigation. I explore the hypothesis that highway mitigation may have caused compensatory increases in railway mortality for grizzly bears and other species. In Chapter 3, I summarize the information gained from this research and offer suggestions for increasing the efficiency and effectiveness of transportation mitigation with broad-scale application.

Chapter 2: Road mitigation does not increase collisions with wildlife on an adjacent railway

Summary

1. Wildlife mortality caused by collisions with vehicles is often mitigated on roads by the installation of wildlife fencing and crossing structures. This mitigation necessarily changes the behaviour of resident wildlife potentially increasing mortality on adjacent roads and railways.
2. We investigated the effect of road mitigation installed in sections between 1983 and 2013 on the TransCanada Highway through Banff National Park, Canada by comparing wildlife collisions on both the highway and adjacent railway before and after mitigation occurred. A core impetus for this investigation was the increase in rail-caused mortality of grizzly bears (*Ursus arctos horribilis*) that began in 2000 and has become the leading source of human-caused mortality.
3. We summed all highway and rail-caused collisions for carnivores and ungulates recorded by parks staff and calculated annual rates for species with sufficient sample sizes. We examined the effects of transportation mode (highway and railway), guild (ungulates and carnivores), and mitigation status (before and after) with mitigation section as a random effect in generalized linear mixed models. We constructed mode-specific models for three species groups with high relevance to managers; elk, (*Cervus canadensis*), other ungulates (family Cervidae), and bears (*Ursus* spp.).
4. In the combined analysis, collision frequency was generally lower on the railway, lower for carnivores, and lower after mitigation. Two-way interactions indicated that the largest effect of mitigation was to reduce collisions on highways for ungulates. For species groups on the highway, annual highway collision frequency decreased for both elk and other ungulates, but it increased in the time since mitigation for bears. Collisions on the railway varied among groups, decreasing over time and with population size for elk, but increasing through time for other ungulates and bears.
5. *Synthesis and applications*. Although the overall effect of highway mitigation was to reduce mortality on both transportation features, this effect was most pronounced for

ungulates on the highway and resulted partly from the concomitant reduction in the population size of elk. Species-level analyses revealed slight increases in mortality through time on the railway for some ungulates and bears, which may have resulted from increasing population sizes. Because highway mitigation occurs, by definition, in areas with changing land use patterns, managers should anticipate the need to plan and evaluate it holistically by monitoring adjacent transportation features and wildlife populations.

Key-words: grizzly bear, highway mitigation, large mammals, population, wildlife-vehicle collisions, wildlife-train collisions, *Ursus arctos*

Introduction

Transportation networks connect societies and economies offering immense benefits, but they can also have unintended consequences for terrestrial ecosystems and wildlife populations (reviewed by Spellerberg 1998; Trombulak & Frissell 2000; Coffin 2007), including mortality from collisions with vehicles (reviewed by Glista, DeVault & DeWoody 2009; Taylor & Goldingay 2010). Although road mortality usually has minimal effects on population viability (Forman 1998; Forman & Alexander 1998), particularly for species that are abdundant and with high reproductive rates (Glista, DeVault & DeWoody 2007), it can be detrimental for wide-ranging species with low population densities and reproductive rates (reviewed by Fahrig & Rytwinski 2009). This makes road mortality especially limiting for large carnivores, which has been demonstrated for, tigers (*Panthera tigris*), and leopards (*Panthera pardus;* Baskaran and Boominathan 2010), African hunting dogs (*Lycaon pictus*; Drews 1995), and Florida panther (*Felis concolor coryi*; Foster & Humphrey 1995). Growing frequency of wildlife collisions and an increased awareness of wildlife mortality on roads, in addition to the danger collisions pose to people and their vehicles, have contributed to the study of road ecology and mitigation (reviewed by Forman & Alexander 1998; van der Ree *et al.* 2011).

Mitigation to reduce the frequency of vehicle collisions with wildlife usually takes the form of wildlife fencing to prevent animals from accessing the road with crossing structures used to facilitate their movement. These techniques have gained widespread use around the world

over the past 30 years (Beckmann *et al.* 2010; van der Ree, Smith & Grilo 2015b). Despite the unambiguous benefit of this mitigation for people and wildlife (Glista, DeVault & DeWoody 2009; Ford & Clevenger 2010; Barrueto, Ford & Clevenger 2014; Sawaya, Kalinowski & Clevenger 2014), road mitigation can also have unintended negative consequences. One of these is the potential to funnel prey against wildlife fencing (Gibeau & Heuer 1996) or crossing structures (Mata *et al.* 2015). Another is the increase in wildlife-vehicle collisions that can stem from increasing habitat permeability near roads (Cain *et al.* 2003). The best way to integrate road mitigation among competing ecological needs is thus sometimes unclear (Hardy *et al.* 2003; van der Grift *et al.* 2013). Resolving these issues will require more long-term studies that examine the landscape-level effects of road mitigation, especially when it influences multiple species and transportation corridors (van der Ree *et al.* 2007; van der Grift *et al.* 2013). It will also be important to incorporate information on population abundance and distribution (e.g., Mysterud 2004; Seiler 2004; Grilo *et al.* 2014).

Given the advances in road mitigation, it is surprising that so little attention has applied to railway ecology, which is known to have similar effects on wildlife populations (Kušta, Ježek & Keken 2011; Dorsey, Olsson & Rew 2015). Railways have similar edge effects as roads, which typically increase the abundance, diversity, and growth rates of adjacent vegetation via greater light availability, warmth, and the spread of invasive species (e.g., Hansen & Clevenger 2005; Roever, Boyce & Stenhouse 2008). Railways have similar potential to create carcasses from vehicle collisions that attract scavengers to roads (Wells *et al.* 1999; Heske 2015) and sometimes reduce movement costs relative to adjacent habitat (Whittington, St. Clair & Mercer 2005). Railways convey an additional food attractant of spilled agricultural products, which emanate from the bottoms of hopper cars with gates that do not close completely (Dorsey, Olsson & Rew 2015). These features potentially attract wide-ranging, omnivorous species, like bears (*Ursus* spp.) Associated train-caused mortality has been demonstrated for brown bears (*Ursus arctos*) in Croatia (Huber, Kusak & Frkovic 1998) and grizzly bears (*Ursus arctos horribilis*) in the United States (Waller & Servheen 2005).

Collisions with grizzly bears were among the reasons for mitigating the TransCanada Highway through Banff National Park, Alberta, Canada, (hereafter, "Banff"), which successfully

reduced collisions with both ungulates and carnivores (Clevenger, Chruszcz & Gunson 2001). Despite this reduction in highway mortality, no similar mitigation occurred on the railway with train collisions becoming the leading source of mortality for grizzly bears in Banff (Bertch & Gibeau 2009), potentially contributing to the threatened status of grizzly bears in Alberta (ASRD 2008). The Banff population is small and has low reproductive rates (Weaver, Paquet & Ruggiero 1996; Garshelis, Gibeau & Herrero 2005; Proctor *et al.* 2005), which could cause transportation-related mortalities to threaten its long-term persistence (Woodroffe & Ginsberg 1998; Proctor *et al.* 2012; Hopkins *et al.* 2014). Wolves (*Canis lupus*) are also vulnerable to train collisions and have been extirpated several times in Banff (Paquet & Callahan 1996). Several other species that occupy this fragmented, but highly productive, habitat and are also vulnerable to transportation mortality (Gibeau & Heuer 1996; Barrueto, Ford & Clevenger 2014).

The objective of this study was to determine whether highway mitigation, which occurred in several stages between 1983-2013, increased the rate of wildlife-train collisions for grizzly bears or other species. We hypothesized that such increases could occur via one or more of several mechanisms including (a) increased collisions everywhere on the rail because animals compensate for the loss of similar open habitat for foraging or travel previously afforded by highway verges, (b) increased probability of collisions on the rail where it was in close proximity to the highway fence, because it channells animal movement parallel to the rail, or (c) increased frequency of collisions after mitigation near crossing structures because they direct animals towards the rail. We evaluated these hypotheses by examining collisions on both the highway and railway in a dataset collected by Parks Canada staff from 1981-2014.

Materials and methods

STUDY AREA

Banff National Park is located in the southeastern portion of the Canadian Rocky Mountains, Alberta, Canada (51º15'N, 115º54'W) and is bisected west to east by the Bow River Valley (Fig. 1a; Benn & Herrero 2002). The Bow Valley provides approximately 80% of the park's productive montane habitat in its valley bottom, which comprises only 2% of park's total

area (Fig. 1a; Cliff 1985; Gibeau & Heuer 1996; Hebblewhite, Percy & Serrouya 2003) making it highly attractive to wildlife (Holroyd & Van Tighem 1983a; b). This region also encompasses two high-volume transcontinental transportation corridors: the TransCanada highway (hereafter, "highway") and Canadian Pacific Railway (hereafter, "railway"; Fig. 1), and one low-volume parkway (Gibeau & Herrero 1998). Banff attracts millions of visitors annually and is among the most human–dominated landscapes in North America with an extant grizzly bear population (Gibeau & Herrero 1998; Gibeau *et al.* 2002).

WILDLIFE TRANSPORTATION COLLISIONS

We examined the correlative relationship between highway mitigation and vehicle collisions (on both road and rail) while accounting for different time periods of mitigation by dividing the transportation corridor into nine sections aligning with the staged installation of wildlife fencing and crossing structures along an 82 km span of the highway (Fig. 1a; see earlier publications from Clevenger & Waltho 2005; Barrueto, Ford & Clevenger 2014). We designated adjacent railway sections via perpendicular bisection from the highway. For each section, we determined the annual rate of vehicle collisions reported on both the road and rail for the years before and after mitigation. Mitigation proceeded from east to west to generate changing ratios in the associated number of years in each category as follows: one (4:30), two (7:27), three (12:22), four (18:16), five (32:2), six (30:4), seven (30:4), eight (30:4), and nine (33:1; Fig 1a). We also calculated the annual rate of collisions per kilometer segment (n=82; highway and railway), but this method produced very similar results to the section-based analysis we report below.

Records of vehicle collision from 1981-2014 were obtained from a database maintained by Parks Canada staff that included both confirmed mortalities (96%) and recorded strikes (4%) with unknown fatalities. These records stemmed from public and staff reports on the highway, train operator reports on the rail, and site investigations by parks staff on both transportation corridors. In general, collisions on the road were more often reported with greater precision (100 m) than on the rail (1 mile), but variability in precision occurred in both corridors. In addition, the consistency of reporting likely varied in time and increased subsequent to 1998 when Parks Canada introduced a standardized incident reporting system. We comprehensively reviewed all

collision records and attempted to increase their accuracy by cross-referencing information on their locations from descriptive notes in the original data source. When more than one mortality resulted from a collision, we described it in our dataset as a single event. We omitted from further analyses 31 records that contained contradictory or implausible information.

DATA ANALYSIS

We conducted an initial analysis of the entire dataset (Table 1) in which we used three dichotomous explanatory variables that included transportation mode (highway vs. railway), guild (ungulates vs. carnivores) and mitigation status (before vs. after mitigation), and set the first term in each set of parentheses as the reference category. We evaluated the effect of these explanatory variables on annual collision rates using generalized linear mixed effects models fit to a negative binomial distribution (similar to Hausman, Hall & Griliches 1984; Shankar *et al.* 1998). We added two-way interactions one at a time and used Akaike Information Criterion (95% CI) to choose the best-supported model with the lowest AIC from all possible combinations of variables (Burnham & Anderson 2002) using the statistical software STATA (version 14.1).

To examine the effects of explanatory variables more specifically, we conducted a second set of analyses separately for each transportation corridor and for each of three species groups aligning with local management distinctions; elk, other ungulates (bighorn sheep [*Ovis Canadensis*], moose [*Alces alces*], mule deer [*Odocoileus hemionus*], unidentified deer, and white-tailed deer [*Odocoileus virginianus*], and bears (black bear [*Ursus americanus*] and grizzly bear [*Ursus arctos horribilis*]; Table 1). For each species group and mitigation section, we tallied the number of collisions per year. We entered zero if there were no records for a given section-year-species combination. As explanatory variables, we again examined mitigation status for all groups and included mitigation section as a random effect. We added to these group-specific models population size (for elk only), and species (for bears only). Elk population data were collected by Parks staff each spring and entered for our purposes in relation to the mitigation section that contained each set of census coordinates. In addition to examining mitigation status as a dichotomous variable (before vs. after mitigation), we evaluated an alternative form of the

variable (time since) in which we set the mitigation year (for a given section) as zero and entered the number of years before or since mitigation for all other years. In the elk model, we used only those years in which collision data could be matched to available spring population censuses (1985-2013). For the bear model, we set black bears (*Ursus americanus*) as the reference category. For each set of models, we retained the stronger of correlated variables ($r > 0.6$) and evaluated the fit of both linear and quadratic forms.

Results

The Parks Canada database contained a total of 1634 highway and 1141 railway collision events over the 33-year study period (Table 1). Despite substantial temporal and spatial variation, the overall density of collisions was concentrated in the more productive, eastern half of the study area (sections 1-4) where collisions comprised 69% of the highway total (n = 858) and 89% of the railway total (n = 972; Fig. 1a-c). Among the three species groups we examined, the average number of collisions per km per year was about 10 times higher for each of elk (0.242 on the highway, n = 655; 0.281 on the railway, n = 761) and other ungulates (0.200 on the highway, n = 542; 0.101 on the railway), relative to bears (0.017 on the highway, n = 45; 0.021 on the railway, n = 56). There appeared to be pronounced differences in collision frequency before and after mitigation (Fig. 2), which we examined after accounting for the random effect of mitigation section (below).

When tallied by ungulates vs. carnivores, transportation modality, and highway mitigation appeared to exert different effects on collision frequency (Fig. 3). Our initial analysis of collision frequency included all species and assessed the binary effects of transportation mode, guild, and mitigation status with a random effect for mitigation section. The most supported model showed that collision frequency was generally lower on the railway, lower for carnivores, and lower after mitigation (Table 2), but it also contained three two-way interactions. Given the reference categories (highway, ungulate, and before), the negative interaction between transportation mode and guild (Table 2) revealed that the lower collision frequency on the railway was more pronounced for carnivores than for ungulates (Fig. 3). The positive interaction between transportation mode and mitigation showed that the reduction in collisions after mitigation was much greater on the highway (Fig. 3). Finally, the positive interaction between

guild and mitigation (Table 2) showed that collision frequency for carnivores was less affected by mitigation than it was for ungulates (Fig. 3). Taken together, these interactions indicate that the largest effect of mitigation was to reduce collisions on highways for ungulates (Fig. 3).

In more specific analyses of collision frequency, we partitioned data by transportation mode, retained the random effect of mitigation section, and constructed separate models for three species targeted for wildlife management in Banff National Park; elk, other ungulates, and bears. On the highway, the most supported models showed that collisions declined after mitigation for both elk and other ungulates, but collisions with elk also declined over time (Table 2; Fig 4.). By contrast, collisions with bears appeared to increase over time since mitigation occurred and were more prevalent for black bears (Table 2). On the railway, elk mortalities increased with population size, but declined over time, with a significant positive interaction between the two (Table 2; Fig 4.) showing a greater effect of population size on elk collisions earlier in time. For other ungulates on the railway, collision frequencies increased over time since mitigation (Table 2). For bears on the railway, collisions increased slightly over time and were higher for black bears (Table 2; Fig 4).

We further examined the most supported model for elk on the railway that replaced the effect of mitigation with population size by comparing the three best-supported models (identified by AIC) for elk on both the highway and railway (Table 3). For the highway, mitigation and year best predicted collision frequency (Table 3; $w_i = 0.57$), with no support for population size. Conversely, the three best-supported models on the railway all included elk population and year (Table 3). The most-supported model, which included a population by year interaction, had much more support than the second-ranked model (without the interaction) or the third-ranked model (without the interaction but with mitigation; Table 3).

Discussion

This study examined the effectiveness of highway mitigation on reducing wildlife-vehicle collisions in a montane valley where the mitigated highway was paralleled by an unmitigated railway. Specifically, we tested whether the highway mitigation increased the rate of wildlife-

train collisions on the railway. A core impetus for this research was the recent increase in rail-caused mortality of grizzly bears, for which continued high mortality would threaten local population persistance (Bertch & Gibeau 2009; Hopkins *et al.* 2014). Collision frequency was generally lower on the railway, lower for carnivores, and lower after mitigation, with the largest effect of mitigation being reduced collisions on the highway for ungulates. Annual highway collision frequency decreased for both elk and other ungulates, but bear collisions increased in the time since mitigation occurred. By contrast, elk collisions on the rail were positively correlated with population size and also declined over time. Railway collisions with other ungulates increased in the time since mitigation and, for bears, increased over the entire study period. For elk, annual population size, which we attributed separately to each mitigation section, was an important predictor of railway collisions. Overall, highway mitigation mainly reduced collisions with ungulates on the highway and we found no evidence that it increased collisions on the railway *per se*, despite the slight increase in collisions that occurred over time for other ungulates and bears.

Our results supported and extended the earlier conclusion by Clevenger, Chruszcz & Gunson (2001), that mitigation resulted in an approximately 80% reduction in ungulate collisions on the highway. Both results support the widespread adoption of highway fencing and crossing structures for road mitigation worldwide (Glista, DeVault & DeWoody 2009). Equally reassuring, we found no evidence that highway mitigation induces increased mortality on an adjacent railway. The positive effect of highway mitigation may be limited in other taxonomic groups, particularly those that can climb over or dig under the fence (Clevenger, Chruszcz & Gunson 2001). In our study, collisions with bears on the highway were unaffected by mitigation, but they increased in frequency in the years since mitigation occurred on the highway and increased by a greater margin over time on the railway. These temporal patterns may be associated with declining rates of management-caused mortality for bears (S. Michel, personal communication) with compensatory increases in transportation-caused mortality. Similarly, the increasing rate of coyote mortality on the highway was concentrated in the east end of the park where animals could dig under the fence and exploit maintenance-caused breaches (Foster & Humphrey 1995; Clevenger, Chruszcz & Gunson 2001), or simply access highway verges from the nearby townsite of Banff where their prevalence has gradually increased (Gibeau 1998). We

observed locations where grizzly bears appear to have torn the fencing, which is secured with carpentry staples, from its posts. Ongoing efforts in Banff and elsewhere are addressing the many ways with which wildlife can breach fences. These include aprons at ground level (Beckmann *et al.* 2010) and floppy tops or outriggers to the top (Foster & Humphrey 1995; Dodd, Barichivich & Smith 2004; Klar, Herrmann & Kramer-Schadt 2009). Similar effort is applied to fence ends, where mitigation has traditionally included cattle guards that do not work well for carnivores (Clevenger, Chruszcz & Gunson 2001). Banff is experimenting with electric mats that show promise for mitigation on both roads and rails (A. Forshner, personal communication).

The clear effect of population size we observed for elk collisions on the railway demonstrates the importance of examining population change as part of any study of the long-term and landscape-level effects of transportation mitigation (e.g., Mysterud 2004; Seiler 2004; Grilo *et al.* 2014). Despite the lack of census data, it is likely that the increase in collisions that we detected over time for other ungulates on the railway and bears on both the highway and railway were also associated with population increases. Populations of bighorn sheep, mule-deer and moose have been relatively low and stable for decades (Holroyd & Van Tighem 1983b), but white-tailed deer have increased in abundance, particularly in the east end of the park (J. Whittington, personal communication). Wolves reconlonized the Bow Valley in the mid-1980's with gradual increases in population size and distribution (Hebblewhite, Pletscher & Paquet 2002). A stable or increasing black bear population may result from high immigration rates from other areas, which would likely be needed to support ongoing, high rates of mortality in the Bow Valley (Hebblewhite, Percy & Serrouya 2003). Camera traps placed over the last several years suggest a slight annual increase in the population size of grizzly bears in Banff National Park (J. Whittington, personal communication), despite evidence of population decline at a larger, regional scale (Steenweg *et al.* 2016). All of these patterns support the recommendation by others to plan transporation mitigation using population data rather than collision hotspots (Eberhardt, Mitchell & Fahrig 2013).

It is intriguing to consider whether changes in population size and distribution of elk, which occurred rapidly between 1999-2002, are associated with the spike in bear mortality that

occurred in 1998 and the greater prevalence of grizzly bear mortality that began in 2000 (Fig. 4). By the late 1980's elk had become so abundant in the valley bottom that they were destroying deciduous and riparian vegetation (White, Olmsted & Kay 1998), despite high rates of predation by recolonizing wolves (Hebblewhite, Pletscher & Paquet 2002) and bears (Hilderbrand *et al.* 1999). An increasing proportion of the burgeoning elk population was also residing year-round near the townsite, which attracted predators and compromised human safety (Kloppers, St. Clair & Hurd 2005). These circumstances prompted managers to break up the elk 'blob,' as it was then known, by translocating elk between 1998-2001 to other locations inside and beyond the park (Howard 2006) and restoring the population in the eastern Bow Valley to a more sustainable size of about 300 animals (Halle 1979). These efforts succeeded in reducing the population by 84% from its high in 1988 (n = 934) to its lowest level in 2002 (n = 151), with an average annual population of 238 elk between 2003 and 2013 (Fig. 4) that remained concentrated near the townsite. The increase in grizzly bear mortality that has occurred since 2000, which was also concentrated near the townsite of Banff, may thus relate to the combined effects of lower absolute abundance of elk, increased concentration near the townsite, and associated increases in scavenging opportunities caused by train strikes on elk and other ungulates. Similar increases in transportation-related mortality have been associated with changes in resource distribution for other species (Grilo *et al.* 2014).

Despite their overlapping timing, our study found no support for the hypothesis that highway mitigation increased the frequency of train collisions with grizzly bears on the railway. More research will be needed to determine which other factors might be involved. One possibility is that bears increased their use of the rail when the declining elk population increased the protein limitation experienced by bears in this area (Hilderbrand *et al.* 1999). Another possibility is that elk, which experienced high rates of mortality on the highway in the 1980's (Fig 4) effectively taught long-lived bears to increase search efforts for elk carcasses on the rail (Wells *et al.* 1999). Greater attraction to the rail by bears could also result from access to spilled grain (Wells *et al.* 1999), which might have stemmed from increased shipping rates through the park in response to global increases in demand for Canadian grain products (Gangadharan *et al.* in review). Vegetation changes associated with increasing human use, the spread of invasive species, or garbage associated with railway maintenance might also increase railway attraction

for bears and other species. Any combination of these factors could cause this railway, and others, to attract bears. In a Croatian study that compared brown bear mortalities on a rail and co-aligned highway, over 70% occurred on the railway (Huber, Kusak & Frkovic 1998).

A final possibility in our study area, is that bears were displaced or confused by highway mitigation, but exhibited lagged responses to it to produce a more gradual increase in mortality rates that is already beginning to level off. There is some promise in this idea because bears are long-lived and probably adapt over years, not months, to changing landscapes. Although grizzly bears are generally quick to adapt to new food sources (e.g., Hamer & Herrero 1987a; Gibeau & Herrero 1998), they were notoriously slow to use new crossing structures in Banff (Clevenger & Waltho 2005; Barrueto, Ford & Clevenger 2014; Sawaya, Kalinowski & Clevenger 2014). Avoidance of people might be the reason that grizzly bears in Montana crossed highways at night when traffic volume was lowest, even though adjacent railway traffic was highest (Waller & Servheen 2005). Black bears also appear to shy away from highway construction and mitigation at first and to initiate use of the new structures when traffic volume (and human activity) is low (Van Manen *et al.* 2012).

Whether or not specific associations can be found, it is likely that road mitigation induces complex effects that interact with levels of biological organization from individuals to ecosystems. More holistic study of these effects is needed to address the paucity of information for railways generally, and for the frequent co-occurrence of roads and railways. Such studies are beginning. In British Columbia, managers appreciated that moose collisions on the highway and railway were substantial and can only be mitigated when they are accurately reported and integrated with other sources of mortality such as hunting (Child, Barry & Aitken 1991). In China, use of railway crossings by Tibetan ungulates appears to be adapted from their experience with roads, but effective mitigation is challenged by the close proximity of many transportation corridors (Baofa *et al.* 2006). In Romania, researchers appreciated the need to integrate information on habitat selection and movement behaviour to mitigate railway mortality for Herman's tortoises (*T. hermanni boettgeri;* Iosif 2012). In our own study area, understanding the problem of railway mortality for grizzly bears is challenged by small sample sizes (Table 1), changing rates and types of management for human-bear conflict (Bertch & Gibeau 2010),

trophic interactions involving wildfire (e.g., Hamer & Herrero 1987b; White, Olmsted & Kay 1998), lacking information on changes in train traffic (e.g., Wells *et al.* 1999), changing approaches to garbage management (Benn & Herrero 2002), and overlapping implementation of multiple management programs. Similar challenges are widespread with additional limitations imposed by the paucity of studies that collected data before and after mitigation or examined interacting effects on parallel transportation corridors (van der Ree *et al.* 2007; van der Grift *et al.* 2013; Dorsey, Olsson & Rew 2015).

APPLIED MANAGEMENT IMPLICATIONS

We encourage a holistic, long-term, and landscape-level approach to understanding and mitigating wildlife-vehicle collisions with explicit integration of parallel transportation routes and modalities. Many kinds of rapid, concurrent changes to landscapes make it essential to collect and integrate information on population size for target species, as well as their predators or prey. These challenges will increase as globalization increases the volume of both transportation infrastructure and traffic, which might be 60% higher by 2050 (Dulac 2013). The decades-old subdiscipline of road ecology is overdue for including railways (Dorsey, Olsson & Rew 2015), incorporating information on the size and distribution of populations (Eberhardt, Mitchell & Fahrig 2013) and assessing related aspects of wildlife management in the study and mitigation of transportation infrastructure.

Acknowledgments

This research was supported by the Canadian Pacific–Parks Canada Grizzly Bear Conservation Initiative and the National Sciences and Engineering Research Council of Canada (NSERC). In-kind support was provided by the University of Alberta. Authors are grateful to L. Put for early support in database cleaning. We thank A. Gangadharan for constructive comments on previous drafts of the manuscript.

Tables and Figures

Table 1. Total number of collision events recorded over approximately 82 km of highway and adjacent railway between 1981 and 2014, in Banff National Park, AB. Species groupings reflect local management distinctions between ungulates and carnivores. Events are summed for the site-specific periods before vs. after mitigation of the highway via wildlife crossing structures and fencing, which occurred in nine highway sections between 1983 and 2013. Corresponding railway sections are identified by the perpendicular intersection of highway sections (Fig 1a). These totals are not adjusted for different durations of before vs. after sampling periods, which varied among sites, or for changes in population sizes or distributions. Collisions that involve multiple individuals at the same location and time are tallied as single events.

	Highway			Railway		
	Before	**After**	**Total**	**Before**	**After**	**Total**
Ungulates						
Bighorn sheep (*Ovis canadensis*)	67	3	70	2	7	9
Elk (*Cervus canadensis*)	559	96	655	216	545	761
Moose (*Alces alces*)	40	3	43	12	20	32
Mule deer (*Odocoileus hemionus*)	232	44	276	17	71	88
Unidentified (other)	10	7	17	5	15	20
White-tailed deer (*Odocoileus virginianus*)	158	48	206	20	112	132
Total	1066	201	1267	272	770	1042
Carnivores						
Black bear (*Ursus americanus*)	18	22	40	21	20	41
Coyotes (*Canis latrans*)	98	186	284	12	7	19
Cougar (*Puma concolor*)	1	3	4	0	3	3
Grizzly bear (*U. arctos horribilis*)	2	3	5	4	11	15
Wolves (*Canis lupus*)	17	17	34	6	15	21
Total	136	231	367	43	56	99
Grand Total	1202	432	1634	315	826	1141

Table 2. Predicted effects of highway mitigation on the frequency of wildlife collisions on the highway and railway through Banff National Park. Most-supported models were identified by Akaike Information Criterion (AIC) with 95% confidence intervals and ranked based on changes in AIC scores. All predictor variables were standardized (mean = 0, SD = 1). The first model shown uses the entire dataset from 1981-2014 (Table 1) and includes the predictor variables of (a) mode (highway vs. railway), (b) guild (ungulates vs. carnivores), and (c) mitigation (before vs. after mitigation), and their two-way interactions. Subsequent models are divided by transportation mode and species groups with high local management relevance (elk, other ungulates, and bears).

Species Group	Variables	IRR	SE	*Z*	*P*
Highway & Railway					
All species	Mode	0.32	0.03	-12.63	<0.001
	Guild	0.21	0.02	-15.30	<0.001
	Mitigation	0.16	0.02	-16.41	<0.001
	Mode x Guild	0.30	0.05	-6.71	<0.001
	Mode x Mitigation	7.02	0.98	13.93	<0.001
	Guild x Mitigation	3.24	0.52	7.28	<0.001
	Intercept	8.65	1.17	15.91	<0.001
Highway					
Elk*	Mitigation	0.25	0.07	-5.05	<0.001
	Year	0.47	0.05	-7.41	<0.001
	Intercept	1.85	0.58	1.95	0.051
Other Ungulates	Mitigation	0.13	0.02	-12.21	<0.001
	Intercept	11.48	4.84	5.79	<0.001
Bears	Time Since†	1.90	0.38	3.23	0.001
	Species‡	0.13	0.06	-4.33	<0.001
	Intercept	9.06	64.45	0.31	0.757
Railway					
Elk*	Population	1.47	0.12	4.92	<0.001
	Year	0.74	0.06	-3.74	<0.001
	Population x Year	1.36	0.09	4.64	<0.001
	Intercept	2.88	0.75	4.07	<0.001
Other Ungulates	Time Since†	3.04	0.38	8.98	<0.001
	Intercept	1.12	0.41	0.32	0.749
Bears	Year	2.62	0.46	5.44	<0.001
	Species‡	0.36	0.11	-3.24	0.001
	Intercept	0.65	0.52	-0.54	0.589

*Elk collision data matched with available elk population estimates from 1985-2013.

† Time since is an integer variable setting the mitigation year as zero and using the number of years before or since mitigation in all other years.

‡Species is a binary variable (black bear vs. grizzly bear).

Table 3. The most-supported models ranked by Akaike Information Criterion (AIC) that predict transportation collisions for elk (*Cervus canadensis*) on a highway (n = 452) and adjacent railway (n = 687) from 1985-2013. For each transportation feature, the best-supported three models of 15 candidate models are shown. Columns include the log likelihood of the model (LogLik), AIC value and the difference from the lowest AIC (ΔAIC), and the Akaike model weight (w_i).

Elk	Model terms	LogLik*	AIC	ΔAIC	w_i
Highway					
	Mitigation + Year	-348.90	707.81	0.00	0.57
	Mitigation + Population + Year	-348.88	709.77	1.96	0.21
	Mitigation + Year + *Mitigation x Year*	-348.90	709.80	1.99	0.21
Railway					
	Population + Year + *Population x Year*	-383.24	778.48	0.00	0.99
	Population + Year	-393.35	796.71	18.22	0.00011
	Population + Mitigation + Year	-393.27	798.55	20.07	4.39E-05

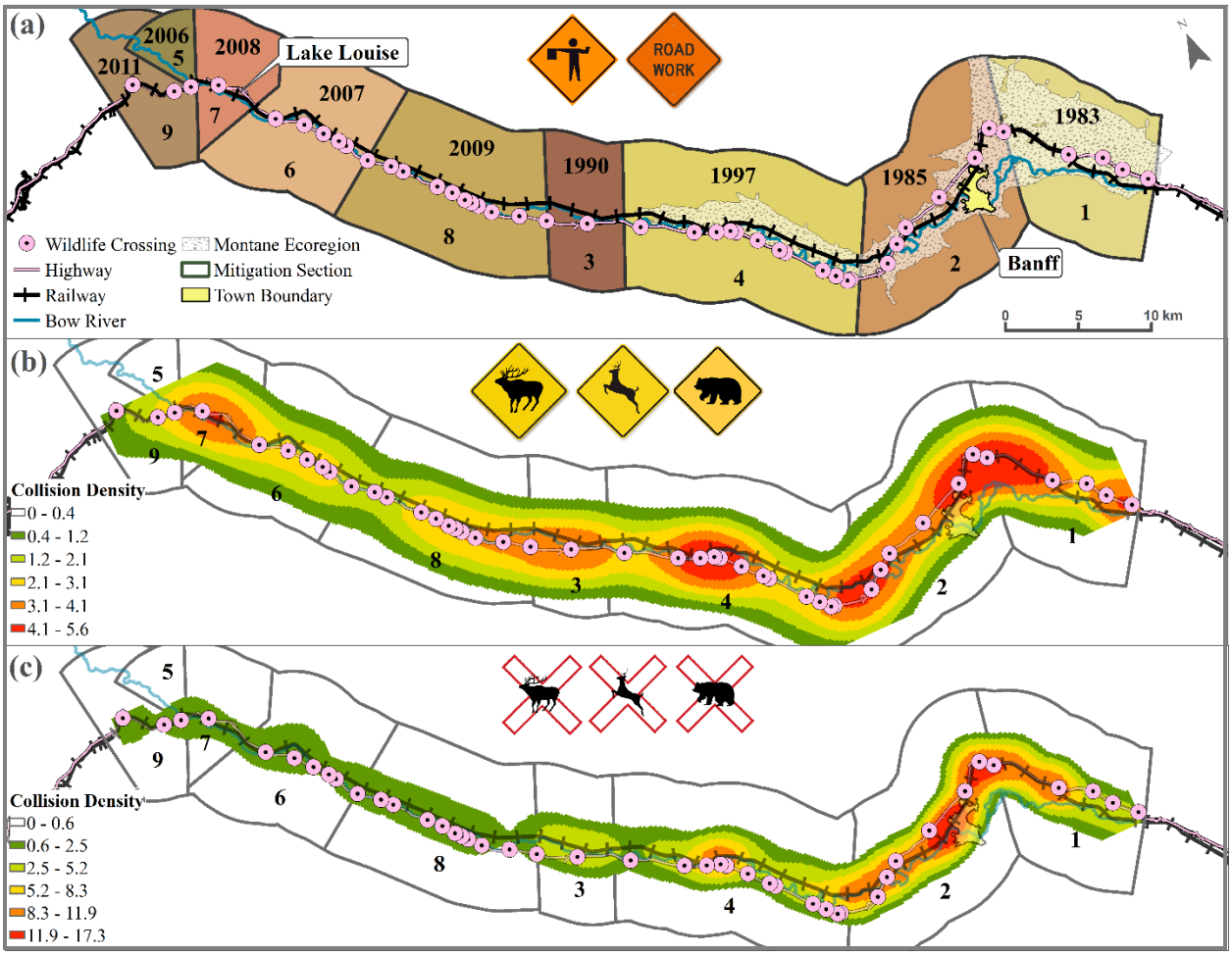

Figure 1. (a) Nine areas in which highway mitigation occurred between 1983-2013 in Banff National Park, AB, are denoted with a unique colour and the year in which mitigation began to address wildlife-vehicle collisions that are depicted as quintiles of density for (b) the TransCanada Highway, and (c) the Canadian Pacific Railway for combined species groups or elk, other ungulates, and bears (Table 1) from 1981-2014. The areas denoting sections support visual identification, but do not indicate the actual area of highway wildlife fencing.

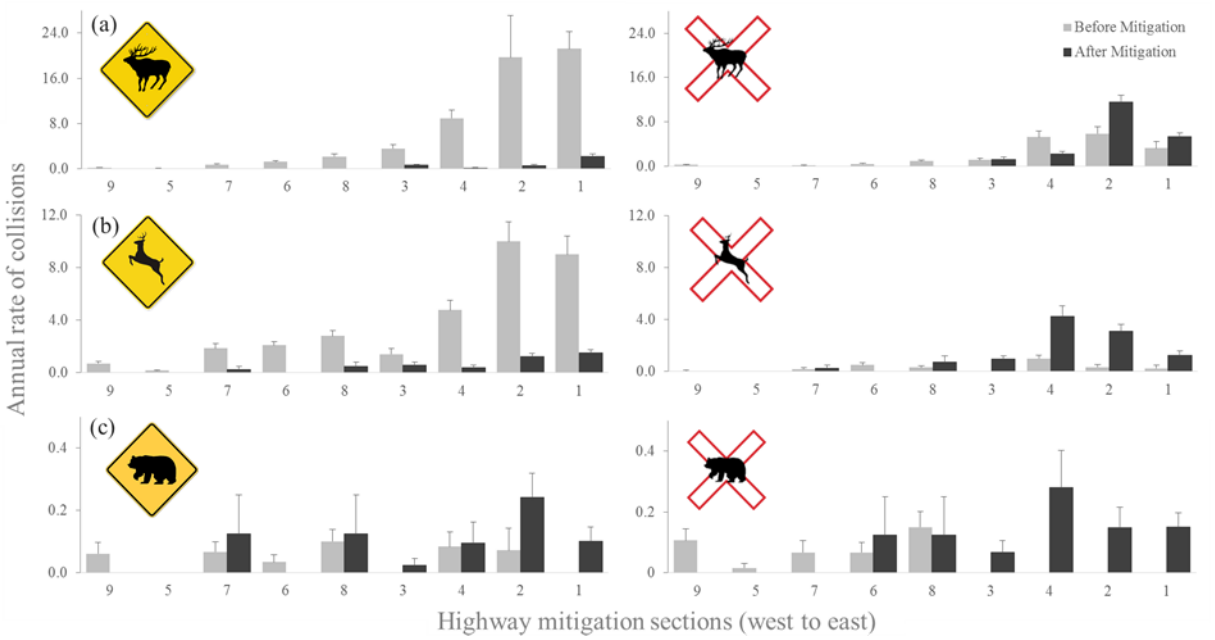

Figure 2. Annual rate of wildlife collisions (± SE) on a highway (left panels) and railway (right panels) in Banff National Park, Canada, before and after mitigation occurred in nine sections, labeled from west to east with numbers that correspond to their order of installation (Fig 1a.). Collision rates were calculated by dividing the total number of collisions by the number of years before or after mitigation occurred in each section for three species groups of management concern that included (a) elk, (b) other ungulates, and (c) bears.

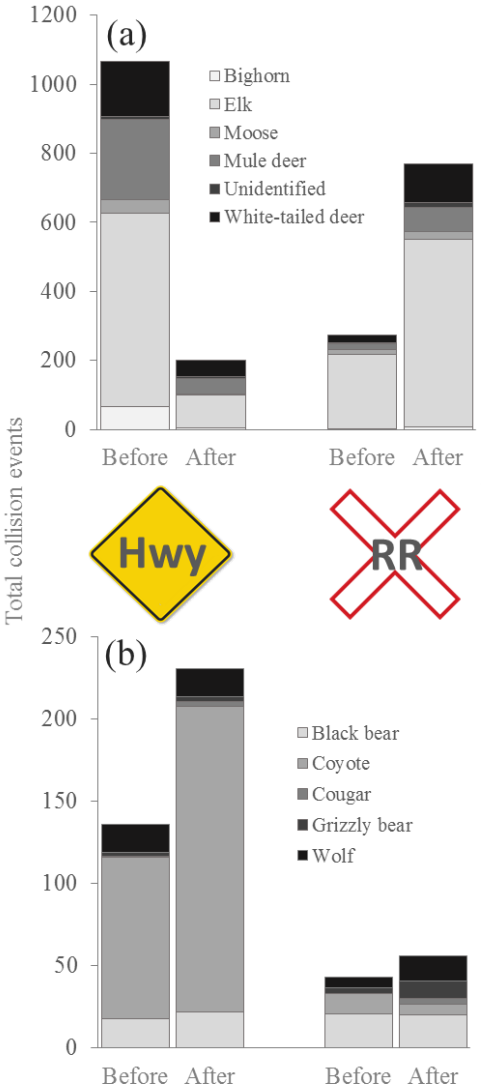

Figure 3. Total number of collision events before and after highway mitigation for (a) ungulates and (b) carnivores recorded on the highway (left) and adjacent railway (right) between 1981 and 2014, in Banff National Park, AB. The raw values (Table 1) do not account for the unbalanced before-after design among site-specific periods or changes in populations over time.

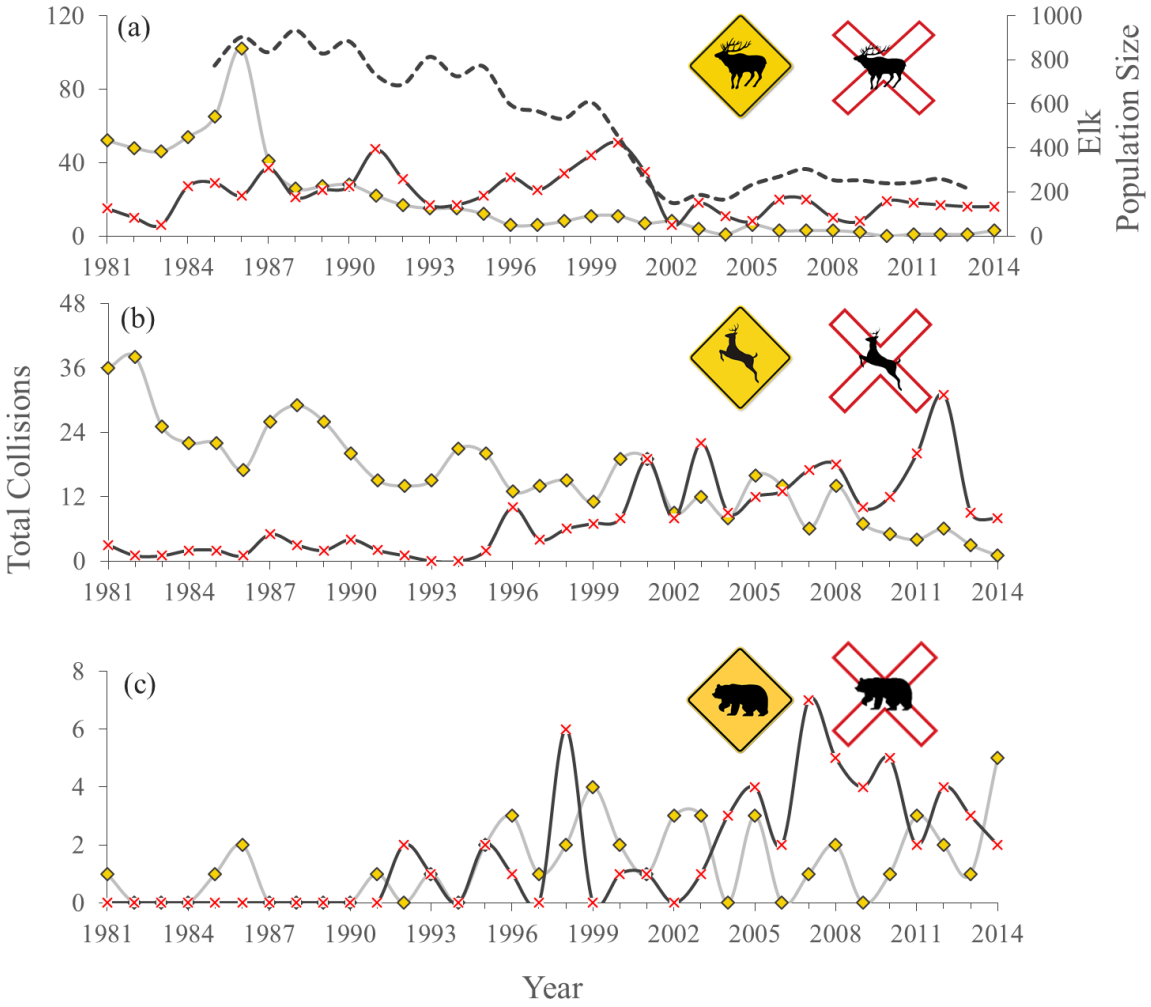

Figure 4. Total wildlife-vehicle collisions per year in Banff National Park, Canada, between 1981 and 2014 on the highway (yellow diamonds) and railway (red x) for species groups of management concern including (a) elk, (b) other ungulates, (c) and bears. Annual population estimates are provided for elk between 1985-2013 (dashed line, panel a).

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Chapter 3: General Discussion

The impetus for this thesis was to determine whether a recent increase in train collisions with grizzly bears (*Ursus arctos horribilis*) in Banff National Park is associated with mitigation of an adjacent highway as part of the *University of Alberta Grizzly Bear Research and Mitigation Project*. My broader objective was to examine mortality records from a highway and railway for several mammal species over a 33-year period to determine whether highway mitigation could, more generally, have the unintended consequence of increasing wildlife mortality on adjacent, unmitigated transportation corridors. Although hundreds of studies address both problems and mitigation concerning the effects of roads on wildlife, I know of no study that specifically addresses the effect of road mitigation on railway mortality.

Results from my research (Chapter 2) indicate that highway mitigation reduced highway collision frequency, predominately for ungulates, without causing an increase on the adjacent railway. Coincidental overlap in the approximate timing of mitigation and increasing (or decreasing) rates of mortality for specific species through time more likely resulted from changes in population size. My research emphasizes the importance of using wildlife population size and distribution when assessing mitigation over long periods of time. It also encourages managers to assess wildlife collisions more holistically to increase the effectiveness and efficiency of mitigation across multiple transportation routes and modalities, which often occur in close proximity around the world.

Many authors have advocated the use of wide-ranging carnivores as umbrellas to foster conservation attention and action (Noss *et al.* 1996; Ripple *et al.* 2014), partly because these species have higher rates of human-wildlife conflict and extinction, even within protected areas (Woodroffe & Ginsberg 1998). Although the global population of brown bears appears to be relatively stable (Ripple *et al.* 2014), Alberta's population was designated as threatened in 2002, due to low densities and reproductive rates, and high sensitivity to increasing human development (ASRD 2008). In the Alberta Central Rockies Ecosystem, roads appear to contribute to human-caused mortality for grizzly bears through both vehicle collisions and human access, which can lead to legal and illegal hunting (Nielsen *et al.* 2004; ASRD 2008). The mortality caused by rail-associated mortality in Banff National Park (Bertch & Gibeau 2009)

does not appear to be sustainable. A greater understanding of transportation collisions in Banff National Park thus has the potential to increase population viability at both local and regional scales (Chruszcz *et al.* 2003).

Mitigation tools such as wildlife fencing and crossing structures have become common around the world (Taylor & Goldingay 2010). As a result, wildlife-vehicle collisions have been successfully reduced by funneling their movement towards crossing structures using roadside fencing, thereby safely influencing their movement and connectivity on the landscape (e.g. Clevenger, Chruszcz & Gunson 2001). Nonetheless, the most effective and efficient means of implementing road mitigation is often unclear, partly because of the lack of long-term, multi-species studies that measure collision rates before and after mitigative actions (van der Ree *et al.* 2007; Glista, DeVault & DeWoody 2009; van der Grift *et al.* 2013; Polak *et al.* 2014). For example, partial wildlife fencing rather than a continuous fencing barrier (in combination with crossing structures) may provide sufficient protection while reducing infrastructure costs and increasing wildlife connectivity (Ascensão *et al.* 2013). High efficiency may be most necessary where mitigation must address both roads and railways (e.g. Child, Barry & Aitken 1991; Baofa *et al.* 2006; Iosif 2012) and apply to multiple species over complex landscapes. Broad-scale effects, interactions among transportation infrastructure, and conflicting needs of species are especially likely in mountainous landscapes where productive habitat and human activity typically overlap and steep topography constrains both wildlife movement and human development.

Ideally, mitigation of transportation infrastructure should nest local-scale projects within broader-scale conservation initiatives via careful coordination and long-term planning (van der Ree *et al.* 2011; Clevenger 2012). Long-term information on population sizes and distribution will be an essential part of this planning. Such monitoring is expensive to maintain but increasingly needed as wildlife habitat becomes more scarce and fragmented. As globalization continues to meet the demands of social and economic development, successful conservation of biodiversity will increasingly depend on effective and well-integrated mitigation of transportation infrastructure (van der Ree, Smith & Grilo 2015a).

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Appendix I: Table 2 (beta coefficients)

Table 2. Predicted effects of highway mitigation on the frequency of wildlife collisions on the highway and railway through Banff National Park. Most-supported models were identified by Akaike Information Criterion (AIC) with 95% confidence intervals and ranked based on changes in AIC scores. All predictor variables were standardized (mean = 0, SD = 1). The first model shown uses the entire dataset from 1981-2014 (Table 1) and includes the predictor variables of (a) mode (highway vs. railway), (b) guild (ungulates vs. carnivores), and (c) mitigation (before vs. after mitigation), and their two-way interactions. Subsequent models are divided by transportation mode and species groups with high local management relevance (elk, other ungulates, and bears).

Species Group	Variables	β	SE	*Z*	*P*
Highway & Railway					
All species	Mode	-1.13	0.09	-12.63	<0.001
	Guild	-1.56	0.10	-15.30	<0.001
	Mitigation	-1.83	0.11	-16.41	<0.001
	Mode x Guild	-1.19	0.19	-6.71	<0.001
	Mode x Mitigation	1.95	0.14	13.93	<0.001
	Guild x Mitigation	1.18	0.16	7.28	<0.001
	Intercept	2.16	0.14	15.91	<0.001
Highway					
Elk*	Mitigation	-1.37	0.27	-5.05	<0.001
	Year	-0.76	0.10	-7.41	<0.001
	Intercept	0.62	0.32	1.95	0.051
Other Ungulates	Mitigation	-2.03	0.17	-12.21	<0.001
	Intercept	2.44	0.42	5.79	<0.001
Bears	Time Since†	0.64	0.20	3.23	0.001
	Species‡	2.07	0.48	-4.33	<0.001
	Intercept	2.20	7.11	0.31	0.757
Railway					
Elk*	Population	0.39	0.08	4.92	<0.001
	Year	-0.31	0.08	-3.74	<0.001
	Population x Year	0.31	0.07	4.64	<0.001
	Intercept	1.06	0.26	4.07	<0.001
Other Ungulates	Time Since†	1.11	0.12	8.98	<0.001
	Intercept	0.11	0.36	0.32	0.749
Bears	Year	0.96	0.18	5.44	<0.001
	Species‡	-1.04	0.32	-3.24	0.001
	Intercept	-0.43	0.80	-0.54	0.589

*Elk collision data matched with available elk population estimates from 1985-2013.

† Time since is an integer variable setting the mitigation year as zero and using the number of years before or since mitigation in all other years.

‡Species is a binary variable (black bear vs. grizzly bear).

Appendix II: Transportation Subset Models

Table 1. I: Subset models used to determine the best predictor of transportation collisions (n = 2775), and includes three fixed-effect variables (a) mitigation (before/after), (b) guild (ungulates/carnivores) and, (c) mode (highway/railway). Section was used as the random-effect and two-way interactions were explored. Akaike Information Criterion (AIC) was used to rank model performance. Incidence-rate ratio (IRR) and beta coefficients (β) and their standard error (SE). Grey shaded rows indicate top model choice and bold indicates the top model based on ΔAIC. All random-effects negative binomial models were run using the statistical software STATA (version 14.1).

#	Model	IRR (SE)	β (SE)	AIC	ΔAIC	Rank
1	Null (Collisions)	0.60(0.04)	-0.51 (0.07)	4147.28	537.03	17
2	Mitigation (Before vs. After)	0.72(0.07)	-0.33 (0.09)	4136.49	526.24	16
3	Guild (Ungulates vs. Carnivores)	0.32(0.02)	-1.16 (0.08)	3927.27	317.03	12
4	Mode (Highway vs. Railway)	0.60(0.05)	-0.51 (0.08)	4104.05	493.81	15
5	Mitigation Mode *Mitigation x Mode*	0.40(0.04) 0.34(0.04) 3.20(0.50)	-0.93 (0.11) -1.09 (0.11) 1.16 (0.15)	4027.51	417.26	13
6	Mitigation Guild	0.46(0.05) 0.22(0.02)	-0.77 (0.10) -1.54 (0.11)	3873.29	263.05	9

	Mitigation x Guild	1.99(0.31)	0.69 (0.15)			
7	Mode Guild *Mode x Guild*	0.80(0.07) 0.42(0.04) 0.49(0.08)	-0.23 (0.08) -0.86 (0.10) -0.71 (0.16)	3872.75	262.50	8
8	Mitigation Mode	0.64(0.06) 0.56(0.04)	-0.45 (0.09) -0.58 (0.08)	4081.99	471.75	14
9	Mitigation Guild	0.58(0.050) 0.29(0.02)	-0.55 (0.09) -1.23 (0.08)	3891.18	280.93	11
10	Mode Guild	0.65(0.05) 0.32(0.03)	-0.44 (0.07) -1.13 (0.08)	3891.08	280.83	10
11	Mode Guild Mitigation	0.56(0.04) 0.29(0.02) 0.48(0.04)	-0.57 (0.07) -1.23 (0.08) -0.74 (0.09)	3827.12	216.88	7
12	Mode Guild	0.66(0.05) 0.35(0.03)	-0.42 (0.08) -1.04 (0.09)	3818.27	208.02	6

	Mitigation	0.50(0.04)	-0.69 (0.09)			
	Mode x Guild	0.59(0.10)	-0.52 (0.16)			
13	Mode	0.28(0.025)	-1.27 (0.09)	3674.07	63.82	4
	Guild	0.24(0.02)	-1.45 (0.08)			
	Mitigation	0.22(0.02)	-1.51 (0.10)			
	Mode x Mitigation	5.91(0.81)	1.78 (0.14)			
14	Mode	0.53(0.04)	-0.64 (0.07)	3793.10	182.85	5
	Guild	0.20(0.02)	-1.62 (0.11)			
	Mitigation	0.35(0.04)	-1.05 (0.10)			
	Mitigation x Guild	2.52(0.39)	0.93 (0.15)			
15	Mode	0.28(0.03)	-1.27 (0.09)	3655.48	45.23	2
	Guild	0.18(0.02)	-1.72 (0.10)			
	Mitigation	0.19(0.02)	-1.64 (0.10)			
	Mitigation x Guild	1.95(0.29)	0.67 (0.15)			
	Mode x Mitigation	5.51(0.77)	1.71 (0.14)			
16	Mode	0.32(0.03)	-1.14 (0.10)	3660.21	49.96	3
	Guild	0.29(0.03)	-1.23 (0.09)			
	Mitigation	0.23(0.02)	-1.49 (0.10)			
	Mode x Guild	0.55(0.08)	-0.60 (0.15)			

	Mode x Mitigation	5.95(0.81)	1.78 (0.14)			
17	**Mode**	**0.32(0.03)**	**-1.13 (0.09)**	**3610.24**	**0.00**	**1**
	Guild	**0.21(0.02)**	**-1.56 (0.10)**			
	Mitigation	**0.16(0.02)**	**-1.83 (0.11)**			
	Mode x Guild	**0.30(0.05)**	**-1.19 (0.18)**			
	Mode x Mitigation	**7.02(0.98)**	**1.95 (0.14)**			
	Guild x Mitigation	**3.24(0.52)**	**1.18 (0.16)**			

Appendix III: Highway Subset Models

Table 1. II: Subset models used to determine the best predictor of highway collisions (n = 1634), and includes three fixed-effect variables (a) mitigation (before/after), (b) year (1981-2014) and, (c) Time since mitigation. Mitigation section was used as the random-effect and two-way interactions and quadratic terms were explored. Akaike Information Criterion (AIC) was used to rank model performance. These data were partitioned for analysis into five species groups and include; (a) ungulates (with elk), (b) ungulates (other ungulates), (c) carnivores, (d) bears, and, (e) elk (with population data; 1985-2013). Incidence-rate ratio (IRR) and beta coefficients (β) and their standard error (SE). Grey shaded rows indicate top model choice and bold indicates the top model based on ΔAIC. All random-effects negative binomial models were run using the statistical software STATA (version 14.1).

Species Group	Model	IRR (SE)	β (SE)	AIC	ΔAIC	Rank
Ungulates (with elk)	Null (Collisions)	0.83(0.09)	-0.19 (0.11)	1417.99	194.26	8
	Mitigation	0.12(0.02)	-2.16 (0.15)	1242.89	19.16	3
	Year	0.53(0.03)	-0.63 (0.06)	1315.40	91.67	6
	Time Since	0.47(0.03)	-0.75 (0.07)	1321.47	97.74	7
	Year Mitigation	0.77(0.05) 0.17(0.03)	-0.27 (0.06) -1.75 (0.17)	1224.32	0.59	2
	Time since Time since ^{2}	0.42(0.04) 0.76(0.05)	-0.87 (0.09) -0.28 (0.06)	1302.72	78.99	4

	Year **Mitigation** ***Year x Mitigation***	**0.80(0.05)** **0.17(0.03)** **0.80(0.12)**	**-0.22 (0.06)** **-1.75 (0.17)** **-0.22 (0.14)**	**1223.73**	**0.00**	**1**
	Year Year ^{2}	0.51(0.04) 0.91(0.06)	-0.67 (0.07) -0.10 (0.06)	1315.17	91.44	5
Ungulates (other ungulates)	Null (Collisions)	0.99(0.14)	-0.005 (0.14)	1101.61	119.64	8
	Mitigation	**0.13(0.02)**	**-2.03 (0.17)**	**981.97**	**0.00**	**1**
	Year	0.62(0.04)	-0.48 (0.07)	1051.99	70.01	6
	Time Since	0.56(0.05)	-0.57 (0.08)	1054.70	72.72	7
	Year Mitigation	0.91(0.06) 0.15(0.03)	-0.09 (0.07) -1.87 (0.21)	982.23	0.26	2
	Time since Time since ^{2}	0.52(0.05) 0.77(0.06)	-0.65 (0.09) -0.26 (0.07)	1041.77	59.80	4
	Year Mitigation *Year x Mitigation*	0.94(0.07) 0.16(0.03) 0.87(0.13)	-0.06 (0.08) -1.86 (0.21) -0.14 (0.15)	983.44	1.47	3
	Year	0.60(0.04)	-0.52 (0.07)	1050.59	68.62	5

	Year ^{2}	0.87(0.07)	-0.14 (0.08)			
Carnivores	Null (Collisions)	6.50(3.14)	1.87 (0.48)	752.82	10.15	4
	Mitigation	1.02(0.16)	0.02 (0.16)	754.81	12.14	7
	Year	0.99(0.06)	-0.008 (0.06)	754.80	12.13	6
	Time Since	1.02(0.09)	0.02 (0.09)	754.77	12.10	5
	Year Mitigation	0.98(0.08) 1.06(0.23)	-0.02 (0.08) 0.06 (0.22)	756.72	14.05	8
	Time since Time since ^{2}	1.27(0.15) 0.82(0.05)	0.24 (0.12) -0.20 (0.07)	746.53	3.86	2
	Year Mitigation *Year x Mitigation*	1.31(0.16) 0.87(0.19) 0.63(0.09)	0.27 (0.12) -0.14 (0.22) -0.46 (0.15)	749.26	6.59	3
	Year **Year ^{2}**	**0.99(0.07)** **0.76(0.06)**	**-0.01 (0.07)** **-0.27 (0.08)**	**742.67**	**0.00**	**1**
Bears	Null (Collisions)	0.47(0.31)	-0.75 (0.66)	325.94	33.16	13
	Mitigation	1.77(0.67)	0.57 (0.38)	325.70	32.92	12

	Year	1.53(0.26)	0.43 (0.17)	321.34	28.57	7
	Time Since	1.78(0.36)	0.58 (0.20)	319.90	27.12	6
	Species (black vs. grizzly)	0.13(0.06)	-2.01 (0.48)	300.97	8.20	5
	Year Mitigation	1.52(0.31) 1.04(0.50)	0.42 (0.20) 0.04 (0.48)	323.34	30.56	10
	Year Mitigation Species	1.62(0.33) 1.02(0.49) 0.13(0.06)	0.48 (0.20) 0.02 (0.48) -2.07 (0.48)	296.49	3.71	4
	Time since **Species**	**1.90(0.38)** **0.13(0.06)**	**0.64 (0.20)** **-2.07 (0.48)**	**292.78**	**0.00**	**1**
	Year Species	1.62(0.27) 0.13(0.06)	0.48 (0.17) -2.07 (0.48)	294.49	1.71	2
	Year Species *Year x Species*	1.52(0.27) 0.08(0.06) 1.86(1.14)	0.42 (0.18) -2.47 (0.70) 0.62 (0.61)	295.31	2.54	3
	Year	1.71(0.44)	0.54 (0.26)	324.76	31.98	11

	Mitigation *Year x Mitigation*	1.18(0.59) 0.75(0.28)	0.16 (0.50) -0.29 (0.38)			
	Time since Time since ^{2}	1.78(0.41) 1.00(0.15)	0.58 (0.23) 0.0001 (0.15)	321.90	29.12	9
	Year Year ^{2}	1.67(0.34) 0.75(0.16)	0.51 (0.20) -0.28 (0.21)	321.42	28.64	8
Elk (with population data)	Null (Collisions)	0.43(0.06)	-0.85 (0.15)	819.59	111.78	12
	Mitigation	0.14(0.04)	-1.96 (0.26)	762.12	54.31	11
	Year	0.39(0.04)	-0.94 (0.10)	732.30	24.49	6
	Time Since	0.27(0.04)	-1.32 (0.16)	741.77	33.96	8
	Population	1.00(0.0008)	0.0002 (0.0008)	821.53	113.72	13
	Year **Mitigation**	**0.47(0.05)** **0.25(0.07)**	**-0.76 (0.10)** **-1.37 (0.27)**	**707.81**	**0.00**	**1**
	Year Mitigation Population	0.47(0.06) 0.24(0.09) 1.03(0.16)	-0.75 (0.12) -1.42 (0.37) 0.03 (0.15)	709.77	1.96	2
	Time since	0.27(0.04)	-1.32 (0.16)	743.77	35.96	10

	Population	1.00(0.10)	-0.002 (0.10)			
	Year Population	0.35(0.04) 0.72(0.08)	-1.04 (0.10) -0.32 (0.11)	724.36	16.56	5
	Year Population *Year x Population*	0.34(0.04) 0.54(0.10) 0.71(0.11)	-1.07 (0.10) -0.62 (0.18) -0.35 (0.15)	720.45	12.64	4
	Year Mitigation *Year x Mitigation*	0.47(0.06) 0.25(0.07) 0.98(0.20)	-0.75 (0.13) -1.38 (0.28) -0.02 (0.21)	709.80	1.99	3
	Time since Time since ^{2}	0.25(0.04) 0.88(0.09)	-1.38 (0.17) -0.13 (0.10)	741.93	34.12	9
	Year Year ^{2}	0.40(0.045) 1.05(0.11)	-0.92 (0.11) 0.05 (0.10)	734.06	26.25	7
Coyotes	Null (Collisions)	4.15(1.81)	1.42(0.44)	653.06	14.38	6
	Mitigation	0.96(0.18)	-0.04(0.18)	655.00	16.32	8
	Year	0.89(0.06)	-0.12(0.07)	652.31	13.63	4
	Time Since	0.88(0.09)	-0.13(0.11)	653.59	14.91	7

	Year Mitigation	0.82(0.08) 1.37(0.33)	-2.00(0.09) 0.31(0.24)	652.68	14.00	5
	Time since Time since ^{2}	1.16(0.17) 0.79(0.06)	0.15(0.15) -0.23(0.08)	645.98	7.30	2
	Year Mitigation *Year x Mitigation*	1.09(0.17) 1.05(0.27) 0.65(0.12)	0.09(0.15) 0.05(0.26) -0.43(0.18)	649.04	10.36	3
	Year Year ^{2}	0.86(0.07) 0.72(0.06)	-0.15(0.08) -0.34(0.10)	638.68	0.00	1

Appendix IV: Railway Subset Models

Table 1. III: Subset models used to determine the best predictor of railway collisions (n = 1141), and includes three fixed-effect variables (a) mitigation (before/after), (b) year (1981-2014) and, (c) Time since mitigation. Mitigation section was used as the random-effect and two-way interactions and quadratic terms were explored. Akaike Information Criterion (AIC) was used to rank model performance. These data were partitioned for analysis into five species groups and include; (a) ungulates (with elk), (b) ungulates (other ungulates), (c) carnivores, (d) bears, and, (e) elk (with population data; 1985-2013). Incidence-rate ratio (IRR) and beta coefficients (β) and their standard error (SE). Grey shaded rows indicate top model choice and bold indicates the top model based on ΔAIC. All random-effects negative binomial models were run using the statistical software STATA (version 14.1).

Species Group	**Model**	**IRR (SE)**	**Beta (SE)**	**AIC**	**ΔAIC**	**Rank**
Ungulates (with elk)	Null (Collisions)	2.92(0.58)	1.07 (0.20)	1080.33	7.59	8
	Mitigation	1.41(0.19)	0.34 (0.13)	1075.47	2.73	2
	Year	1.08(0.06)	0.08 (0.05)	1080.03	7.29	7
	Time Since	1.17(0.09)	0.16 (0.08)	1078.04	5.30	5
	Year Mitigation	0.97(0.07) 1.48(0.27)	-0.03 (07) 0.39 (0.18)	1077.32	4.58	4
	Time since Time since ^{2}	1.21(0.13) 0.97(0.05)	0.19 (0.10) -0.03(0.06)	1079.80	7.06	6
	Year Mitigation *Year x Mitigation*	1.12(0.13) 1.33(0.25) 0.81(0.11)	0.12 (0.12) 0.29 (0.19) -0.21 (0.13)	1076.95	4.21	3
	Year	**1.09(0.06)**	**0.08 (0.06)**	**1072.74**	**0.00**	**1**

	Year ^{2}	**0.83(0.05)**	**-0.185 (0.06)**			
Ungulates (other ungulates)	Null (Collisions)	0.89(0.20)	-0.12 (0.22)	679.79	67.88	8
	Mitigation	3.38(0.79)	1.22 (0.23)	652.74	40.84	7
	Year	2.01(0.17)	0.70 (0.09)	621.67	9.76	4
	Time Since	**3.04(0.38)**	**1.11 (0.12)**	**611.90**	**0.00**	**1**
	Year Mitigation	1.90(0.21) 1.25(0.36)	0.64 (0.11) 0.22 (0.29)	623.06	11.16	5
	Time since Time since ^{2}	3.10(0.59) 0.99(0.09)	1.13 (0.19) -0.01 (0.09)	613.88	1.98	2
	Year Mitigation *Year x Mitigation*	2.08(0.40) 1.23(0.35) 0.89(0.19)	0.73 (0.19) 0.21 (0.29) -0.12 (0.22)	624.74	12.84	6
	Year Year ^{2}	2.34(0.27) 0.79(0.08)	0.85 (0.12) -0.24 (0.1)	617.95	6.05	3
Carnivores	Null (Collisions)	2.46(1.73)	0.90 (0.70)	443.89	32.79	8
	Mitigation	2.02(0.52)	0.70 (0.26)	438.70	27.60	7
	Year	1.92(0.22)	0.65 (0.11)	412.16	1.06	4
	Time Since	2.37(0.38)	0.86 (0.16)	411.91	0.81	3
	Year Mitigation	2.13(0.32) 0.67(0.24)	0.78 (0.15) -0.41 (0.36)	412.83	1.73	5

	Time since Time since ^{2}	2.75(0.55) 0.85(0.01)	1.01 (0.20) -0.16 (0.12)	411.84	0.74	2
	Year Mitigation *Year x Mitigation*	2.53(0.50) 0.80(0.30) 0.69(0.18)	0.93 (0.20) -0.23 (0.38) -0.37 (0.27)	412.91	1.81	6
	Year **Year ^{2}**	**2.20(0.34)** **0.79(0.11)**	**0.79 (0.15)** **-0.23 (0.14)**	**411.10**	**0.00**	**1**
Bears	Null (Collisions)	0.47(0.27)	-0.76 (0.59)	389.23	45.92	13
	Mitigation	2.14(0.65)	0.76 (0.30)	384.51	41.20	12
	Year	2.64(0.47)	0.97 (0.18)	353.98	10.67	5
	Time Since	2.89(0.78)	1.05 (0.27)	365.40	22.09	9
	Species (black vs. grizzly)	0.35(0.11)	-1.05 (0.32)	379.20	35.89	11
	Year Mitigation	2.72(0.55) 0.88(0.33)	1.00 (0.20) -0.13 (0.38)	355.86	12.55	7
	Year Mitigation Species	2.72(0.55) 0.87(0.33) 0.35(0.11)	0.10 (0.20) -0.14 (0.38) -1.04 (0.32)	345.88	2.56	3
	Time since Species	2.85(0.78) 0.37(0.12)	1.05 (0.27) -0.20 (0.31)	355.93	12.62	8
	Year Species	2.62(0.46) 0.36(0.11)	0.96 (0.18) -1.04 (0.32)	344.02	0.70	2

	Year **Species** ***Year x Species***	**2.25(0.43)** **0.18(0.11)** **2.11(1.03)**	**0.81 (0.19)** **-1.73 (0.61)** **0.75 (0.49)**	**343.31**	**0.00**	**1**
	Year Mitigation *Year x Mitigation*	3.71(1.07) 1.58(0.75) 0.50(0.20)	1.31 (0.29) 0.46 (0.48) -0.69 (0.40)	354.84	11.53	6
	Time since Time since ^{2}	3.05(0.92) 0.93(0.14)	1.12 (0.30) -0.07 (0.15)	367.18	23.86	10
	Year Year ^{2}	5.41(2.29) 0.49(0.14)	1.69 (0.42) -0.71 (0.30)	348.08	4.76	4
Elk (with population data)	Null (Collisions)	2.35(0.52)	0.85 (0.22)	816.27	37.79	13
	Mitigation	0.75(0.14)	-0.29 (0.19)	815.97	37.49	12
	Year	0.76(0.05)	-0.28 (0.06)	799.02	20.53	4
	Time Since	0.67(0.07)	-0.40 (0.11)	804.54	26.06	10
	Population	1.00(0.01)	0.002 (0.001)	799.87	21.39	8
	Year Mitigation	0.72(0.05) 1.27(0.27)	-0.32 (0.08) 0.24 (0.22)	799.83	21.35	7
	Year Mitigation Population	0.82(0.08) 1.10(0.25) 1.17(0.10)	-0.20 (0.10) 0.09 (0.229) 0.16 (0.08)	798.55	20.07	3
	Time since	0.82(0.11)	-0.20 (0.13)	799.37	20.89	6

	Population	1.24(0.09)	0.21 (0.07)			
	Year Population	0.84(0.07) 1.19(0.09)	-0.18 (0.08) 0.17 (0.08)	796.71	18.22	2
	Year **Population** ***Year x Population***	**0.74(0.06)** **1.47(0.12)** **1.36(0.09)**	**-0.31 (0.08)** **0.39 (0.08)** **0.31 (0.07)**	**778.48**	**0.00**	**1**
	Year Mitigation *Year x Mitigation*	0.64(0.10) 1.44(0.39) 1.16(0.21)	-0.44 (0.16) 0.36 (0.27) 0.15 (0.18)	801.12	22.64	9
	Time since Time since ^{2}	0.60(0.08) 1.10(0.08)	-0.51 (0.13) 0.09 (0.07)	804.75	26.27	11
	Year Year ^{2}	0.74(0.05) 0.90(0.07)	-0.30 (0.07) -0.10 (0.08)	799.22	20.74	5

Appendix V: Cross-referenced and cleaned annual transportation collision data by species, transportation mode, mitigation section, and mitigation status

Year	Species ID	Total Animals	Total Collision Events	Mode	Section	Mitigation
2013	BLAC	1	1	Highway	2	After
1998	BLAC	1	1	Highway	2	After
1996	BLAC	1	1	Highway	2	After
1995	BLAC	1	1	Highway	2	After
2010	BLAC	1	1	Highway	2	After
1981	BLAC	1	1	Highway	2	After
1991	BLAC	1	1	Highway	4	After
1995	BLAC	1	1	Highway	1	After
1999	BLAC	1	1	Highway	4	Before
1993	BLAC	1	1	Highway	4	After
1996	BLAC	1	1	Highway	1	After
1986	BLAC	1	1	Highway	1	After
2014	BLAC	1	1	Highway	2	After
2014	BLAC	1	1	Highway	2	After
2014	BLAC	1	1	Highway	2	After
2003	BLAC	1	1	Highway	1	After
2003	BLAC	1	1	Highway	2	Before
2012	BLAC	1	1	Highway	2	After
2014	BLAC	1	1	Highway	1	After
2014	BLAC	1	1	Highway	1	After
2011	BLAC	1	1	Highway	2	After
2012	BLAC	1	1	Highway	2	After
1985	BLAC	1	1	Highway	4	After
1999	BLAC	1	1	Highway	4	After
2000	BLAC	1	1	Highway	4	After
2002	BLAC	1	1	Highway	3	After
2008	BLAC	1	1	Highway	8	After
2000	BLAC	1	1	Highway	8	After
1986	BLAC	1	1	Highway	8	After
1996	BLAC	1	1	Highway	8	After
1999	BLAC	1	1	Highway	8	After
2002	BLAC	1	1	Highway	8	Before
1998	BLAC	1	1	Highway	6	After

2008	BLAC	1	1	Highway	7	After
1997	BLAC	1	1	Highway	7	After
2005	BLAC	1	1	Highway	9	After
1999	BLAC	1	1	Highway	7	After
2007	BLAC	1	1	Highway	9	After
2005	BLAC	1	1	Highway	9	After
2003	BLAC	1	1	Highway	9	After
1999	COUG	1	1	Highway	2	After
1999	COUG	1	1	Highway	2	After
1999	COUG	1	1	Highway	2	After
1994	COUG	1	1	Highway	4	Before
1983	COYO	1	1	Highway	1	After
2002	COYO	1	1	Highway	1	After
2006	COYO	1	1	Highway	1	After
1999	COYO	1	1	Highway	1	After
1981	COYO	1	1	Highway	1	After
1996	COYO	1	1	Highway	1	After
1987	COYO	1	1	Highway	1	After
1989	COYO	1	1	Highway	1	After
2010	COYO	1	1	Highway	1	After
1996	COYO	1	1	Highway	1	After
1987	COYO	1	1	Highway	1	After
1999	COYO	1	1	Highway	1	After
2001	COYO	1	1	Highway	1	After
1998	COYO	1	1	Highway	4	After
2013	COYO	1	1	Highway	2	Before
1987	COYO	1	1	Highway	2	After
1999	COYO	1	1	Highway	2	After
2000	COYO	1	1	Highway	2	After
1985	COYO	1	1	Highway	2	After
1990	COYO	1	1	Highway	2	After
1994	COYO	1	1	Highway	2	After
1988	COYO	1	1	Highway	1	After
1999	COYO	1	1	Highway	2	After
2002	COYO	1	1	Highway	2	After
1994	COYO	1	1	Highway	2	After
1988	COYO	1	1	Highway	2	After
1984	COYO	1	1	Highway	2	Before
1989	COYO	1	1	Highway	2	After
1986	COYO	1	1	Highway	2	After
2013	COYO	1	1	Highway	2	After

1997	COYO	1	1	Highway	1	After
2002	COYO	1	1	Highway	2	After
1999	COYO	1	1	Highway	2	After
1995	COYO	1	1	Highway	2	Before
2003	COYO	1	1	Highway	2	After
2005	COYO	1	1	Highway	2	After
2008	COYO	1	1	Highway	4	Before
1984	COYO	1	1	Highway	2	After
1981	COYO	1	1	Highway	1	Before
2009	COYO	1	1	Highway	4	Before
2009	COYO	1	1	Highway	4	Before
2001	COYO	1	1	Highway	4	Before
2001	COYO	1	1	Highway	4	Before
1994	COYO	1	1	Highway	4	After
2013	COYO	1	1	Highway	2	After
2011	COYO	1	1	Highway	4	After
1981	COYO	1	1	Highway	4	After
1992	COYO	1	1	Highway	2	Before
2000	COYO	1	1	Highway	1	Before
1992	COYO	1	1	Highway	4	Before
2000	COYO	1	1	Highway	2	After
1996	COYO	1	1	Highway	2	After
1987	COYO	1	1	Highway	1	After
2000	COYO	1	1	Highway	2	After
1989	COYO	1	1	Highway	4	After
1987	COYO	1	1	Highway	1	After
2011	COYO	1	1	Highway	2	Before
2013	COYO	1	1	Highway	2	Before
1987	COYO	1	1	Highway	2	After
1988	COYO	1	1	Highway	2	After
1984	COYO	1	1	Highway	2	Before
1984	COYO	1	1	Highway	2	Before
1988	COYO	1	1	Highway	2	Before
1982	COYO	1	1	Highway	2	After
1982	COYO	1	1	Highway	1	Before
1998	COYO	1	1	Highway	2	Before
1985	COYO	1	1	Highway	2	After
1998	COYO	1	1	Highway	2	After
1981	COYO	1	1	Highway	2	Before
2001	COYO	1	1	Highway	2	After
2013	COYO	1	1	Highway	2	After

2009	COYO	1	1	Highway	4	Before
2005	COYO	1	1	Highway	2	After
1999	COYO	1	1	Highway	2	After
1993	COYO	1	1	Highway	2	After
2007	COYO	1	1	Highway	4	After
1999	COYO	1	1	Highway	1	After
2002	COYO	1	1	Highway	1	After
2012	COYO	1	1	Highway	4	After
1993	COYO	1	1	Highway	4	After
2003	COYO	1	1	Highway	1	After
1987	COYO	1	1	Highway	1	After
2001	COYO	1	1	Highway	1	After
1997	COYO	1	1	Highway	2	After
1991	COYO	1	1	Highway	2	After
1993	COYO	1	1	Highway	1	After
1994	COYO	1	1	Highway	1	After
2005	COYO	1	1	Highway	1	Before
1993	COYO	1	1	Highway	2	After
1998	COYO	1	1	Highway	1	After
1988	COYO	1	1	Highway	1	After
2014	COYO	1	1	Highway	2	After
2006	COYO	1	1	Highway	1	After
2008	COYO	1	1	Highway	1	After
1996	COYO	1	1	Highway	4	After
1988	COYO	1	1	Highway	1	After
1997	COYO	1	1	Highway	1	Before
1988	COYO	1	1	Highway	2	Before
2007	COYO	1	1	Highway	1	After
1989	COYO	1	1	Highway	2	After
1987	COYO	1	1	Highway	2	After
2000	COYO	1	1	Highway	2	After
1995	COYO	1	1	Highway	1	After
1997	COYO	1	1	Highway	2	Before
2007	COYO	1	1	Highway	1	Before
2007	COYO	1	1	Highway	4	After
2004	COYO	1	1	Highway	2	After
1990	COYO	1	1	Highway	4	Before
1995	COYO	1	1	Highway	2	After
1990	COYO	1	1	Highway	2	Before
1989	COYO	1	1	Highway	2	After
1992	COYO	1	1	Highway	2	Before

2002	COYO	1	1	Highway	2	After
1987	COYO	1	1	Highway	1	Before
1996	COYO	1	1	Highway	1	Before
2004	COYO	1	1	Highway	2	Before
1981	COYO	1	1	Highway	2	Before
1989	COYO	1	1	Highway	2	Before
1987	COYO	1	1	Highway	1	Before
1984	COYO	1	1	Highway	1	After
2003	COYO	1	1	Highway	2	After
1988	COYO	1	1	Highway	2	After
1981	COYO	1	1	Highway	1	After
2004	COYO	1	1	Highway	1	After
2012	COYO	1	1	Highway	1	After
1981	COYO	1	1	Highway	2	After
2000	COYO	1	1	Highway	2	After
2003	COYO	1	1	Highway	2	Before
1999	COYO	1	1	Highway	1	After
1986	COYO	1	1	Highway	2	After
1986	COYO	1	1	Highway	2	After
2006	COYO	1	1	Highway	1	After
1999	COYO	1	1	Highway	2	Before
2005	COYO	1	1	Highway	2	After
2004	COYO	1	1	Highway	2	Before
1997	COYO	1	1	Highway	2	After
1997	COYO	1	1	Highway	2	After
1998	COYO	1	1	Highway	2	Before
1998	COYO	1	1	Highway	2	After
2010	COYO	1	1	Highway	2	Before
1988	COYO	1	1	Highway	1	Before
1998	COYO	1	1	Highway	2	Before
2000	COYO	1	1	Highway	2	After
1996	COYO	1	1	Highway	2	After
1986	COYO	1	1	Highway	2	After
1983	COYO	1	1	Highway	2	After
1986	COYO	1	1	Highway	2	After
2011	COYO	1	1	Highway	2	After
2001	COYO	1	1	Highway	2	After
1990	COYO	1	1	Highway	2	After
1992	COYO	1	1	Highway	2	Before
1995	COYO	1	1	Highway	1	After
2007	COYO	1	1	Highway	2	Before

2005	COYO	1	1	Highway	2	Before
2005	COYO	1	1	Highway	2	Before
2005	COYO	1	1	Highway	2	After
1994	COYO	1	1	Highway	1	Before
1994	COYO	1	1	Highway	1	Before
2005	COYO	1	1	Highway	2	Before
1992	COYO	1	1	Highway	2	Before
1993	COYO	1	1	Highway	2	After
1987	COYO	1	1	Highway	1	After
1997	COYO	1	1	Highway	1	Before
2007	COYO	1	1	Highway	2	Before
1990	COYO	1	1	Highway	2	After
2010	COYO	1	1	Highway	2	After
1981	COYO	1	1	Highway	2	After
1994	COYO	1	1	Highway	2	Before
1994	COYO	1	1	Highway	2	After
2011	COYO	1	1	Highway	2	After
1989	COYO	1	1	Highway	2	After
1984	COYO	1	1	Highway	1	After
2007	COYO	1	1	Highway	1	After
2012	COYO	1	1	Highway	1	After
1996	COYO	1	1	Highway	2	After
1996	COYO	1	1	Highway	2	After
1992	COYO	1	1	Highway	2	After
1992	COYO	1	1	Highway	2	After
1994	COYO	1	1	Highway	1	Before
1993	COYO	1	1	Highway	1	Before
1997	COYO	1	1	Highway	1	After
2008	COYO	1	1	Highway	1	Before
1986	COYO	1	1	Highway	4	After
1995	COYO	1	1	Highway	2	Before
1987	COYO	1	1	Highway	1	After
1996	COYO	1	1	Highway	1	After
1991	COYO	1	1	Highway	1	Before
1994	COYO	1	1	Highway	1	After
1997	COYO	1	1	Highway	1	After
1981	COYO	1	1	Highway	1	Before
1991	COYO	1	1	Highway	1	Before
1994	COYO	1	1	Highway	1	Before
1997	COYO	1	1	Highway	1	Before
1997	COYO	1	1	Highway	1	Before

1987	COYO	1	1	Highway	4	Before
1983	COYO	1	1	Highway	2	Before
1989	COYO	1	1	Highway	1	Before
2006	COYO	1	1	Highway	2	After
2005	COYO	1	1	Highway	2	After
1981	COYO	1	1	Highway	2	After
1982	COYO	1	1	Highway	2	After
2011	COYO	1	1	Highway	2	Before
2011	COYO	1	1	Highway	2	After
1993	COYO	1	1	Highway	4	After
1996	COYO	1	1	Highway	2	After
1981	COYO	1	1	Highway	2	Before
2004	COYO	1	1	Highway	2	After
1989	COYO	1	1	Highway	2	Before
1994	COYO	1	1	Highway	2	After
1992	COYO	1	1	Highway	2	Before
1981	COYO	1	1	Highway	2	Before
1988	COYO	1	1	Highway	4	Before
2013	COYO	1	1	Highway	2	Before
2006	COYO	1	1	Highway	2	Before
1986	COYO	1	1	Highway	2	Before
1994	COYO	1	1	Highway	2	After
1999	COYO	1	1	Highway	2	Before
2003	COYO	1	1	Highway	4	Before
1987	COYO	1	1	Highway	4	Before
2004	COYO	1	1	Highway	4	Before
1986	COYO	1	1	Highway	4	Before
1994	COYO	1	1	Highway	4	Before
1998	COYO	1	1	Highway	4	After
1989	COYO	1	1	Highway	4	After
1996	COYO	1	1	Highway	4	Before
1989	COYO	1	1	Highway	4	Before
1999	COYO	1	1	Highway	4	Before
2000	COYO	1	1	Highway	4	Before
1997	COYO	1	1	Highway	4	After
1991	COYO	1	1	Highway	4	After
2009	COYO	1	1	Highway	4	After
1993	COYO	1	1	Highway	3	After
1991	COYO	1	1	Highway	3	After
1994	COYO	1	1	Highway	3	After
2012	COYO	1	1	Highway	3	After

2000	COYO	1	1	Highway	3	Before
1992	COYO	1	1	Highway	3	Before
2005	COYO	1	1	Highway	3	Before
2004	COYO	1	1	Highway	3	Before
2003	COYO	1	1	Highway	3	After
2013	COYO	1	1	Highway	8	Before
2009	COYO	1	1	Highway	8	Before
2012	COYO	1	1	Highway	8	Before
1997	COYO	1	1	Highway	8	After
2012	COYO	1	1	Highway	8	Before
2006	COYO	1	1	Highway	8	Before
1988	COYO	1	1	Highway	6	Before
1999	COYO	1	1	Highway	6	After
1987	COYO	1	1	Highway	6	After
1993	COYO	1	1	Highway	6	Before
1997	COYO	1	1	Highway	6	Before
2009	COYO	1	1	Highway	6	Before
1998	COYO	1	1	Highway	6	Before
2006	COYO	1	1	Highway	6	Before
1999	COYO	1	1	Highway	6	Before
1990	COYO	1	1	Highway	6	Before
2005	COYO	1	1	Highway	7	After
1981	COYO	1	1	Highway	7	After
1998	COYO	1	1	Highway	7	After
1988	COYO	1	1	Highway	7	After
1988	COYO	1	1	Highway	7	After
1995	COYO	1	1	Highway	7	After
1994	COYO	1	1	Highway	7	Before
1988	COYO	1	1	Highway	7	Before
1990	COYO	1	1	Highway	7	Before
1987	COYO	1	1	Highway	7	Before
1990	COYO	1	1	Highway	7	After
1994	COYO	1	1	Highway	7	After
1988	COYO	1	1	Highway	7	Before
1999	COYO	1	1	Highway	7	Before
1999	COYO	1	1	Highway	7	After
1982	COYO	1	1	Highway	7	After
1993	COYO	1	1	Highway	7	After
1999	COYO	1	1	Highway	7	After
1998	COYO	1	1	Highway	7	After
2007	COYO	1	1	Highway	7	Before

1997	COYO	1	1	Highway	9	After
1998	COYO	1	1	Highway	9	After
2008	COYO	1	1	Highway	9	After
2005	COYO	1	1	Highway	9	Before
1990	COYO	1	1	Highway	9	Before
1999	COYO	1	1	Highway	9	Before
2008	COYO	1	1	Highway	9	After
2007	COYO	1	1	Highway	9	Before
2003	DEER	1	1	Highway	1	Before
2001	DEER	1	1	Highway	1	After
1995	DEER	1	1	Highway	2	After
2001	DEER	1	1	Highway	2	After
1997	DEER	1	1	Highway	4	After
2000	DEER	1	1	Highway	4	After
2000	DEER	1	1	Highway	3	Before
2000	DEER	1	1	Highway	3	After
2008	DEER	1	1	Highway	8	After
1998	DEER	1	1	Highway	8	After
2009	DEER	1	1	Highway	8	After
2010	DEER	1	1	Highway	8	After
2006	DEER	1	1	Highway	6	After
1998	DEER	1	1	Highway	6	After
2001	DEER	1	1	Highway	7	After
1998	DEER	1	1	Highway	7	After
1999	DEER	1	1	Highway	9	After
1995	ELK	1	1	Highway	1	Before
2014	ELK	1	1	Highway	1	Before
1985	ELK	1	1	Highway	1	After
1988	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	After
1991	ELK	1	1	Highway	1	After
1993	ELK	1	1	Highway	1	After
1994	ELK	1	1	Highway	1	After
1995	ELK	1	1	Highway	1	After
1997	ELK	1	1	Highway	1	Before
2013	ELK	1	1	Highway	1	Before
2003	ELK	1	1	Highway	1	Before
1985	ELK	1	1	Highway	1	Before
1988	ELK	1	1	Highway	1	After
1985	ELK	1	1	Highway	1	After
1986	ELK	1	1	Highway	1	After

1988	ELK	1	1	Highway	1	After
1990	ELK	1	1	Highway	1	After
1991	ELK	1	1	Highway	1	After
1991	ELK	1	1	Highway	1	After
2002	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	After
1994	ELK	1	1	Highway	1	After
2014	ELK	1	1	Highway	1	After
1985	ELK	1	1	Highway	1	Before
1994	ELK	1	1	Highway	1	After
2006	ELK	1	1	Highway	1	After
1987	ELK	1	1	Highway	1	After
1997	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	After
1993	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	1	Before
1981	ELK	1	1	Highway	1	After
1996	ELK	1	1	Highway	1	Before
1982	ELK	1	1	Highway	1	Before
1982	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	Before
1981	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	Before
1986	ELK	1	1	Highway	1	Before
1981	ELK	1	1	Highway	1	Before
2002	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
2002	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	After
1994	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	After
1998	ELK	1	1	Highway	1	Before
1999	ELK	1	1	Highway	1	Before
1986	ELK	1	1	Highway	2	After
1987	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	2	After
1987	ELK	1	1	Highway	2	Before
1981	ELK	1	1	Highway	2	Before
1995	ELK	1	1	Highway	2	Before

1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
1983	ELK	1	1	Highway	2	Before
1993	ELK	1	1	Highway	2	After
1996	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1991	ELK	1	1	Highway	1	Before
1995	ELK	1	1	Highway	4	Before
1995	ELK	1	1	Highway	2	Before
1991	ELK	1	1	Highway	4	After
1981	ELK	1	1	Highway	2	After
1997	ELK	1	1	Highway	1	Before
1994	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
1986	ELK	1	1	Highway	2	After
1995	ELK	1	1	Highway	2	After
1983	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	4	Before
1983	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
2002	ELK	1	1	Highway	1	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	After
1988	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	2	After
1982	ELK	1	1	Highway	2	Before
1991	ELK	1	1	Highway	1	Before
1986	ELK	1	1	Highway	2	Before

1991	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1991	ELK	1	1	Highway	2	Before
1990	ELK	1	1	Highway	4	Before
1984	ELK	1	1	Highway	4	Before
1985	ELK	1	1	Highway	4	Before
1983	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	1	After
1986	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	4	After
1983	ELK	1	1	Highway	2	Before
1982	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	1	After
1997	ELK	1	1	Highway	1	After
1991	ELK	1	1	Highway	1	Before
1983	ELK	1	1	Highway	4	Before
1985	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	1	After
1991	ELK	1	1	Highway	1	After
1993	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
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1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	Before
1983	ELK	1	1	Highway	4	Before
1990	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1982	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
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1982	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
1985	ELK	1	1	Highway	1	After

1981	ELK	1	1	Highway	2	Before
1981	ELK	1	1	Highway	2	Before
1984	ELK	1	1	Highway	1	After
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1983	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	1	After
1990	ELK	1	1	Highway	1	Before
2011	ELK	1	1	Highway	2	After
1982	ELK	1	1	Highway	4	After
1995	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1984	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	Before
1983	ELK	1	1	Highway	1	After
1995	ELK	1	1	Highway	4	Before
1981	ELK	1	1	Highway	2	After
1984	ELK	1	1	Highway	1	After
1985	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
1985	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	2	After
1982	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	After
2005	ELK	1	1	Highway	1	After
1988	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	1	After
1992	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	2	Before
1984	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	1	Before
1991	ELK	1	1	Highway	1	Before
1991	ELK	1	1	Highway	1	Before
1994	ELK	1	1	Highway	4	After

1983	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
1989	ELK	1	1	Highway	1	After
1992	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	Before
1984	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	After
1982	ELK	1	1	Highway	1	After
2014	ELK	1	1	Highway	2	After
1987	ELK	1	1	Highway	4	After
1992	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
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1983	ELK	1	1	Highway	2	After
1983	ELK	1	1	Highway	2	After
1983	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	1	Before
1982	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	2	Before
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1987	ELK	1	1	Highway	2	After
1984	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1987	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	After
1986	ELK	1	1	Highway	2	After

1984	ELK	1	1	Highway	1	After
1986	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	2	After
1984	ELK	1	1	Highway	1	After
1990	ELK	1	1	Highway	4	After
1994	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	After
2008	ELK	1	1	Highway	2	After
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1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1982	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
1993	ELK	1	1	Highway	4	After
1984	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
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1982	ELK	1	1	Highway	2	After
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1984	ELK	1	1	Highway	1	Before
1982	ELK	1	1	Highway	1	Before
1983	ELK	1	1	Highway	1	Before
1985	ELK	1	1	Highway	4	Before
1983	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
1981	ELK	1	1	Highway	2	Before
1984	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	Before
1982	ELK	1	1	Highway	1	After

1984	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
2006	ELK	1	1	Highway	2	After
1996	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
1988	ELK	1	1	Highway	4	After
1983	ELK	1	1	Highway	4	After
1989	ELK	1	1	Highway	4	After
1993	ELK	1	1	Highway	4	After
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1983	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1984	ELK	1	1	Highway	1	After
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1982	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
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1985	ELK	1	1	Highway	2	After
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1981	ELK	1	1	Highway	1	After
1981	ELK	1	1	Highway	1	After
1983	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	After
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1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1983	ELK	1	1	Highway	2	After
1995	ELK	1	1	Highway	2	Before

1981	ELK	1	1	Highway	1	Before
1983	ELK	1	1	Highway	1	Before
1981	ELK	1	1	Highway	1	Before
1982	ELK	1	1	Highway	1	Before
1983	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	1	Before
1982	ELK	1	1	Highway	1	Before
1984	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	After
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1982	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1983	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	After
1982	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	1	Before
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1985	ELK	1	1	Highway	4	After
1984	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	1	After
1984	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After
1991	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
1992	ELK	1	1	Highway	4	Before
1982	ELK	1	1	Highway	4	Before
1982	ELK	1	1	Highway	4	Before
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1986	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	2	After
1981	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	After

1993	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	4	After
1991	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	2	After
1985	ELK	1	1	Highway	2	After
1984	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	2	After
1986	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1982	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1986	ELK	1	1	Highway	2	Before
1981	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	2	Before
1985	ELK	1	1	Highway	4	Before
1985	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
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1989	ELK	1	1	Highway	4	Before
1985	ELK	1	1	Highway	4	Before
1990	ELK	1	1	Highway	4	Before
1984	ELK	1	1	Highway	4	Before
1982	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	After
1983	ELK	1	1	Highway	4	After
1984	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
1989	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	Before
1983	ELK	1	1	Highway	4	After
1983	ELK	1	1	Highway	4	Before
1984	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
1984	ELK	1	1	Highway	4	Before
1990	ELK	1	1	Highway	4	Before
1991	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
1991	ELK	1	1	Highway	4	Before

1983	ELK	1	1	Highway	4	After
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1984	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
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1981	ELK	1	1	Highway	4	After
1992	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	4	After
1993	ELK	1	1	Highway	4	After
1994	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	Before
1989	ELK	1	1	Highway	4	Before
1987	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	4	Before
1990	ELK	1	1	Highway	4	Before
1987	ELK	1	1	Highway	4	Before
1985	ELK	1	1	Highway	4	Before
1992	ELK	1	1	Highway	4	Before
2006	ELK	1	1	Highway	4	After
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1988	ELK	1	1	Highway	4	After
1992	ELK	1	1	Highway	4	After
1987	ELK	1	1	Highway	4	Before
1994	ELK	1	1	Highway	4	Before
1984	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	4	After
1981	ELK	1	1	Highway	4	After
1983	ELK	1	1	Highway	4	After
1987	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	4	After
1992	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	After
1987	ELK	1	1	Highway	4	After

1987	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	4	After
1992	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	4	After
1987	ELK	1	1	Highway	4	After
1991	ELK	1	1	Highway	4	After
1995	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	After
1989	ELK	1	1	Highway	4	After
1985	ELK	1	1	Highway	4	Before
1992	ELK	1	1	Highway	4	Before
1988	ELK	1	1	Highway	4	Before
1988	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	After
1988	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
1987	ELK	1	1	Highway	4	Before
1987	ELK	1	1	Highway	4	Before
1990	ELK	1	1	Highway	4	Before
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1991	ELK	1	1	Highway	4	Before
1985	ELK	1	1	Highway	4	Before
1989	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	After
1991	ELK	1	1	Highway	4	Before
1988	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
1996	ELK	1	1	Highway	4	Before
1983	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
1994	ELK	1	1	Highway	4	Before
1986	ELK	1	1	Highway	4	Before
1988	ELK	1	1	Highway	4	After
2000	ELK	1	1	Highway	4	Before
1981	ELK	1	1	Highway	4	After
1982	ELK	1	1	Highway	3	After
1988	ELK	1	1	Highway	4	Before
1987	ELK	1	1	Highway	4	After
1990	ELK	1	1	Highway	4	After
1986	ELK	1	1	Highway	3	After

1983	ELK	1	1	Highway	3	After
1986	ELK	1	1	Highway	3	After
1992	ELK	1	1	Highway	3	After
1986	ELK	1	1	Highway	3	After
1986	ELK	1	1	Highway	3	After
1987	ELK	1	1	Highway	3	After
1981	ELK	1	1	Highway	3	After
1983	ELK	1	1	Highway	3	Before
1987	ELK	1	1	Highway	3	After
1996	ELK	1	1	Highway	3	After
1992	ELK	1	1	Highway	3	After
1992	ELK	1	1	Highway	3	After
1986	ELK	1	1	Highway	3	After
1983	ELK	1	1	Highway	3	After
1992	ELK	1	1	Highway	3	After
1982	ELK	1	1	Highway	3	After
1987	ELK	1	1	Highway	3	After
1984	ELK	1	1	Highway	3	After
1990	ELK	1	1	Highway	4	After
1994	ELK	1	1	Highway	3	After
1983	ELK	1	1	Highway	3	After
1988	ELK	1	1	Highway	3	After
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1987	ELK	1	1	Highway	3	After
1981	ELK	1	1	Highway	3	After
1988	ELK	1	1	Highway	3	After
1989	ELK	1	1	Highway	3	After
1983	ELK	1	1	Highway	3	Before
1985	ELK	1	1	Highway	3	Before
1981	ELK	1	1	Highway	3	Before
2003	ELK	1	1	Highway	3	After
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1989	ELK	1	1	Highway	3	Before
1989	ELK	1	1	Highway	3	Before
1997	ELK	1	1	Highway	3	After
1983	ELK	1	1	Highway	3	Before
1985	ELK	1	1	Highway	3	Before
1993	ELK	1	1	Highway	3	Before
1995	ELK	1	1	Highway	3	After
1989	ELK	1	1	Highway	3	After
2012	ELK	1	1	Highway	3	Before

1998	ELK	1	1	Highway	3	Before
1989	ELK	1	1	Highway	3	Before
1986	ELK	1	1	Highway	3	Before
1985	ELK	1	1	Highway	3	Before
1987	ELK	1	1	Highway	3	Before
1981	ELK	1	1	Highway	3	After
2002	ELK	1	1	Highway	3	After
1986	ELK	1	1	Highway	3	After
1999	ELK	1	1	Highway	3	After
2001	ELK	1	1	Highway	3	Before
1990	ELK	1	1	Highway	3	After
1994	ELK	1	1	Highway	3	After
1989	ELK	1	1	Highway	3	After
1998	ELK	1	1	Highway	3	After
1984	ELK	1	1	Highway	3	After
1985	ELK	1	1	Highway	8	After
2009	ELK	1	1	Highway	8	After
1985	ELK	1	1	Highway	8	After
2000	ELK	1	1	Highway	8	Before
1991	ELK	1	1	Highway	8	Before
2001	ELK	1	1	Highway	8	After
1988	ELK	1	1	Highway	8	Before
1982	ELK	1	1	Highway	8	Before
1999	ELK	1	1	Highway	8	After
1999	ELK	1	1	Highway	8	After
1985	ELK	1	1	Highway	8	After
1990	ELK	1	1	Highway	8	After
1984	ELK	1	1	Highway	8	After
1985	ELK	1	1	Highway	8	Before
1986	ELK	1	1	Highway	8	After
1990	ELK	1	1	Highway	8	After
2001	ELK	1	1	Highway	8	Before
1986	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	Before
1990	ELK	1	1	Highway	8	After
2001	ELK	1	1	Highway	8	After
1984	ELK	1	1	Highway	8	After
1984	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1984	ELK	1	1	Highway	8	After

1986	ELK	1	1	Highway	8	After
1988	ELK	1	1	Highway	8	After
1992	ELK	1	1	Highway	8	After
1986	ELK	1	1	Highway	8	After
1986	ELK	1	1	Highway	8	After
2008	ELK	1	1	Highway	8	After
2000	ELK	1	1	Highway	8	After
1986	ELK	1	1	Highway	8	After
2000	ELK	1	1	Highway	8	After
1989	ELK	1	1	Highway	8	After
1986	ELK	1	1	Highway	8	After
1988	ELK	1	1	Highway	8	Before
2005	ELK	1	1	Highway	8	Before
1999	ELK	1	1	Highway	8	Before
1990	ELK	1	1	Highway	8	Before
1989	ELK	1	1	Highway	8	Before
2000	ELK	1	1	Highway	8	Before
1993	ELK	1	1	Highway	8	Before
1984	ELK	1	1	Highway	8	After
1990	ELK	1	1	Highway	8	Before
1987	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1985	ELK	1	1	Highway	8	After
1986	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1999	ELK	1	1	Highway	8	After
1983	ELK	1	1	Highway	8	Before
2002	ELK	1	1	Highway	8	After
1984	ELK	1	1	Highway	8	Before
1989	ELK	1	1	Highway	8	Before
1987	ELK	1	1	Highway	8	After
1992	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1987	ELK	1	1	Highway	8	After
1981	ELK	1	1	Highway	8	After
2009	ELK	1	1	Highway	8	After
1990	ELK	1	1	Highway	8	After
2007	ELK	1	1	Highway	8	After
1994	ELK	1	1	Highway	6	After
1993	ELK	1	1	Highway	6	After

1989	ELK	1	1	Highway	6	After
1986	ELK	1	1	Highway	6	After
1987	ELK	1	1	Highway	6	After
1992	ELK	1	1	Highway	6	After
1988	ELK	1	1	Highway	6	After
1993	ELK	1	1	Highway	6	Before
1986	ELK	1	1	Highway	6	Before
1981	ELK	1	1	Highway	6	Before
1986	ELK	1	1	Highway	6	After
1989	ELK	1	1	Highway	6	After
1999	ELK	1	1	Highway	6	After
2007	ELK	1	1	Highway	6	After
1981	ELK	1	1	Highway	6	After
1995	ELK	1	1	Highway	6	After
1983	ELK	1	1	Highway	6	After
1986	ELK	1	1	Highway	6	After
1982	ELK	1	1	Highway	6	Before
2001	ELK	1	1	Highway	6	After
1999	ELK	1	1	Highway	6	After
1993	ELK	1	1	Highway	6	After
1987	ELK	1	1	Highway	6	After
1982	ELK	1	1	Highway	6	After
2000	ELK	1	1	Highway	6	After
1990	ELK	1	1	Highway	6	After
1985	ELK	1	1	Highway	6	After
1987	ELK	1	1	Highway	6	After
1982	ELK	1	1	Highway	6	After
2000	ELK	1	1	Highway	6	After
1988	ELK	1	1	Highway	6	After
2000	ELK	1	1	Highway	6	After
1998	ELK	1	1	Highway	6	After
1999	ELK	1	1	Highway	6	After
1999	ELK	1	1	Highway	6	After
1991	ELK	1	1	Highway	6	After
2000	ELK	1	1	Highway	7	After
2000	ELK	1	1	Highway	6	Before
1993	ELK	1	1	Highway	7	Before
2000	ELK	1	1	Highway	7	After
2003	ELK	1	1	Highway	7	Before
2004	ELK	1	1	Highway	7	Before
2005	ELK	1	1	Highway	7	Before

2005	ELK	1	1	Highway	7	After
2002	ELK	1	1	Highway	7	Before
1994	ELK	1	1	Highway	7	After
1982	ELK	1	1	Highway	7	After
2005	ELK	1	1	Highway	7	After
1998	ELK	1	1	Highway	7	After
2005	ELK	1	1	Highway	7	After
2001	ELK	1	1	Highway	7	Before
1994	ELK	1	1	Highway	7	After
1987	ELK	1	1	Highway	7	After
2008	ELK	1	1	Highway	7	After
1990	ELK	1	1	Highway	7	After
1990	ELK	1	1	Highway	7	After
2003	ELK	1	1	Highway	7	After
1998	ELK	1	1	Highway	7	After
2002	ELK	1	1	Highway	7	After
1989	ELK	1	1	Highway	5	After
1998	ELK	1	1	Highway	5	After
1999	ELK	1	1	Highway	7	Before
1997	ELK	1	1	Highway	9	After
1987	ELK	1	1	Highway	9	Before
1985	ELK	1	1	Highway	9	Before
2000	ELK	1	1	Highway	9	Before
1993	ELK	1	1	Highway	9	Before
2007	ELK	1	1	Highway	9	Before
2005	GRIZ	2	1	Highway	2	After
2011	GRIZ	1	1	Highway	8	Before
2002	GRIZ	1	1	Highway	6	Before
2001	GRIZ	1	1	Highway	7	Before
2011	GRIZ	1	1	Highway	7	Before
1982	MOOS	1	1	Highway	2	After
1985	MOOS	1	1	Highway	2	After
1988	MOOS	1	1	Highway	4	After
1987	MOOS	1	1	Highway	2	After
1985	MOOS	1	1	Highway	2	After
1981	MOOS	1	1	Highway	2	After
1984	MOOS	1	1	Highway	4	After
1985	MOOS	1	1	Highway	2	After
1984	MOOS	1	1	Highway	4	After
1983	MOOS	1	1	Highway	4	After
1981	MOOS	1	1	Highway	4	After

1985	MOOS	1	1	Highway	4	After
1989	MOOS	1	1	Highway	4	After
1987	MOOS	1	1	Highway	4	After
1982	MOOS	1	1	Highway	4	After
1994	MOOS	1	1	Highway	3	After
1986	MOOS	1	1	Highway	3	Before
1990	MOOS	1	1	Highway	3	Before
1998	MOOS	1	1	Highway	3	Before
1995	MOOS	1	1	Highway	8	Before
2013	MOOS	1	1	Highway	8	Before
2008	MOOS	1	1	Highway	8	Before
2008	MOOS	1	1	Highway	8	Before
2006	MOOS	1	1	Highway	8	After
2008	MOOS	1	1	Highway	8	After
2008	MOOS	1	1	Highway	8	Before
2005	MOOS	1	1	Highway	8	Before
2008	MOOS	1	1	Highway	8	Before
2009	MOOS	1	1	Highway	8	After
2003	MOOS	1	1	Highway	8	After
2006	MOOS	1	1	Highway	8	Before
1993	MOOS	1	1	Highway	6	Before
2001	MOOS	1	1	Highway	6	After
1994	MOOS	1	1	Highway	6	After
1990	MOOS	1	1	Highway	6	After
2001	MOOS	1	1	Highway	6	Before
2007	MOOS	1	1	Highway	6	After
1983	MOOS	1	1	Highway	7	After
1991	MOOS	1	1	Highway	7	After
1981	MOOS	1	1	Highway	7	After
1993	MOOS	1	1	Highway	9	Before
1994	MOOS	1	1	Highway	9	Before
1990	MOOS	1	1	Highway	9	Before
2008	MULE	1	1	Highway	1	Before
2004	MULE	1	1	Highway	1	Before
2005	MULE	1	1	Highway	1	Before
1989	MULE	1	1	Highway	1	Before
1996	MULE	1	1	Highway	1	Before
1991	MULE	1	1	Highway	1	After
2012	MULE	1	1	Highway	1	After
1990	MULE	1	1	Highway	1	Before
1983	MULE	1	1	Highway	1	Before

1981	MULE	1	1	Highway	1	After
1982	MULE	1	1	Highway	1	Before
1996	MULE	1	1	Highway	1	After
1991	MULE	1	1	Highway	2	After
1983	MULE	1	1	Highway	2	After
1985	MULE	1	1	Highway	2	After
1989	MULE	1	1	Highway	2	After
1992	MULE	1	1	Highway	2	Before
1996	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	2	After
1982	MULE	1	1	Highway	2	Before
1981	MULE	1	1	Highway	2	Before
1989	MULE	1	1	Highway	2	Before
1981	MULE	1	1	Highway	2	Before
1986	MULE	1	1	Highway	2	Before
1985	MULE	1	1	Highway	2	Before
1986	MULE	1	1	Highway	2	Before
1982	MULE	1	1	Highway	1	Before
1981	MULE	1	1	Highway	1	Before
1995	MULE	1	1	Highway	2	After
1988	MULE	1	1	Highway	4	Before
1988	MULE	1	1	Highway	4	After
1991	MULE	1	1	Highway	4	Before
1987	MULE	1	1	Highway	4	After
1988	MULE	1	1	Highway	4	Before
1988	MULE	1	1	Highway	4	Before
1990	MULE	1	1	Highway	4	Before
1982	MULE	1	1	Highway	1	Before
1982	MULE	1	1	Highway	1	Before
1993	MULE	1	1	Highway	4	Before
1993	MULE	1	1	Highway	4	Before
2000	MULE	1	1	Highway	2	Before
1981	MULE	1	1	Highway	1	Before
1981	MULE	1	1	Highway	1	After
1989	MULE	1	1	Highway	4	After
2014	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	2	After
2013	MULE	1	1	Highway	2	Before
1984	MULE	1	1	Highway	1	After
1991	MULE	1	1	Highway	4	After
1989	MULE	1	1	Highway	4	Before

1983	MULE	1	1	Highway	1	Before
1995	MULE	1	1	Highway	4	Before
1982	MULE	1	1	Highway	2	Before
1985	MULE	1	1	Highway	2	Before
1987	MULE	1	1	Highway	2	Before
1997	MULE	1	1	Highway	2	Before
1982	MULE	1	1	Highway	2	Before
1982	MULE	1	1	Highway	2	Before
1985	MULE	1	1	Highway	2	Before
1985	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	2	After
1982	MULE	1	1	Highway	2	After
1987	MULE	1	1	Highway	2	Before
1981	MULE	1	1	Highway	1	After
1988	MULE	1	1	Highway	1	After
1989	MULE	1	1	Highway	2	After
2007	MULE	1	1	Highway	2	After
2008	MULE	1	1	Highway	2	After
2001	MULE	1	1	Highway	2	After
1984	MULE	1	1	Highway	2	After
1983	MULE	1	1	Highway	2	After
1983	MULE	1	1	Highway	2	After
1982	MULE	1	1	Highway	1	After
1982	MULE	1	1	Highway	2	Before
1982	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	2	After
1982	MULE	1	1	Highway	4	After
1983	MULE	1	1	Highway	2	After
1998	MULE	1	1	Highway	1	Before
1981	MULE	1	1	Highway	2	Before
2005	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	1	Before
1996	MULE	1	1	Highway	2	Before
1984	MULE	1	1	Highway	1	Before
1983	MULE	1	1	Highway	2	Before
1983	MULE	1	1	Highway	1	Before
1982	MULE	1	1	Highway	1	Before
1985	MULE	1	1	Highway	2	Before
1983	MULE	1	1	Highway	2	Before
2010	MULE	1	1	Highway	4	Before
1981	MULE	1	1	Highway	1	Before

1983	MULE	1	1	Highway	4	After
1987	MULE	1	1	Highway	2	After
1982	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	4	After
1983	MULE	1	1	Highway	2	After
1981	MULE	1	1	Highway	1	Before
1999	MULE	1	1	Highway	2	Before
1994	MULE	1	1	Highway	4	After
1982	MULE	1	1	Highway	2	After
1983	MULE	1	1	Highway	2	After
1993	MULE	1	1	Highway	4	After
1984	MULE	1	1	Highway	2	After
1983	MULE	1	1	Highway	2	After
1982	MULE	1	1	Highway	1	After
1993	MULE	1	1	Highway	4	After
1982	MULE	1	1	Highway	2	After
1985	MULE	1	1	Highway	2	Before
1995	MULE	1	1	Highway	4	Before
1987	MULE	1	1	Highway	2	Before
1986	MULE	1	1	Highway	2	Before
1982	MULE	1	1	Highway	1	Before
2006	MULE	1	1	Highway	1	Before
1987	MULE	1	1	Highway	4	Before
1981	MULE	1	1	Highway	2	Before
1998	MULE	1	1	Highway	2	Before
1983	MULE	1	1	Highway	1	Before
1997	MULE	1	1	Highway	1	Before
1997	MULE	1	1	Highway	1	Before
1982	MULE	1	1	Highway	2	Before
1982	MULE	1	1	Highway	1	Before
1984	MULE	1	1	Highway	1	Before
1984	MULE	1	1	Highway	1	Before
1984	MULE	1	1	Highway	1	Before
1985	MULE	1	1	Highway	1	After
1982	MULE	1	1	Highway	2	Before
1984	MULE	1	1	Highway	2	Before
1991	MULE	1	1	Highway	1	After
1982	MULE	1	1	Highway	4	Before
1988	MULE	1	1	Highway	4	Before
1985	MULE	1	1	Highway	2	After
1987	MULE	1	1	Highway	2	After

1989	MULE	1	1	Highway	4	After
1994	MULE	1	1	Highway	4	After
1983	MULE	1	1	Highway	4	After
1993	MULE	1	1	Highway	4	After
1991	MULE	1	1	Highway	4	After
1988	MULE	1	1	Highway	4	After
1989	MULE	1	1	Highway	4	After
1990	MULE	1	1	Highway	4	After
1990	MULE	1	1	Highway	4	After
1994	MULE	1	1	Highway	4	After
1983	MULE	1	1	Highway	4	After
1987	MULE	1	1	Highway	4	After
1981	MULE	1	1	Highway	4	After
1983	MULE	1	1	Highway	4	After
1987	MULE	1	1	Highway	4	Before
2000	MULE	1	1	Highway	4	After
1995	MULE	1	1	Highway	4	Before
1996	MULE	1	1	Highway	4	Before
1987	MULE	1	1	Highway	4	Before
1981	MULE	1	1	Highway	4	Before
1993	MULE	1	1	Highway	4	Before
1988	MULE	1	1	Highway	3	After
1988	MULE	1	1	Highway	3	Before
1986	MULE	1	1	Highway	3	After
1990	MULE	1	1	Highway	3	After
1990	MULE	1	1	Highway	4	After
2005	MULE	1	1	Highway	3	After
1982	MULE	1	1	Highway	3	After
1999	MULE	1	1	Highway	3	After
1982	MULE	1	1	Highway	3	Before
2000	MULE	1	1	Highway	3	Before
1994	MULE	1	1	Highway	3	Before
1994	MULE	1	1	Highway	3	Before
1993	MULE	1	1	Highway	3	Before
1993	MULE	1	1	Highway	3	After
2008	MULE	2	1	Highway	8	Before
1982	MULE	1	1	Highway	8	Before
2005	MULE	1	1	Highway	8	Before
2008	MULE	1	1	Highway	8	After
1998	MULE	1	1	Highway	8	After
1993	MULE	1	1	Highway	8	After

2000	MULE	1	1	Highway	8	After
2005	MULE	1	1	Highway	8	Before
1991	MULE	1	1	Highway	8	Before
1981	MULE	1	1	Highway	8	Before
1990	MULE	1	1	Highway	8	Before
2009	MULE	1	1	Highway	8	Before
1985	MULE	1	1	Highway	8	After
2006	MULE	1	1	Highway	8	Before
2006	MULE	1	1	Highway	8	Before
1989	MULE	1	1	Highway	8	Before
1990	MULE	1	1	Highway	8	Before
1990	MULE	1	1	Highway	8	Before
2004	MULE	1	1	Highway	8	After
1989	MULE	1	1	Highway	8	After
1994	MULE	1	1	Highway	8	After
1982	MULE	1	1	Highway	8	After
2000	MULE	1	1	Highway	8	After
1983	MULE	1	1	Highway	6	After
1999	MULE	1	1	Highway	6	After
1988	MULE	1	1	Highway	6	After
1990	MULE	1	1	Highway	6	Before
1986	MULE	1	1	Highway	6	After
1998	MULE	1	1	Highway	6	After
1997	MULE	1	1	Highway	6	After
1997	MULE	1	1	Highway	6	Before
2001	MULE	1	1	Highway	6	After
1987	MULE	1	1	Highway	6	Before
1990	MULE	1	1	Highway	6	Before
2005	MULE	1	1	Highway	6	Before
1996	MULE	1	1	Highway	6	Before
2003	MULE	1	1	Highway	6	After
1997	MULE	1	1	Highway	6	Before
1998	MULE	1	1	Highway	6	After
1989	MULE	1	1	Highway	6	After
1989	MULE	1	1	Highway	6	After
1983	MULE	1	1	Highway	6	After
1997	MULE	1	1	Highway	6	After
1997	MULE	1	1	Highway	6	After
1986	MULE	1	1	Highway	6	Before
1998	MULE	1	1	Highway	6	Before
1985	MULE	1	1	Highway	6	Before

1984	MULE	1	1	Highway	6	Before
1995	MULE	1	1	Highway	6	Before
2002	MULE	1	1	Highway	6	Before
1991	MULE	1	1	Highway	6	After
1992	MULE	1	1	Highway	6	After
1989	MULE	1	1	Highway	6	Before
1990	MULE	1	1	Highway	7	Before
2001	MULE	1	1	Highway	7	Before
2001	MULE	1	1	Highway	7	After
1987	MULE	1	1	Highway	7	Before
1988	MULE	1	1	Highway	7	Before
1996	MULE	1	1	Highway	7	After
1998	MULE	1	1	Highway	7	After
1989	MULE	1	1	Highway	7	After
1981	MULE	1	1	Highway	7	After
1990	MULE	1	1	Highway	7	After
1988	MULE	1	1	Highway	7	After
2002	MULE	1	1	Highway	7	Before
1987	MULE	1	1	Highway	7	Before
1988	MULE	1	1	Highway	7	Before
1981	MULE	1	1	Highway	7	Before
1984	MULE	1	1	Highway	7	After
1988	MULE	1	1	Highway	7	After
1983	MULE	1	1	Highway	7	After
1987	MULE	1	1	Highway	7	After
1999	MULE	1	1	Highway	7	Before
1998	MULE	1	1	Highway	7	After
1984	MULE	1	1	Highway	7	After
1997	MULE	1	1	Highway	7	After
1997	MULE	1	1	Highway	7	After
1999	MULE	1	1	Highway	7	After
1991	MULE	1	1	Highway	7	After
1994	MULE	1	1	Highway	7	After
1999	MULE	1	1	Highway	7	Before
1987	MULE	1	1	Highway	7	Before
1998	MULE	1	1	Highway	5	After
1982	MULE	1	1	Highway	5	After
1981	MULE	1	1	Highway	7	Before
2001	MULE	1	1	Highway	7	Before
1988	MULE	1	1	Highway	7	Before
1986	MULE	1	1	Highway	7	After

1996	MULE	1	1	Highway	7	After
2005	MULE	1	1	Highway	5	After
2000	MULE	1	1	Highway	5	After
1981	MULE	1	1	Highway	9	After
1981	MULE	1	1	Highway	9	After
1982	MULE	1	1	Highway	7	After
1997	MULE	1	1	Highway	7	After
1998	MULE	1	1	Highway	7	After
1992	MULE	1	1	Highway	9	After
1989	MULE	1	1	Highway	9	After
1989	MULE	1	1	Highway	9	After
1994	MULE	1	1	Highway	9	Before
1995	MULE	1	1	Highway	7	Before
1999	MULE	1	1	Highway	9	Before
1996	MULE	1	1	Highway	9	Before
2008	MULE	1	1	Highway	9	Before
2002	MULE	1	1	Highway	9	Before
2001	MULE	1	1	Highway	9	Before
1982	MULE	1	1	Highway	9	After
1981	MULE	1	1	Highway	9	After
2000	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	After
1983	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	After
1984	SHEE	1	1	Highway	2	After
1986	SHEE	1	1	Highway	2	After
1987	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	After
1984	SHEE	1	1	Highway	2	After
1984	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	Before
1982	SHEE	1	1	Highway	2	Before
1981	SHEE	1	1	Highway	2	Before
1982	SHEE	1	1	Highway	2	Before
1981	SHEE	1	1	Highway	2	Before
1993	SHEE	1	1	Highway	2	Before
1982	SHEE	1	1	Highway	2	After

1986	SHEE	1	1	Highway	2	Before
1985	SHEE	1	1	Highway	2	After
1986	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	After
1984	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	After
1984	SHEE	1	1	Highway	2	After
1984	SHEE	1	1	Highway	2	After
1982	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1982	SHEE	1	1	Highway	2	After
1983	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	After
1987	SHEE	1	1	Highway	2	After
1986	SHEE	1	1	Highway	2	After
1986	SHEE	1	1	Highway	2	After
1986	SHEE	1	1	Highway	2	After
1986	SHEE	1	1	Highway	2	After
1987	SHEE	1	1	Highway	2	After
1987	SHEE	1	1	Highway	2	After
1983	SHEE	1	1	Highway	2	After
1985	SHEE	1	1	Highway	2	Before
1983	SHEE	1	1	Highway	2	Before
1987	SHEE	1	1	Highway	2	Before
1992	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	Before
1985	SHEE	1	1	Highway	2	After

1982	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	After
1981	SHEE	1	1	Highway	2	Before
1984	SHEE	1	1	Highway	2	Before
1986	SHEE	1	1	Highway	2	After
1983	SHEE	1	1	Highway	2	After
1982	SHEE	1	1	Highway	4	After
2006	SHEE	1	1	Highway	6	After
2005	WHIT	1	1	Highway	1	After
2012	WHIT	1	1	Highway	1	After
2011	WHIT	1	1	Highway	1	After
1990	WHIT	1	1	Highway	1	Before
1984	WHIT	1	1	Highway	1	Before
1988	WHIT	1	1	Highway	1	Before
1992	WHIT	1	1	Highway	1	Before
2007	WHIT	1	1	Highway	1	Before
2006	WHIT	1	1	Highway	1	Before
1984	WHIT	1	1	Highway	1	After
2011	WHIT	1	1	Highway	1	After
2012	WHIT	1	1	Highway	1	Before
2000	WHIT	1	1	Highway	1	Before
2000	WHIT	1	1	Highway	1	After
1992	WHIT	1	1	Highway	1	Before
1993	WHIT	1	1	Highway	1	After
1983	WHIT	1	1	Highway	1	After
1982	WHIT	1	1	Highway	1	Before
1994	WHIT	1	1	Highway	1	After
1998	WHIT	1	1	Highway	1	Before
1996	WHIT	1	1	Highway	1	After
2000	WHIT	1	1	Highway	1	After
1986	WHIT	1	1	Highway	2	After
1982	WHIT	1	1	Highway	2	After
1984	WHIT	1	1	Highway	2	Before
1991	WHIT	1	1	Highway	2	Before
1995	WHIT	1	1	Highway	2	Before
1995	WHIT	1	1	Highway	2	Before
1981	WHIT	1	1	Highway	2	After
1982	WHIT	1	1	Highway	2	After
1985	WHIT	1	1	Highway	2	Before
1984	WHIT	1	1	Highway	2	After
1995	WHIT	1	1	Highway	2	After

1986	WHIT	1	1	Highway	2	After
1988	WHIT	1	1	Highway	4	Before
1981	WHIT	1	1	Highway	4	After
1987	WHIT	1	1	Highway	2	Before
2012	WHIT	1	1	Highway	2	After
2003	WHIT	1	1	Highway	2	After
1997	WHIT	1	1	Highway	4	After
1981	WHIT	1	1	Highway	2	After
1988	WHIT	1	1	Highway	4	After
1995	WHIT	1	1	Highway	1	After
2007	WHIT	1	1	Highway	2	Before
2009	WHIT	1	1	Highway	1	Before
1995	WHIT	1	1	Highway	4	Before
1990	WHIT	1	1	Highway	4	After
1986	WHIT	1	1	Highway	2	After
1985	WHIT	1	1	Highway	4	After
1989	WHIT	1	1	Highway	4	After
1989	WHIT	1	1	Highway	4	After
1986	WHIT	1	1	Highway	2	After
1992	WHIT	1	1	Highway	1	After
2008	WHIT	1	1	Highway	2	After
2006	WHIT	1	1	Highway	4	After
2008	WHIT	1	1	Highway	1	After
1991	WHIT	1	1	Highway	4	After
1994	WHIT	1	1	Highway	4	Before
1986	WHIT	1	1	Highway	2	Before
1989	WHIT	1	1	Highway	4	Before
1981	WHIT	1	1	Highway	2	After
2012	WHIT	1	1	Highway	1	After
2002	WHIT	1	1	Highway	2	Before
1983	WHIT	1	1	Highway	2	After
1982	WHIT	1	1	Highway	1	After
2006	WHIT	1	1	Highway	1	After
2009	WHIT	1	1	Highway	2	Before
1994	WHIT	1	1	Highway	4	After
1985	WHIT	1	1	Highway	2	After
1981	WHIT	1	1	Highway	1	Before
1989	WHIT	1	1	Highway	4	After
1995	WHIT	1	1	Highway	2	Before
2000	WHIT	1	1	Highway	2	After
1986	WHIT	1	1	Highway	4	After

1984	WHIT	1	1	Highway	1	Before
1986	WHIT	1	1	Highway	4	Before
1985	WHIT	1	1	Highway	4	Before
1996	WHIT	1	1	Highway	1	Before
2005	WHIT	2	1	Highway	1	Before
1981	WHIT	1	1	Highway	1	After
2008	WHIT	1	1	Highway	1	After
1994	WHIT	1	1	Highway	4	Before
1984	WHIT	1	1	Highway	1	After
2012	WHIT	1	1	Highway	1	After
1981	WHIT	1	1	Highway	1	Before
1995	WHIT	1	1	Highway	2	After
1985	WHIT	1	1	Highway	2	After
1992	WHIT	1	1	Highway	4	After
1994	WHIT	1	1	Highway	4	After
1994	WHIT	1	1	Highway	4	After
1994	WHIT	1	1	Highway	4	After
1996	WHIT	1	1	Highway	4	After
1991	WHIT	1	1	Highway	4	After
2013	WHIT	1	1	Highway	4	After
1982	WHIT	1	1	Highway	4	After
1984	WHIT	1	1	Highway	4	Before
1984	WHIT	1	1	Highway	4	Before
1993	WHIT	1	1	Highway	4	Before
2006	WHIT	1	1	Highway	4	Before
1994	WHIT	1	1	Highway	4	Before
1988	WHIT	1	1	Highway	4	Before
1995	WHIT	1	1	Highway	4	Before
1988	WHIT	1	1	Highway	4	Before
1989	WHIT	1	1	Highway	4	Before
1991	WHIT	1	1	Highway	3	Before
1986	WHIT	1	1	Highway	3	After
1987	WHIT	1	1	Highway	3	After
1999	WHIT	1	1	Highway	3	After
1988	WHIT	1	1	Highway	3	After
1987	WHIT	1	1	Highway	3	After
1987	WHIT	1	1	Highway	3	After
1987	WHIT	1	1	Highway	3	Before
1992	WHIT	1	1	Highway	3	Before
2004	WHIT	1	1	Highway	3	After
2004	WHIT	1	1	Highway	8	After

1999	WHIT	1	1	Highway	8	Before
2000	WHIT	1	1	Highway	8	After
2005	WHIT	1	1	Highway	8	After
2003	WHIT	1	1	Highway	8	After
2003	WHIT	1	1	Highway	8	Before
2005	WHIT	1	1	Highway	8	Before
2001	WHIT	1	1	Highway	8	Before
1991	WHIT	1	1	Highway	8	Before
1996	WHIT	1	1	Highway	8	After
1988	WHIT	1	1	Highway	8	Before
1999	WHIT	1	1	Highway	8	Before
2001	WHIT	1	1	Highway	8	Before
2006	WHIT	1	1	Highway	8	Before
2002	WHIT	1	1	Highway	8	Before
2004	WHIT	1	1	Highway	8	Before
1986	WHIT	1	1	Highway	8	After
1985	WHIT	1	1	Highway	8	After
1985	WHIT	1	1	Highway	8	Before
2003	WHIT	1	1	Highway	8	Before
1992	WHIT	1	1	Highway	8	After
2009	WHIT	1	1	Highway	8	Before
2010	WHIT	1	1	Highway	8	After
2001	WHIT	1	1	Highway	8	After
1984	WHIT	1	1	Highway	8	After
2004	WHIT	1	1	Highway	8	After
2000	WHIT	1	1	Highway	8	After
1995	WHIT	1	1	Highway	8	After
1989	WHIT	1	1	Highway	8	After
2007	WHIT	1	1	Highway	8	Before
1987	WHIT	1	1	Highway	8	Before
2006	WHIT	1	1	Highway	8	Before
2006	WHIT	1	1	Highway	8	Before
2001	WHIT	1	1	Highway	8	Before
1990	WHIT	1	1	Highway	8	Before
1988	WHIT	1	1	Highway	8	Before
1988	WHIT	1	1	Highway	8	Before
1990	WHIT	1	1	Highway	8	Before
2000	WHIT	1	1	Highway	8	After
2011	WHIT	1	1	Highway	8	After
2003	WHIT	1	1	Highway	8	After
2004	WHIT	1	1	Highway	8	After

1987	WHIT	1	1	Highway	8	After
2001	WHIT	1	1	Highway	8	After
1992	WHIT	1	1	Highway	8	Before
2005	WHIT	1	1	Highway	8	Before
2005	WHIT	1	1	Highway	8	Before
1988	WHIT	1	1	Highway	6	After
2006	WHIT	1	1	Highway	6	Before
2010	WHIT	1	1	Highway	6	Before
1993	WHIT	1	1	Highway	6	Before
1983	WHIT	1	1	Highway	6	After
2002	WHIT	1	1	Highway	6	After
2005	WHIT	1	1	Highway	6	After
1993	WHIT	1	1	Highway	6	After
2007	WHIT	1	1	Highway	6	Before
2000	WHIT	1	1	Highway	6	Before
1987	WHIT	1	1	Highway	6	After
1992	WHIT	1	1	Highway	6	After
1997	WHIT	1	1	Highway	6	After
1992	WHIT	1	1	Highway	6	After
2009	WHIT	1	1	Highway	6	Before
1989	WHIT	1	1	Highway	6	After
1987	WHIT	1	1	Highway	6	After
1992	WHIT	1	1	Highway	6	After
1995	WHIT	1	1	Highway	6	After
1992	WHIT	1	1	Highway	6	After
2003	WHIT	1	1	Highway	6	After
1989	WHIT	1	1	Highway	6	Before
2005	WHIT	1	1	Highway	6	Before
2002	WHIT	1	1	Highway	7	Before
2002	WHIT	1	1	Highway	6	Before
1989	WHIT	1	1	Highway	7	Before
1988	WHIT	1	1	Highway	7	After
2004	WHIT	1	1	Highway	7	Before
2001	WHIT	1	1	Highway	7	After
2011	WHIT	1	1	Highway	7	After
2001	WHIT	1	1	Highway	7	After
1988	WHIT	1	1	Highway	7	Before
1994	WHIT	1	1	Highway	7	Before
2003	WHIT	1	1	Highway	7	Before
2003	WHIT	2	1	Highway	7	Before
2002	WHIT	1	1	Highway	7	After

2003	WHIT	1	1	Highway	7	Before
1994	WHIT	1	1	Highway	7	After
1988	WHIT	1	1	Highway	7	After
1995	WHIT	1	1	Highway	9	After
2001	WHIT	1	1	Highway	9	Before
2000	WHIT	1	1	Highway	9	After
2000	WHIT	1	1	Highway	9	After
2010	WHIT	1	1	Highway	9	Before
1995	WHIT	1	1	Highway	9	Before
1996	WOLF	1	1	Highway	1	After
1996	WOLF	1	1	Highway	1	After
2008	WOLF	1	1	Highway	2	After
2012	WOLF	1	1	Highway	2	After
1990	WOLF	1	1	Highway	4	After
1991	WOLF	1	1	Highway	4	Before
2005	WOLF	1	1	Highway	2	Before
2014	WOLF	1	1	Highway	4	Before
1992	WOLF	1	1	Highway	2	Before
2002	WOLF	1	1	Highway	2	Before
1987	WOLF	1	1	Highway	2	Before
1998	WOLF	1	1	Highway	1	Before
1996	WOLF	1	1	Highway	4	Before
2009	WOLF	1	1	Highway	2	Before
1996	WOLF	1	1	Highway	4	Before
2010	WOLF	1	1	Highway	2	Before
1982	WOLF	1	1	Highway	1	Before
1988	WOLF	1	1	Highway	4	After
2008	WOLF	1	1	Highway	4	After
1988	WOLF	1	1	Highway	4	After
2012	WOLF	1	1	Highway	4	Before
2011	WOLF	1	1	Highway	4	After
1996	WOLF	1	1	Highway	4	Before
1988	WOLF	1	1	Highway	4	Before
1989	WOLF	1	1	Highway	4	After
2006	WOLF	1	1	Highway	3	Before
1996	WOLF	1	1	Highway	3	Before
2012	WOLF	1	1	Highway	3	After
1994	WOLF	1	1	Highway	8	After
2009	WOLF	1	1	Highway	8	After
1996	WOLF	1	1	Highway	6	After
2001	WOLF	1	1	Highway	6	After

1986	WOLF	1	1	Highway	7	After
2012	WOLF	1	1	Highway	9	After
2012	BLAC	1	1	Railway	1	Before
2008	BLAC	1	1	Railway	1	Before
2007	BLAC	3	1	Railway	1	Before
2006	BLAC	1	1	Railway	1	Before
2008	BLAC	1	1	Railway	2	After
1998	BLAC	1	1	Railway	1	After
2012	BLAC	1	1	Railway	2	After
2013	BLAC	1	1	Railway	1	After
2004	BLAC	1	1	Railway	2	Before
2003	BLAC	1	1	Railway	1	Before
1992	BLAC	1	1	Railway	1	After
2004	BLAC	1	1	Railway	4	After
2007	BLAC	1	1	Railway	4	After
2013	BLAC	1	1	Railway	4	After
2007	BLAC	2	1	Railway	4	After
2013	BLAC	1	1	Railway	4	After
2007	BLAC	1	1	Railway	4	After
1996	BLAC	1	1	Railway	3	After
1993	BLAC	1	1	Railway	3	Before
2009	BLAC	1	1	Railway	8	After
2010	BLAC	1	1	Railway	8	Before
1998	BLAC	1	1	Railway	8	Before
1995	BLAC	1	1	Railway	8	Before
2008	BLAC	1	1	Railway	8	After
1998	BLAC	1	1	Railway	8	Before
2007	BLAC	1	1	Railway	8	Before
2012	BLAC	1	1	Railway	8	After
2006	BLAC	1	1	Railway	8	After
2009	BLAC	1	1	Railway	6	After
2005	BLAC	1	1	Railway	6	After
2005	BLAC	1	1	Railway	7	After
1998	BLAC	1	1	Railway	7	After
2008	BLAC	1	1	Railway	7	After
1998	BLAC	1	1	Railway	7	After
2007	BLAC	2	1	Railway	9	After
1998	BLAC	1	1	Railway	5	After
2004	BLAC	1	1	Railway	9	After
2008	BLAC	1	1	Railway	9	After
1995	BLAC	1	1	Railway	9	After

1992	BLAC	1	1	Railway	9	After
2011	BLAC	1	1	Railway	9	After
1998	COUG	1	1	Railway	1	After
1996	COUG	1	1	Railway	1	After
1999	COUG	1	1	Railway	2	After
1995	COYO	1	1	Railway	2	After
1985	COYO	1	1	Railway	1	After
1986	COYO	1	1	Railway	4	After
2011	COYO	1	1	Railway	1	After
1986	COYO	1	1	Railway	2	After
1993	COYO	1	1	Railway	4	After
2008	COYO	1	1	Railway	1	Before
1996	COYO	1	1	Railway	1	Before
2009	coyo	1	1	Railway	1	After
1982	COYO	1	1	Railway	2	Before
1990	COYO	1	1	Railway	4	After
1992	COYO	1	1	Railway	3	After
2010	COYO	1	1	Railway	8	After
2003	COYO	1	1	Railway	6	After
1999	COYO	1	1	Railway	7	After
2001	COYO	1	1	Railway	7	After
2006	COYO	1	1	Railway	7	After
2003	COYO	1	1	Railway	7	Before
2013	COYO	1	1	Railway	5	Before
1996	DEER	1	1	Railway	1	Before
2006	DEER	1	1	Railway	2	After
2007	DEER	1	1	Railway	2	After
2000	DEER	1	1	Railway	2	After
2007	DEER	1	1	Railway	2	After
2002	DEER	1	1	Railway	2	Before
2001	DEER	1	1	Railway	2	After
2001	DEER	1	1	Railway	2	After
2001	DEER	1	1	Railway	2	After
1997	DEER	1	1	Railway	4	After
1997	DEER	1	1	Railway	1	Before
2001	DEER	1	1	Railway	2	Before
2002	DEER	1	1	Railway	3	Before
1998	DEER	1	1	Railway	8	Before
2011	DEER	1	1	Railway	8	Before
2003	DEER	1	1	Railway	8	After
2004	DEER	1	1	Railway	6	Before

2004	DEER	1	1	Railway	7	Before
2012	DEER	1	1	Railway	7	Before
2000	ELK	1	1	Railway	1	Before
1983	ELK	1	1	Railway	1	Before
1991	ELK	1	1	Railway	1	Before
1996	ELK	1	1	Railway	1	Before
1988	ELK	1	1	Railway	1	Before
1984	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	1	After
2001	ELK	1	1	Railway	1	After
2008	ELK	1	1	Railway	1	Before
1985	ELK	1	1	Railway	1	Before
1990	ELK	1	1	Railway	1	Before
1981	ELK	1	1	Railway	1	After
2001	ELK	1	1	Railway	1	Before
1983	ELK	1	1	Railway	1	Before
1985	ELK	1	1	Railway	1	Before
1993	ELK	1	1	Railway	1	After
1985	ELK	1	1	Railway	1	After
2001	ELK	1	1	Railway	1	Before
1984	ELK	1	1	Railway	1	After
2000	ELK	1	1	Railway	1	Before
2005	ELK	2	1	Railway	1	Before
1991	ELK	1	1	Railway	1	Before
1985	ELK	1	1	Railway	1	After
1991	ELK	1	1	Railway	1	Before
2001	ELK	1	1	Railway	1	Before
2014	ELK	1	1	Railway	1	Before
2011	ELK	1	1	Railway	1	Before
2003	ELK	1	1	Railway	1	Before
1987	ELK	1	1	Railway	1	Before
1995	ELK	1	1	Railway	1	Before
1991	ELK	1	1	Railway	1	Before
1991	ELK	1	1	Railway	1	Before
1988	ELK	1	1	Railway	1	Before
1998	ELK	1	1	Railway	1	Before
1996	ELK	1	1	Railway	1	Before
2004	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	1	Before
1987	ELK	1	1	Railway	2	Before

1987	ELK	1	1	Railway	2	Before
1984	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	After
1991	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
1988	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	2	After
1996	ELK	1	1	Railway	2	After
2007	ELK	1	1	Railway	4	After
1999	ELK	1	1	Railway	2	After
2011	ELK	1	1	Railway	2	After
1996	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	1	Before
2005	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	After
1989	ELK	1	1	Railway	2	After
2012	ELK	1	1	Railway	2	Before
1981	ELK	1	1	Railway	2	Before
2004	ELK	1	1	Railway	2	Before
1985	ELK	1	1	Railway	2	Before
1982	ELK	2	1	Railway	2	Before
1992	ELK	1	1	Railway	4	Before
2000	ELK	1	1	Railway	4	Before
1991	ELK	1	1	Railway	4	Before
1991	ELK	1	1	Railway	4	Before
1981	ELK	3	1	Railway	4	Before
1990	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1985	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before

1992	ELK	1	1	Railway	2	After
1996	ELK	1	1	Railway	2	After
1982	ELK	1	1	Railway	2	Before
1981	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	4	Before
1992	ELK	1	1	Railway	2	Before
2007	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	4	Before
1989	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	After
1984	ELK	1	1	Railway	2	After
1988	ELK	1	1	Railway	2	After
1983	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	1	After
1999	ELK	1	1	Railway	2	After
2013	ELK	1	1	Railway	2	After
1984	ELK	1	1	Railway	2	After
2004	ELK	1	1	Railway	2	After
2011	ELK	1	1	Railway	2	After
1991	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before

1988	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	After
1999	ELK	1	1	Railway	2	Before
2001	ELK	1	1	Railway	2	Before
2002	ELK	1	1	Railway	2	Before
2007	ELK	1	1	Railway	2	Before
2013	ELK	1	1	Railway	2	Before
2004	ELK	1	1	Railway	1	Before
2010	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	After
2001	ELK	1	1	Railway	4	After
2011	ELK	1	1	Railway	1	After
2007	ELK	1	1	Railway	4	After
2007	ELK	1	1	Railway	2	After
2011	ELK	2	1	Railway	2	Before
1997	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	2	After
1990	ELK	1	1	Railway	2	After
1985	ELK	1	1	Railway	2	After
1999	ELK	1	1	Railway	2	After
1990	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	Before
1988	ELK	1	1	Railway	2	Before
1985	ELK	1	1	Railway	1	Before
1986	ELK	1	1	Railway	1	Before
2001	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
2001	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
2003	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	After
2003	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	1	Before
2014	ELK	1	1	Railway	1	Before
2010	ELK	1	1	Railway	2	Before
2008	ELK	1	1	Railway	2	After
2007	ELK	1	1	Railway	2	Before

2007	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	After
2012	ELK	5	1	Railway	2	After
2010	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	After
2013	ELK	1	1	Railway	2	After
2009	ELK	1	1	Railway	2	After
1984	ELK	1	1	Railway	4	After
1996	ELK	1	1	Railway	2	After
1993	ELK	1	1	Railway	2	After
1985	ELK	1	1	Railway	2	After
1990	ELK	1	1	Railway	2	After
1986	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	1	Before
1985	ELK	1	1	Railway	1	Before
1988	ELK	1	1	Railway	1	Before
1988	ELK	1	1	Railway	1	Before
2014	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	2	After
1999	ELK	1	1	Railway	1	After
1984	ELK	1	1	Railway	2	Before
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2003	ELK	1	1	Railway	2	Before
2010	ELK	1	1	Railway	2	Before
2003	ELK	1	1	Railway	2	Before
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2013	ELK	1	1	Railway	2	Before
2013	ELK	1	1	Railway	2	Before
2011	ELK	1	1	Railway	2	Before
2013	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	2	Before
2004	ELK	1	1	Railway	2	Before

2004	ELK	2	1	Railway	1	Before
2004	ELK	1	1	Railway	1	Before
1988	ELK	1	1	Railway	4	Before
1990	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
2001	ELK	3	1	Railway	2	Before
1987	ELK	1	1	Railway	1	After
1990	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
2009	ELK	1	1	Railway	1	Before
1982	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	1	Before
2007	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	Before
2013	ELK	1	1	Railway	2	After
1991	ELK	1	1	Railway	4	After
2001	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	1	Before
1987	ELK	1	1	Railway	1	Before
1990	ELK	1	1	Railway	1	Before
1981	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	2	Before
2001	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	1	After
2000	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	1	After
2011	ELK	1	1	Railway	1	Before
2007	ELK	1	1	Railway	2	After
1985	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before

1991	ELK	1	1	Railway	1	After
1993	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	2	Before
2013	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
2010	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
2010	ELK	2	1	Railway	2	Before
2012	ELK	1	1	Railway	1	Before
2012	ELK	1	1	Railway	2	Before
2010	ELK	2	1	Railway	2	Before
2002	ELK	1	1	Railway	2	After
2006	ELK	1	1	Railway	2	After
1984	ELK	1	1	Railway	2	After
1986	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
2003	ELK	1	1	Railway	2	Before
1984	ELK	1	1	Railway	2	After
1990	ELK	1	1	Railway	1	After
1992	ELK	1	1	Railway	1	Before
1989	ELK	1	1	Railway	1	After
1990	ELK	1	1	Railway	1	Before
1990	ELK	1	1	Railway	1	Before
1986	ELK	1	1	Railway	1	After
1999	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	1	After
2001	ELK	1	1	Railway	1	Before
2007	ELK	1	1	Railway	2	Before
2008	ELK	1	1	Railway	2	After
2007	ELK	1	1	Railway	2	Before
2014	ELK	2	1	Railway	1	After
2014	ELK	1	1	Railway	1	Before
1989	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	1	Before
1998	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	1	Before

2013	ELK	1	1	Railway	1	Before
2011	ELK	1	1	Railway	4	After
1991	ELK	1	1	Railway	4	Before
2000	ELK	1	1	Railway	2	After
1995	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	After
1992	ELK	1	1	Railway	1	After
1989	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	2	Before
2001	ELK	1	1	Railway	2	Before
2003	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	1	Before
1998	ELK	1	1	Railway	1	Before
2010	ELK	1	1	Railway	2	Before
2010	ELK	1	1	Railway	2	Before
2014	ELK	1	1	Railway	2	After
2005	ELK	1	1	Railway	2	Before
2011	ELK	1	1	Railway	2	Before
2002	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	1	Before
1998	ELK	1	1	Railway	4	Before
1997	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	1	Before
1999	ELK	1	1	Railway	2	After
2011	ELK	2	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	1	After
2008	ELK	1	1	Railway	2	Before
2014	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	4	After
1997	ELK	1	1	Railway	2	Before
2003	ELK	1	1	Railway	2	Before
1993	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	Before

1995	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before
2001	ELK	1	1	Railway	2	After
2013	ELK	1	1	Railway	2	Before
2012	ELK	1	1	Railway	1	Before
2010	ELK	1	1	Railway	2	After
2001	ELK	1	1	Railway	2	Before
2003	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
1993	ELK	1	1	Railway	4	Before
1986	ELK	1	1	Railway	4	Before
2001	ELK	1	1	Railway	2	After
1994	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	1	Before
1993	ELK	1	1	Railway	1	After
1999	ELK	1	1	Railway	2	Before
2011	ELK	1	1	Railway	1	Before
1995	ELK	1	1	Railway	1	Before
2008	ELK	1	1	Railway	1	After
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1992	ELK	1	1	Railway	1	Before
1998	ELK	1	1	Railway	2	After
2001	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	After
2007	ELK	1	1	Railway	2	Before
2010	ELK	1	1	Railway	2	Before
2000	ELK	2	1	Railway	2	After
1991	ELK	1	1	Railway	4	After
1984	ELK	1	1	Railway	1	Before
1998	ELK	1	1	Railway	2	After
1989	ELK	1	1	Railway	1	After
2010	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	1	Before
1992	ELK	1	1	Railway	1	After
2001	ELK	1	1	Railway	2	After

1998	ELK	1	1	Railway	1	Before
1996	ELK	1	1	Railway	4	After
2006	ELK	1	1	Railway	2	After
1988	ELK	1	1	Railway	4	Before
1991	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	4	Before
1997	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	After
2001	ELK	1	1	Railway	2	After
2012	ELK	1	1	Railway	1	After
2010	ELK	1	1	Railway	1	Before
1985	ELK	1	1	Railway	4	After
2011	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	After
1992	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	1	After
2000	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	After
2012	ELK	1	1	Railway	2	Before
1985	ELK	1	1	Railway	4	After
1984	ELK	1	1	Railway	4	Before
1986	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
1983	ELK	1	1	Railway	1	Before
1995	ELK	1	1	Railway	1	After
1998	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	1	Before
2014	ELK	1	1	Railway	2	Before
2011	ELK	1	1	Railway	2	Before
2009	ELK	1	1	Railway	2	Before
1988	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	1	After
1991	ELK	1	1	Railway	4	After
2000	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	1	Before

1995	ELK	1	1	Railway	1	Before
2001	ELK	1	1	Railway	4	After
2010	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
2005	ELK	1	1	Railway	2	After
1990	ELK	1	1	Railway	2	Before
2014	ELK	1	1	Railway	2	After
2014	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	1	After
2006	ELK	1	1	Railway	4	After
2006	ELK	1	1	Railway	4	After
1991	ELK	1	1	Railway	1	Before
1992	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	1	After
1998	ELK	1	1	Railway	2	After
2001	ELK	1	1	Railway	1	Before
1994	ELK	1	1	Railway	2	After
2007	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	After
1987	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	1	Before
2008	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	2	Before
2013	ELK	2	1	Railway	2	Before
1989	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	After
1989	ELK	1	1	Railway	1	After
1992	ELK	1	1	Railway	1	After
1996	ELK	1	1	Railway	1	After
1992	ELK	1	1	Railway	1	After
2000	ELK	1	1	Railway	1	Before
2006	ELK	1	1	Railway	1	After
1999	ELK	1	1	Railway	2	After
2006	ELK	1	1	Railway	2	After
2004	ELK	1	1	Railway	2	After
1991	ELK	1	1	Railway	4	After
1991	ELK	1	1	Railway	4	Before

1984	ELK	1	1	Railway	1	After
1990	ELK	1	1	Railway	1	After
1992	ELK	1	1	Railway	1	After
1999	ELK	1	1	Railway	2	After
1999	ELK	1	1	Railway	1	After
2010	ELK	1	1	Railway	1	After
2010	ELK	1	1	Railway	1	Before
2008	ELK	1	1	Railway	1	Before
2008	ELK	1	1	Railway	1	After
1992	ELK	1	1	Railway	1	After
1983	ELK	1	1	Railway	1	After
2012	ELK	1	1	Railway	1	After
1986	ELK	1	1	Railway	4	After
2011	ELK	1	1	Railway	2	After
1982	ELK	1	1	Railway	2	After
1992	ELK	1	1	Railway	1	After
1995	ELK	1	1	Railway	1	Before
1991	ELK	1	1	Railway	1	After
1993	ELK	1	1	Railway	1	After
1994	ELK	1	1	Railway	1	After
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1996	ELK	1	1	Railway	1	After
1996	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	1	After
1996	ELK	1	1	Railway	1	Before
2008	ELK	2	1	Railway	1	After
2006	ELK	1	1	Railway	2	Before
1994	ELK	1	1	Railway	1	Before
1981	ELK	1	1	Railway	4	Before
1992	ELK	1	1	Railway	1	Before
1996	ELK	1	1	Railway	1	Before
1984	ELK	1	1	Railway	1	Before
1993	ELK	1	1	Railway	1	Before
1994	ELK	1	1	Railway	1	Before
1984	ELK	1	1	Railway	1	Before
1995	ELK	1	1	Railway	1	Before
1996	ELK	1	1	Railway	1	Before
1981	ELK	1	1	Railway	1	Before
1992	ELK	1	1	Railway	1	Before
1992	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	1	Before

2014	ELK	1	1	Railway	1	Before
2000	ELK	1	1	Railway	1	Before
1985	ELK	1	1	Railway	1	After
1992	ELK	1	1	Railway	1	Before
1993	ELK	1	1	Railway	1	Before
1993	ELK	1	1	Railway	1	After
1998	ELK	1	1	Railway	1	After
1998	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	After
1991	ELK	1	1	Railway	1	After
2012	ELK	2	1	Railway	2	After
2011	ELK	2	1	Railway	2	After
1998	ELK	1	1	Railway	2	Before
2005	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	After
1982	ELK	1	1	Railway	2	Before
1993	ELK	1	1	Railway	2	After
1988	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	After
2003	ELK	1	1	Railway	1	Before
2006	ELK	1	1	Railway	2	Before
2009	ELK	1	1	Railway	2	After
1987	ELK	1	1	Railway	2	After
2000	ELK	1	1	Railway	2	After
1997	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	2	After
1998	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	Before
1992	ELK	1	1	Railway	2	After
1993	ELK	1	1	Railway	2	After
2014	ELK	1	1	Railway	2	Before
2014	ELK	2	1	Railway	2	Before
1989	ELK	1	1	Railway	2	After
1999	ELK	1	1	Railway	2	Before
1988	ELK	1	1	Railway	2	After
1989	ELK	1	1	Railway	2	Before
1981	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before

2009	ELK	1	1	Railway	2	Before
2009	ELK	1	1	Railway	2	Before
1986	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	Before
1990	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	Before
2014	ELK	1	1	Railway	2	Before
2006	ELK	2	1	Railway	2	Before
1998	ELK	1	1	Railway	2	After
1992	ELK	1	1	Railway	2	Before
1987	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1988	ELK	1	1	Railway	2	Before
1998	ELK	1	1	Railway	2	After
1999	ELK	1	1	Railway	2	Before
2005	ELK	1	1	Railway	2	Before
2009	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
2011	ELK	1	1	Railway	2	After
2010	ELK	1	1	Railway	2	Before
2010	ELK	1	1	Railway	2	Before
2011	ELK	2	1	Railway	2	Before
1993	ELK	1	1	Railway	2	Before
1995	ELK	1	1	Railway	2	Before
2002	ELK	1	1	Railway	2	Before
1988	ELK	1	1	Railway	2	Before
1996	ELK	1	1	Railway	2	Before
1997	ELK	1	1	Railway	2	Before
1989	ELK	1	1	Railway	2	Before
2000	ELK	1	1	Railway	2	Before
1999	ELK	1	1	Railway	2	Before
2001	ELK	1	1	Railway	2	Before
1985	ELK	1	1	Railway	2	Before
2006	ELK	1	1	Railway	2	Before
2014	ELK	1	1	Railway	2	Before
1993	ELK	1	1	Railway	2	Before
1991	ELK	1	1	Railway	4	After

1981	ELK	1	1	Railway	4	Before
2012	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	4	Before
1989	ELK	1	1	Railway	4	Before
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1987	ELK	1	1	Railway	4	Before
1984	ELK	1	1	Railway	4	Before
1985	ELK	1	1	Railway	4	Before
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1990	ELK	1	1	Railway	4	Before
2003	ELK	1	1	Railway	4	Before
1994	ELK	1	1	Railway	4	Before
1981	ELK	1	1	Railway	4	Before
1984	ELK	1	1	Railway	4	Before
1984	ELK	1	1	Railway	4	Before
1984	ELK	1	1	Railway	4	Before
1984	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	4	Before
2013	ELK	1	1	Railway	4	Before
1982	ELK	1	1	Railway	4	Before
2004	ELK	1	1	Railway	4	Before
1985	ELK	1	1	Railway	4	Before
2000	ELK	1	1	Railway	4	Before
1987	ELK	1	1	Railway	4	Before
1981	ELK	2	1	Railway	4	After
1986	ELK	1	1	Railway	4	Before
1989	ELK	1	1	Railway	4	Before
1989	ELK	1	1	Railway	4	Before
1989	ELK	1	1	Railway	4	Before
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2007	ELK	1	1	Railway	4	Before
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1987	ELK	1	1	Railway	4	Before
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1988	ELK	1	1	Railway	4	Before
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1999	ELK	1	1	Railway	4	Before
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1982	ELK	1	1	Railway	4	Before
1991	ELK	1	1	Railway	4	Before
1991	ELK	1	1	Railway	4	Before
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1991	ELK	1	1	Railway	4	Before
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2000	ELK	1	1	Railway	4	Before
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1996	ELK	1	1	Railway	4	Before
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1982	ELK	1	1	Railway	4	Before
1990	ELK	1	1	Railway	4	Before
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1990	ELK	1	1	Railway	3	After
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2001	ELK	1	1	Railway	3	Before
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1999	ELK	1	1	Railway	3	Before
1999	ELK	1	1	Railway	3	Before
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1984	ELK	1	1	Railway	3	Before
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2000	ELK	1	1	Railway	3	Before

1997	ELK	1	1	Railway	3	Before
2001	ELK	2	1	Railway	3	Before
2003	ELK	1	1	Railway	3	Before
2001	ELK	1	1	Railway	3	Before
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2001	ELK	1	1	Railway	3	Before
1988	ELK	1	1	Railway	3	Before
1987	ELK	1	1	Railway	3	Before
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1985	ELK	1	1	Railway	8	Before
1982	ELK	1	1	Railway	8	Before
1987	ELK	1	1	Railway	8	Before
1990	ELK	1	1	Railway	8	After
1987	ELK	1	1	Railway	8	Before
1996	ELK	1	1	Railway	8	Before
2007	ELK	1	1	Railway	8	Before
2001	ELK	1	1	Railway	8	Before
2001	ELK	1	1	Railway	8	Before
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2002	ELK	1	1	Railway	8	Before
1985	ELK	1	1	Railway	8	Before
1999	ELK	1	1	Railway	8	Before
2007	ELK	1	1	Railway	8	Before
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2003	ELK	1	1	Railway	8	Before
1999	ELK	1	1	Railway	8	Before
2007	ELK	1	1	Railway	8	Before
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1990	ELK	1	1	Railway	8	Before
1996	ELK	1	1	Railway	8	Before
1996	ELK	1	1	Railway	8	Before
2001	ELK	1	1	Railway	8	Before
1986	ELK	1	1	Railway	8	Before
1989	ELK	1	1	Railway	8	Before
2004	ELK	1	1	Railway	8	Before
1985	ELK	1	1	Railway	6	Before
1987	ELK	1	1	Railway	6	Before
1987	ELK	1	1	Railway	6	Before
1982	ELK	1	1	Railway	6	Before

1985	ELK	1	1	Railway	6	Before
2007	ELK	1	1	Railway	6	Before
2007	ELK	1	1	Railway	6	Before
1991	ELK	1	1	Railway	6	Before
2006	ELK	1	1	Railway	6	Before
1995	ELK	1	1	Railway	6	Before
2007	ELK	1	1	Railway	6	Before
2000	ELK	1	1	Railway	6	Before
1989	ELK	1	1	Railway	6	Before
1986	ELK	1	1	Railway	7	Before
1992	ELK	1	1	Railway	7	Before
1983	ELK	1	1	Railway	7	Before
1985	ELK	1	1	Railway	9	Before
2003	ELK	4	1	Railway	9	Before
1994	ELK	1	1	Railway	7	Before
2005	ELK	1	1	Railway	9	Before
1989	ELK	1	1	Railway	9	Before
1991	ELK	1	1	Railway	9	Before
1998	ELK	1	1	Railway	9	Before
2003	ELK	1	1	Railway	9	Before
1985	ELK	1	1	Railway	9	Before
2003	ELK	1	1	Railway	9	Before
2014	GRIZ	1	1	Railway	1	Before
2010	GRIZ	1	1	Railway	2	Before
2014	GRIZ	1	1	Railway	4	Before
2007	GRIZ	1	1	Railway	2	Before
2010	GRIZ	1	1	Railway	2	Before
2009	GRIZ	1	1	Railway	2	Before
2010	GRIZ	1	1	Railway	2	Before
2012	GRIZ	2	1	Railway	4	Before
2005	GRIZ	1	1	Railway	4	Before
2005	GRIZ	1	1	Railway	3	Before
2009	GRIZ	1	1	Railway	8	Before
2001	GRIZ	1	1	Railway	6	Before
2000	GRIZ	1	1	Railway	6	Before
2011	GRIZ	1	1	Railway	6	Before
2010	GRIZ	1	1	Railway	9	Before
1997	MOOS	1	1	Railway	4	Before
2011	MOOS	1	1	Railway	2	Before
1981	MOOS	1	1	Railway	2	Before
2012	MOOS	1	1	Railway	2	Before

2011	MOOS	1	1	Railway	2	Before
2012	MOOS	1	1	Railway	4	Before
2003	MOOS	1	1	Railway	4	Before
2011	MOOS	1	1	Railway	4	Before
2007	MOOS	1	1	Railway	2	Before
2008	MOOS	1	1	Railway	2	Before
2005	MOOS	1	1	Railway	4	Before
2012	MOOS	1	1	Railway	4	Before
1990	MOOS	1	1	Railway	4	Before
2006	MOOS	1	1	Railway	4	Before
2006	MOOS	1	1	Railway	4	Before
2012	MOOS	1	1	Railway	4	Before
1981	MOOS	1	1	Railway	4	Before
2014	MOOS	1	1	Railway	4	Before
1985	MOOS	1	1	Railway	4	Before
1981	MOOS	1	1	Railway	4	Before
1996	MOOS	1	1	Railway	4	Before
2012	MOOS	1	1	Railway	3	Before
2001	MOOS	1	1	Railway	3	Before
2002	MOOS	1	1	Railway	3	Before
2001	MOOS	1	1	Railway	3	Before
2011	MOOS	1	1	Railway	8	Before
1996	MOOS	1	1	Railway	8	Before
2010	MOOS	1	1	Railway	8	Before
2012	MOOS	1	1	Railway	8	Before
1996	MOOS	1	1	Railway	6	Before
1996	MOOS	1	1	Railway	6	Before
2003	MOOS	1	1	Railway	9	Before
1998	MULE	1	1	Railway	1	Before
2007	MULE	1	1	Railway	1	Before
2012	MULE	1	1	Railway	1	Before
2012	MULE	1	1	Railway	1	Before
1986	MULE	1	1	Railway	2	Before
2003	MULE	1	1	Railway	2	Before
2005	MULE	1	1	Railway	2	Before
2006	MULE	1	1	Railway	2	Before
2001	MULE	1	1	Railway	2	Before
1998	MULE	1	1	Railway	2	Before
2012	MULE	1	1	Railway	2	Before
2008	MULE	1	1	Railway	2	Before
1990	MULE	1	1	Railway	2	Before

2010	MULE	1	1	Railway	2	Before
2005	MULE	1	1	Railway	4	Before
2008	MULE	1	1	Railway	2	Before
1991	MULE	1	1	Railway	2	Before
2007	MULE	1	1	Railway	2	Before
2006	MULE	1	1	Railway	4	After
1999	MULE	1	1	Railway	1	Before
2007	MULE	1	1	Railway	1	Before
2003	MULE	1	1	Railway	1	Before
2004	MULE	1	1	Railway	4	Before
1987	MULE	1	1	Railway	4	Before
2012	MULE	1	1	Railway	4	Before
2006	MULE	1	1	Railway	2	Before
2014	MULE	1	1	Railway	2	Before
2007	MULE	1	1	Railway	2	Before
2003	MULE	1	1	Railway	2	Before
2000	MULE	1	1	Railway	2	Before
2003	MULE	1	1	Railway	2	Before
1996	MULE	1	1	Railway	4	Before
2012	MULE	1	1	Railway	2	Before
2005	MULE	1	1	Railway	2	Before
2006	MULE	1	1	Railway	2	Before
2001	MULE	1	1	Railway	2	Before
2008	MULE	1	1	Railway	2	Before
1988	MULE	1	1	Railway	2	Before
2012	MULE	1	1	Railway	2	Before
2012	MULE	1	1	Railway	2	Before
2012	MULE	2	1	Railway	2	Before
2009	MULE	1	1	Railway	2	Before
1989	MULE	1	1	Railway	2	Before
2000	MULE	1	1	Railway	1	Before
2003	MULE	1	1	Railway	4	Before
2008	MULE	1	1	Railway	1	Before
2000	MULE	1	1	Railway	1	Before
1987	MULE	1	1	Railway	2	Before
2013	MULE	1	1	Railway	2	Before
2003	MULE	1	1	Railway	1	Before
2010	MULE	1	1	Railway	1	Before
1991	MULE	1	1	Railway	1	Before
2010	MULE	1	1	Railway	1	Before
2007	MULE	1	1	Railway	4	Before

2010	MULE	1	1	Railway	2	Before
1989	MULE	1	1	Railway	2	Before
2013	MULE	1	1	Railway	2	Before
1996	MULE	1	1	Railway	4	Before
1982	MULE	1	1	Railway	4	Before
2006	MULE	1	1	Railway	4	Before
2010	MULE	1	1	Railway	4	Before
2007	MULE	1	1	Railway	4	Before
2001	MULE	1	1	Railway	4	Before
2012	MULE	1	1	Railway	4	Before
2012	MULE	1	1	Railway	4	Before
2001	MULE	1	1	Railway	4	Before
2009	MULE	1	1	Railway	4	Before
2004	MULE	1	1	Railway	4	Before
2003	MULE	1	1	Railway	4	Before
2009	MULE	1	1	Railway	3	Before
2005	MULE	1	1	Railway	3	Before
2012	MULE	1	1	Railway	3	Before
2014	MULE	1	1	Railway	3	Before
2002	MULE	1	1	Railway	3	Before
2000	MULE	1	1	Railway	3	Before
2006	MULE	1	1	Railway	3	Before
1999	MULE	1	1	Railway	8	Before
1999	MULE	1	1	Railway	8	Before
2001	MULE	1	1	Railway	6	Before
2001	MULE	1	1	Railway	6	Before
2001	MULE	1	1	Railway	6	Before
1987	MULE	1	1	Railway	6	Before
2002	MULE	1	1	Railway	6	Before
2004	MULE	1	1	Railway	6	Before
2007	MULE	1	1	Railway	6	Before
2005	MULE	1	1	Railway	6	Before
1983	MULE	1	1	Railway	7	Before
2003	MULE	1	1	Railway	7	Before
2011	SHEE	1	1	Railway	2	Before
2008	SHEE	2	1	Railway	4	Before
2010	SHEE	5	1	Railway	2	Before
1994	SHEE	1	1	Railway	2	Before
2001	SHEE	2	1	Railway	2	Before
2014	SHEE	2	1	Railway	2	Before
2000	SHEE	1	1	Railway	2	Before

1997	SHEE	1	1	Railway	4	Before
1997	SHEE	1	1	Railway	4	Before
2010	WHIT	1	1	Railway	1	Before
2008	WHIT	1	1	Railway	1	Before
2008	WHIT	1	1	Railway	1	Before
1996	WHIT	1	1	Railway	1	Before
2008	WHIT	1	1	Railway	1	Before
2007	WHIT	1	1	Railway	1	Before
2014	WHIT	1	1	Railway	1	Before
2006	WHIT	1	1	Railway	2	Before
2006	WHIT	1	1	Railway	2	Before
1990	WHIT	1	1	Railway	2	After
2013	WHIT	1	1	Railway	2	Before
2003	WHIT	1	1	Railway	2	Before
2014	WHIT	1	1	Railway	2	Before
2013	WHIT	1	1	Railway	2	Before
2009	WHIT	1	1	Railway	2	Before
2013	WHIT	1	1	Railway	2	Before
2011	WHIT	1	1	Railway	2	Before
1999	WHIT	1	1	Railway	4	Before
1990	WHIT	1	1	Railway	2	Before
1996	WHIT	1	1	Railway	2	Before
2008	WHIT	1	1	Railway	2	Before
1988	WHIT	1	1	Railway	4	Before
1995	WHIT	1	1	Railway	2	Before
1998	WHIT	1	1	Railway	2	Before
2014	WHIT	1	1	Railway	4	Before
2008	WHIT	1	1	Railway	4	Before
2004	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	2	Before
2008	WHIT	1	1	Railway	2	Before
2000	WHIT	1	1	Railway	2	Before
2008	WHIT	1	1	Railway	1	Before
1999	WHIT	1	1	Railway	1	Before
2011	WHIT	1	1	Railway	4	Before
1998	WHIT	1	1	Railway	2	Before
2007	WHIT	2	1	Railway	2	Before
2009	WHIT	1	1	Railway	2	Before
2000	WHIT	1	1	Railway	1	Before
2013	WHIT	1	1	Railway	4	Before
2005	WHIT	1	1	Railway	2	After

1985	WHIT	1	1	Railway	1	Before
2008	WHIT	1	1	Railway	4	Before
2007	WHIT	1	1	Railway	1	Before
2005	WHIT	1	1	Railway	1	Before
2011	WHIT	1	1	Railway	1	Before
1996	WHIT	1	1	Railway	4	Before
1998	WHIT	1	1	Railway	4	Before
1984	WHIT	1	1	Railway	1	Before
2008	WHIT	1	1	Railway	4	Before
1988	WHIT	1	1	Railway	1	Before
2009	WHIT	1	1	Railway	2	Before
2008	WHIT	1	1	Railway	4	Before
2014	WHIT	1	1	Railway	4	Before
2010	WHIT	1	1	Railway	2	Before
2012	WHIT	1	1	Railway	2	Before
2011	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	1	Before
2011	WHIT	1	1	Railway	2	Before
2003	WHIT	2	1	Railway	4	Before
2011	WHIT	1	1	Railway	2	Before
2013	WHIT	1	1	Railway	4	Before
2001	WHIT	1	1	Railway	4	Before
2005	WHIT	1	1	Railway	1	After
2005	WHIT	1	1	Railway	1	Before
2007	WHIT	1	1	Railway	4	Before
2008	WHIT	1	1	Railway	2	Before
1999	WHIT	1	1	Railway	4	Before
2004	WHIT	1	1	Railway	2	Before
2008	WHIT	1	1	Railway	2	Before
2003	WHIT	1	1	Railway	4	Before
2003	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	4	Before
1992	WHIT	1	1	Railway	4	Before
2010	WHIT	1	1	Railway	4	Before
2014	WHIT	1	1	Railway	2	Before
2012	WHIT	1	1	Railway	4	Before
2003	WHIT	1	1	Railway	4	Before
2008	WHIT	1	1	Railway	1	Before
2005	WHIT	1	1	Railway	1	Before
2003	WHIT	1	1	Railway	1	Before

2010	WHIT	1	1	Railway	2	Before
2012	WHIT	1	1	Railway	2	Before
2012	WHIT	1	1	Railway	4	Before
2007	WHIT	1	1	Railway	2	Before
2009	WHIT	1	1	Railway	2	Before
2001	WHIT	1	1	Railway	2	Before
2011	WHIT	1	1	Railway	2	Before
2011	WHIT	1	1	Railway	4	Before
2006	WHIT	1	1	Railway	2	Before
2009	WHIT	1	1	Railway	2	Before
2012	WHIT	1	1	Railway	4	Before
2005	WHIT	1	1	Railway	4	Before
2011	WHIT	2	1	Railway	4	Before
2006	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	4	Before
1995	WHIT	1	1	Railway	4	Before
2007	WHIT	2	1	Railway	4	Before
2011	WHIT	1	1	Railway	4	Before
2013	WHIT	1	1	Railway	4	Before
2013	WHIT	1	1	Railway	4	Before
1987	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	4	Before
2011	WHIT	1	1	Railway	4	Before
2009	WHIT	1	1	Railway	4	Before
2012	WHIT	1	1	Railway	4	Before
2010	WHIT	1	1	Railway	4	Before
1999	WHIT	1	1	Railway	4	Before
2011	WHIT	1	1	Railway	4	Before
1997	WHIT	1	1	Railway	4	After
2007	WHIT	1	1	Railway	4	Before
2009	WHIT	1	1	Railway	4	Before
2001	WHIT	1	1	Railway	3	Before
2010	WHIT	1	1	Railway	3	Before
2001	WHIT	1	1	Railway	3	Before
2011	WHIT	2	1	Railway	3	Before
2011	WHIT	1	1	Railway	3	Before
2012	WHIT	1	1	Railway	3	Before
2002	WHIT	1	1	Railway	3	Before
2003	WHIT	1	1	Railway	3	Before
2004	WHIT	1	1	Railway	3	Before
2001	WHIT	1	1	Railway	8	Before

2003	WHIT	1	1	Railway	8	Before
2011	WHIT	1	1	Railway	8	Before
2002	WHIT	1	1	Railway	8	Before
1984	WHIT	1	1	Railway	6	Before
2003	WHIT	1	1	Railway	6	Before
1987	WHIT	1	1	Railway	6	Before
2001	WHIT	1	1	Railway	6	Before
2003	WHIT	1	1	Railway	7	Before
2004	WHIT	1	1	Railway	7	Before
2003	WHIT	1	1	Railway	7	Before
2002	WHIT	1	1	Railway	9	Before
2002	WOLF	1	1	Railway	1	Before
1999	WOLF	1	1	Railway	4	Before
2011	WOLF	1	1	Railway	2	Before
2002	WOLF	1	1	Railway	1	Before
2012	WOLF	1	1	Railway	4	Before
2011	WOLF	1	1	Railway	4	Before
1991	WOLF	1	1	Railway	4	Before
2012	WOLF	1	1	Railway	4	Before
2013	WOLF	1	1	Railway	4	Before
1993	WOLF	1	1	Railway	2	Before
2005	WOLF	1	1	Railway	4	Before
2013	WOLF	1	1	Railway	4	Before
1991	WOLF	1	1	Railway	4	Before
1993	WOLF	1	1	Railway	4	Before
1995	WOLF	1	1	Railway	4	Before
2012	WOLF	1	1	Railway	4	Before
2011	WOLF	1	1	Railway	4	Before
2013	WOLF	1	1	Railway	4	Before
1998	WOLF	1	1	Railway	4	Before
1995	WOLF	1	1	Railway	3	Before
1988	WOLF	1	1	Railway	8	Before
2001	DEER	1	1	Railway	2	After
2001	ELK	1	1	Railway	3	After
2001	ELK	1	1	Railway	3	After
2001	ELK	1	1	Railway	3	After