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BOB STUMP



ARIZONA CORPORATION COMMISSION



0000093280

MICHAEL P. KEARNS  
Interim Executive Director

DATE: FEBRUARY 3, 2009

DOCKET NO.: RR-03639A-08-0037

TO ALL PARTIES:

Arizona Corporation Commission

DOCKETED

FEB 03 2009

DOCKETED BY

Enclosed please find the recommendation of Administrative Law Judge Teena Wolfe. The recommendation has been filed in the form of an Opinion and Order on:

UNION PACIFIC RAILROAD  
(ALTER FOUR CROSSINGS)

Pursuant to A.A.C. R14-3-110(B), you may file exceptions to the recommendation of the Administrative Law Judge by filing an original and thirteen (13) copies of the exceptions with the Commission's Docket Control at the address listed below by **4:00** p.m. on or before:

FEBRUARY 12, 2009

The enclosed is NOT an order of the Commission, but a recommendation of the Administrative Law Judge to the Commissioners. Consideration of this matter has tentatively been scheduled for the Commission's Open Meeting to be held on:

FEBRUARY 19, 2009

For more information, you may contact Docket Control at (602) 542-3477 or the Hearing Division at (602)542-4250. For information about the Open Meeting, contact the Executive Director's Office at (602) 542-3931.

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AZ CORP COMMISSION  
DOCKET CONTROL

MICHAEL P. KEARNS  
INTERIM EXECUTIVE DIRECTOR

1 **BEFORE THE ARIZONA CORPORATION COMMISSION**

2 COMMISSIONERS

3 KRISTIN K. MAYES, Chairman  
4 GARY PIERCE  
5 PAUL NEWMAN  
6 SANDRA D. KENNEDY  
7 BOB STUMP

8 IN THE MATTER OF THE APPLICATION OF  
9 THE UNION PACIFIC RAILROAD COMPANY  
10 TO ALTER FOUR CROSSINGS OF THE UNION  
11 PACIFIC RAILROAD AT MARANA,  
12 TANGERINE, CORTARO FARMS, AND INA  
13 ROADS IN THE TOWN OF MARANA, PIMA  
14 COUNTY, ARIZONA.

DOCKET NO. RR-03639A-08-0037

DECISION NO. \_\_\_\_\_

**OPINION AND ORDER**

11 DATE OF HEARING: July 17, 2008 (Procedural Conference); October 14,  
12 2008

13 PLACE OF HEARING: Phoenix, Arizona

14 ADMINISTRATIVE LAW JUDGE: Marc Stern<sup>1</sup>

15 APPEARANCES: Mr. Anthony J. Hancock and Mr. Terrance L. Sims,  
16 BEAUGUREAU, HANCOCK, STOLL &  
17 SCHWARTZ, P.C., on behalf of the Union Pacific  
18 Railroad Company;

19 Mr. William P. Sullivan, CURTIS, GOODWIN,  
20 SULLIVAN, UDALL & SCHWAB, P.L.C. on behalf of  
21 Cortaro-Marana Irrigation District; and

22 Ms. Amanda Ho and Mr. Charles Hains, Staff  
23 Attorneys, Legal Division, on behalf of the Safety  
24 Division of the Arizona Corporation Commission.

25 **BY THE COMMISSION:**

26 On January 17, 2008, the Union Pacific Railroad Company ("Railroad") filed with the  
27 Arizona Corporation Commission ("Commission") an application for approval to alter four public at-  
28 grade crossings of the Railroad in Pima County, Arizona by adding a second mainline track  
("Application"). The four crossings, Cochie Canyon Road (formerly called Marana Road), Tangerine

<sup>1</sup> Administrative Law Judge Marc Stern presided over the procedural conference and hearing in this matter, and Administrative Law Judge Teena Wolfe prepared the Recommended Opinion and Order.

1 Road, Cortaro Farms Road, and Ina Road, are all in the Town of Marana.

2 Intervention in this proceeding was granted to Cortaro-Marana Irrigation District and the  
3 Cortaro Water User's Association ("District").

4 A hearing on the Application was held as scheduled on October 14, 2008, before a duly  
5 authorized Administrative Law Judge of the Commission. The Railroad, the District, and the  
6 Railroad Safety Section of the Commission's Safety Division ("Staff") appeared through counsel,  
7 presented evidence, and cross-examined witnesses. Following the hearing, the matter was taken  
8 under advisement.

9 \* \* \* \* \*

10 Having considered the entire record herein and being fully advised in the premises, the  
11 Commission finds, concludes, and orders that:

12 **FINDINGS OF FACT**

13 1. On January 17, 2008, the Railroad filed the Application with the Commission. The  
14 Application requests approval to alter four public at-grade crossings of the Railroad in Pima County,  
15 Arizona ("County") by adding a second mainline track 20 feet from the center of the existing  
16 mainline track. The Application is part of the Railroad's double tracking effort for the "Sunset  
17 Route" across Arizona.

18 2. The four crossings affected by the Application are all located in the Town of Marana  
19 ("Town") and are identified as follows: Cochie Canyon Road (formerly called Marana Road),  
20 AAR/DOT No. 922-399-X; Tangerine Road, AAR/DOT No. 741-088-V, Cortaro Farms Road,  
21 AAR/DOT No.741-098-B; and Ina Road, AAR/DOT No. 741-101-G. The rail line runs in a  
22 southeast to northwest direction, parallel to both the Casa Grande Highway and I-10, through the four  
23 affected crossings. The Town is the controlling roadway authority for all four crossings.

24 3. On June 9, 2008, the Railroad filed a Request for a Procedural Conference to discuss  
25 scheduling issues.

26 4. On June 25, 2008, a Procedural Order was issued scheduling a procedural conference  
27 in this matter for July 17, 2008, to discuss an appropriate procedural schedule.

28

1           5.       On July 28, 2008, following the procedural conference attended by Staff and the  
2 Railroad, a Procedural Order was issued scheduling a hearing in this matter for October 14, 2008, and  
3 establishing other procedural requirements and deadlines.

4           6.       On July 31, 2008, the Railroad docketed responses to Staff's First Set of Data  
5 Requests.

6           7.       Pursuant to the Procedural Order issued on July 28, 2008, the Railroad provided a  
7 copy of the Application and of the Procedural Order by certified mail to the Town, the City of Tucson  
8 ("Tucson"), the County, and the Arizona Department of Transportation ("ADOT"). The Railroad  
9 also had notice of the Application and hearing published in the *Arizona Daily Star* and *Tucson*  
10 *Citizen*, daily newspapers of general circulation in the Town and County, on August 4, 2008, and in  
11 the *Marana Weekly News*, a weekly publication of general circulation in the Town and County, on  
12 August 13, 20, and 27, 2008.

13           8.       On September 11, 2008, the District filed a Motion to Intervene, which was granted by  
14 a Procedural Order issued September 30, 2008.

15           9.       On September 15, 2008, the Railroad docketed its Certification of Notice Pursuant to  
16 the Procedural Order dated July 28, 2008.

17           10.      On September 26, 2008, Staff docketed its Staff Report recommending approval.

18           11.      On October 8 and 9, 2008, the District filed Comments to the Staff Report. The  
19 District's October 9, 2008, filing stated that the Railroad and the District were working together, but  
20 had not yet finalized their understanding, regarding payment of costs associated with the crossing of  
21 the District's facilities.

22           12.      On October 14, 2008, a full evidentiary hearing was held before a duly authorized  
23 Administrative Law Judge of the Commission at the Commission's offices in Phoenix, Arizona. The  
24 Railroad, the District, and Staff appeared through counsel and presented evidence.

25           13.      The District stated at the hearing that the District had intervened in this case to inform  
26 the Commission that the Railroad and the District are negotiating the specifics of two non-public  
27 Railroad crossings of the District's facilities located between the Cortaro Farms Road crossing and  
28 the Ina Road Crossing. (Tr. at 4-5; 27-28.)

1           14.     A witness for the Railroad testified that the Town supports the Application. (Tr. at  
2 24.)

3           15.     Staff, the Railroad, the Town, and the County participated in diagnostic reviews of the  
4 proposed improvements at Cochie Canyon Road and Tangerine Road. Staff, the Railroad, and the  
5 Town participated in diagnostic reviews of the proposed improvements at Cortaro Farms Road and  
6 Ina Road. According to Staff, all parties present at the diagnostic reviews were in agreement with the  
7 proposed improvements at the crossings.

8           16.     According to Staff, the improvements recommended for the four crossings are  
9 consistent with safety measures employed at other crossings in the State, will provide for the public's  
10 safety, and are in compliance with Commission rules.

11          17.     According to Staff, the cost estimates provided by the Railroad for the improvements  
12 are reasonable.

13 **Cochie Canyon Road (formerly called Marana Road)**

14          18.     The Cochie Canyon Road crossing is the westernmost of the four crossings in the  
15 Application and runs in an east-to-west direction. Cochie Canyon Road has an interchange at I-10.  
16 The area surrounding this crossing is both new residential and farmland.

17          19.     The Application proposes adding a second mainline track at this crossing, to the north  
18 of the existing mainline track. The Railroad plans to re-profile a portion of the four-lane urban  
19 asphalt road to meet the new track and to replace the existing incandescent flashing lights, gate  
20 mechanisms, bells, and detection circuitry with the latest industry standard equipment, including 12-  
21 inch LED flashing lights, automatic gates, bells, and constant warning time circuitry.<sup>2</sup> The automatic  
22 gates will be installed at the curbside and in the existing roadway raised median. The Railroad also  
23 will add a new concrete crossing surface and will replace any impacted pavement markings.

24          20.     The existing automatic gates, flashing lights, and bells at this crossing were ordered by  
25 Commission Decision No. 65987 (June 17, 2003).

26 \_\_\_\_\_  
27 <sup>2</sup> Constant warning time circuitry sends a signal to the at-grade crossing to activate its functioning at the instant it detects  
28 a train's distance and measures the speed of the train to adjust the length of time that the crossing gates have to be closed,  
so that the crossing gates are closed only for the amount of time necessary for the train to move through safely, thereby  
avoiding motorist frustration and possible noncompliance caused by unnecessarily lengthy crossing gate closure.

1           21.     Based on traffic data provided to the Railroad and its contractor HDR by Keith Brann,  
2 Assistant Public Works Director for the Town, as verified by Staff in September 2008, the average  
3 daily traffic ("ADT") for Cochie Canyon Road in 2006 was 4,300 vehicles per day ("VPD"). Data  
4 provided indicated the estimated ADT for the year 2030 to be 29,200 VPD. The current Level of  
5 Service ("LOS") for Cochie Canyon Road, based on the standards of the American Association of  
6 State Highway and Transportation Officials ("AASHTO"), is LOS A, or least congested, for both  
7 eastbound and westbound traffic.<sup>3</sup> The posted speed limit on Cochie Canyon Road is 40 MPH.

8           22.     Staff and Federal Railroad Administration ("FRA") records indicate that no accidents  
9 have occurred at the Cochie Canyon Road crossing.

10          23.     The estimated costs of the Cochie Canyon Road crossing improvements total  
11 \$392,640 and break down to \$300,000 for signal work and \$92,640 for the crossing surface. The  
12 Railroad will pay the entire cost of these crossing improvements.

13          24.     Alternative routes to the Cochie Canyon Road crossing are to the west 5.40 miles to  
14 Missile Base Road and to the east 4.03 miles to Tangerine Road, which are both at-grade crossings.

15 **Tangerine Road**

16          25.     The Application proposes adding a second mainline track at this crossing to the north  
17 of the existing mainline track. The Railroad plans to re-profile a portion of the two-lane asphalt road  
18 to meet the new track and to replace the existing incandescent flashing lights, gate mechanisms, bells,  
19 and detection circuitry with the latest industry standard equipment, including 12-inch LED flashing  
20 lights, gates, bells, and constant warning time circuitry. The Railroad also will add a new concrete  
21 crossing surface and will replace any impacted pavement markings.

22          26.     The existing automatic gates, flashing lights, and bells at this crossing were ordered by  
23 Commission Decision No. 46978 (May 24, 1976).

24  
25  
26  
27 <sup>3</sup> According to the Staff Report, the AASHTO Geometric Design of Highways and Streets, 2004, uses LOS to  
28 characterize the operating conditions on a facility in terms of traffic performance measures related to speed and travel  
time, freedom to maneuver, traffic interruptions, and comfort and convenience. LOS ranges from LOS A, least  
congested, to LOS F, most congested.

1           27.     The Town has asked the Railroad to tie the Town's traffic light at the Tangerine Road  
2 crossing into the Railroads' signal system for the crossing, and the Railroad is working with the  
3 Town to comply with the request. (Tr. at 29.)

4           28.     Based on traffic data provided by Mr. Brann, as verified by Staff in September 2008,  
5 the ADT for Tangerine Road in 2006 was 8,750 VPD. Data provided indicated the estimated ADT  
6 for the year 2030 to be 37,800 VPD. The current LOS for Tangerine Road, based on AASHTO  
7 standards, is LOS A, or least congested, for both eastbound and westbound traffic. The posted speed  
8 limit on Tangerine Road is 40 MPH.

9           29.     Staff and FRA records indicate that no accidents have occurred at the Tangerine Road  
10 crossing.

11           30.     The estimated costs of the improvements for the Tangerine Road crossing total  
12 \$279,824 and break down to \$248,944 for signal work and \$30,880 for the crossing surface. The  
13 Railroad will pay the entire cost of these crossing improvements.

14           31.     Alternative routes to the Tangerine Road crossing are to the west 4.03 miles to Cochie  
15 Canyon Road and to the east 4.73 miles to Camino de Manana Road, both of which are at-grade  
16 crossings.

17 **Cortaro Farms Road**

18           32.     The Application proposes adding a second mainline track at this crossing, to the north  
19 of the existing mainline track. The Railroad plans to re-profile a portion of the four-lane urban  
20 asphalt road to meet the new track and to replace the existing incandescent flashing lights, gate  
21 mechanisms, bells, and detection circuitry with the latest industry standard equipment, including 12-  
22 inch LED flashing lights, automatic gates, bells, and constant warning time circuitry. The automatic  
23 gates will be installed at the curbside and in the existing roadway median. An extra indication,  
24 consisting of two 12-inch LED flashing lights, will also be added for motorists approaching the  
25 crossing from North Casa Grande Highway, which parallels the tracks just south of the crossing. The  
26 Railroad also will add a new concrete crossing surface and will replace any impacted pavement  
27 markings.

28

1           33.     The existing automatic gates, flashing lights, and bells at this crossing were ordered by  
2 Commission Decision No. 46983 (May 24, 1976).

3           34.     Based on traffic data provided by Mr. Brann, as verified by Staff in September 2008,  
4 the ADT for Cortaro Farms Road in 2006 was 24,000 VPD. Data provided indicated the estimated  
5 ADT for the year 2030 to be 36,900 VPD. The current LOS for Cortaro Farms Road, based on  
6 AASHTO standards, is LOS F, for both eastbound and westbound traffic. The posted speed limit on  
7 Cortaro Farms Road is 35 MPH.

8           35.     Staff and FRA records indicate that two accidents have occurred at the Cortaro Farms  
9 Road crossing, resulting in two injuries and no fatalities. Records indicate the warning devices were  
10 reported to be working as intended in both accidents. The first accident occurred on July 24, 2002,  
11 when a motorist drove around the gates and was struck by a train, resulting in two injuries and no  
12 fatalities. The second accident occurred on June 6, 2004, when a driver ran into the side of the train,  
13 resulting in no injuries or fatalities.

14           36.     The estimated costs of the improvements for the Cortaro Farms Road crossing total  
15 \$471,008 and break down to \$378,368 for signal work and \$92,640 for the crossing surface. The  
16 Railroad will pay the entire cost of these crossing improvements.

17           37.     Alternative routes from the Cortaro Farms Road crossing are to the west 1.59 miles to  
18 Camino de Manana Road and to the east 1.37 miles to Massingale Road, both of which are at-grade  
19 crossings.

20 **Ina Road**

21           38.     The Application proposes adding a second mainline track at this crossing, to the north  
22 of the existing mainline track. The Railroad plans to re-profile a portion of the four-lane urban  
23 asphalt road to meet the new track and to replace the existing incandescent flashing lights, gate  
24 mechanisms, bells, and detection circuitry with the latest industry standard equipment, including 12-  
25 inch LED flashing lights, automatic gates, bells, and constant warning time circuitry and cantilevers  
26 with 12-inch LED flashing lights. The automatic gates will be installed at the curbside and in the  
27 existing roadway median. The Railroad also will add a new concrete crossing surface and will  
28 replace any impacted pavement markings. The Railroad will also install an extra crossing indication,

1 consisting of two 12-inch LED flashing lights, to alert motorists approaching the crossing from North  
2 Casa Grande Highway, which parallels the tracks just south of the crossing.

3 39. According to Staff, flashing lights, automatic gates, and bells were present at this  
4 crossing as early as 1974.

5 40. In Decision No. 68812 (June 29, 2006), the Commission approved the Railroad's  
6 application for approval of an agreement between ADOT and the Railroad to upgrade the Ina Road  
7 crossing by replacing existing flashing lights with new cantilever LED automatic warning devices on  
8 both the westbound and eastbound sides of the crossing. Staff's witness testified that a recent  
9 diagnostic of the Ina Road crossing revealed that the I-10 structure would block any cantilever  
10 installed for eastbound traffic and that ADOT will be raising the issue with the Federal Highway  
11 Administration ("FHWA") to determine whether FHWA agrees with ADOT's position that, due to  
12 the configuration of the crossing, cantilevers should not be installed on both sides of the crossing as  
13 required by Decision No. 68812. (Tr. at 59.) A witness for the Railroad indicated an understanding  
14 that ADOT will be initiating a request to amend Decision No. 68812's requirement to place  
15 cantilevers on both sides of the crossing. (Tr. at 30)

16 41. Based on traffic data provided by Mr. Brann, as verified by Staff in September 2008,  
17 the ADT for Ina Road in 2006 was 35,400 VPD. Data provided indicated the estimated ADT for the  
18 year 2030 to be 44,400 VPD. The current LOS for Ina Road, based on AASHTO standards, for  
19 eastbound commuter traffic is LOS D in the morning peak hours and LOS C during afternoon peak  
20 hours. The westbound direction operates at LOS B during the morning peak hours and LOS F for the  
21 afternoon peak hours. The posted speed limit on Ina Road is 45 MPH.

22 42. Staff and FRA records indicate that seven accidents have occurred at the Ina Road  
23 crossing, resulting in one injury. Records indicate that the warning devices were reported to be  
24 working as intended in all seven accidents. The first accident occurred on July 9, 1976, when a train  
25 struck an automobile at the crossing, with no injuries or fatalities reported. A second accident  
26 occurred on October 11, 1976, when a motorist drove around the downed gate arms and was struck  
27 by a train, with no resulting injuries or fatalities reported. The third accident occurred on November  
28 26, 1991, when a driver stopped a vehicle on the tracks and was struck by a train, with no injuries or

1 fatalities reported. A fourth accident occurred on February 15, 1997, when a train struck an  
2 abandoned golf cart on the tracks, with no injuries or fatalities reported. On November 29, 1999, a  
3 fifth accident occurred, in which an automobile stopped on the tracks and was struck by a train,  
4 resulting in one injury. On February 22, 2001, the sixth accident occurred when an automobile  
5 stopped on the tracks and was struck by a train while the gate arms were down, with no reported  
6 injuries or fatalities. The seventh accident occurred on June 29, 2003, when a motorist drove around  
7 the downed gate arms and ran into the side of a train, with no injuries or fatalities reported.

8 43. The estimated costs of the improvements for the Ina Road crossing total \$482,848 and  
9 break down to \$374,768 for signal work and \$108,080 for the crossing surface. The Railroad will  
10 pay the entire cost of these crossing improvements.

11 44. Alternative routes from the Ina Road crossing are to the west 0.65 miles to Massingale  
12 Road, an at-grade crossing, and to the east 1.32 miles to Orange Grove Road, an underpass at the  
13 tracks.

14 45. Alternative routes from the Ina Road crossing are to the west 1.59 miles to Camino de  
15 Manana Road, and to the east 1.37 miles to Massingale Road, both of which are at-grade crossings.

#### 16 **Train Volume and Crossing Usage**

17 46. According to the Staff Report, data from the Railroad establish that an average of 48  
18 trains per day travel through all four crossings presently, 46 freight trains and 2 passenger trains, at a  
19 speed of 70 MPH for the freight trains and 79 MPH for the passenger trains. The number of freight  
20 trains is projected to increase to an average of 84 trains per day by the year 2016.

21 47. There are three schools located within the area of the four crossings that serve the  
22 public to the southeast of these crossings. These include one elementary school, one middle school,  
23 and one high school. The Staff Report indicates that Staff verified, in September 2008, a report by  
24 Alisha Meza, Operations Manager of Transportation for Marana Unified School District, that no  
25 school buses currently cross at the Cochie Canyon Road crossing and that buses cross on Tangerine  
26 Road at least 16 times per day, on Cortaro Farms Road at least 36 times per day, and on Ina Road at  
27 least 8 times per day. Ms. Meza indicated to Staff that there have been no complaints from bus  
28 drivers regarding warning devices malfunctioning at any of the three crossings used and that

1 Operation Lifesaver has given several presentations to the Marana Unified School District bus drivers  
2 during the last three years.

3 48. The nearest hospital to the crossings is Northwest Medical Center, located 8.8 miles  
4 from the Cochie Canyon Road crossing, 4.87 miles from the Tangerine Road crossing, 1.48 miles  
5 from the Cortaro Farms Road crossing, and 3 miles from the Ina Road crossing. There is no evidence  
6 that the improvements and upgrades to be made to the four crossings at issue will adversely impact  
7 motorists' ability to reach the hospital.

8 49. Staff testified that the addition of the second mainline track should enhance safety  
9 because through train traffic will be able to flow through the crossings more easily, even if another  
10 train is stopped in the same area. (Tr. at 63.) This will result in better traffic flow for motorists as  
11 well. (*Id.*)

#### 12 **Grade Separation/Crossing Elimination**

13 50. Staff analyzed whether grade separation is warranted at any of the four crossings using  
14 the FHWA *Railroad-Highway Grade Crossing Handbook* ("FHWA Handbook").<sup>4</sup> The FHWA  
15 Handbook indicates that grade separation or crossing elimination should be considered when one or  
16 more of nine criteria are met. Staff created a chart, attached hereto and incorporated herein as Exhibit  
17 A, showing the results of Staff's analysis of the criteria for each of the four crossings.

18 51. Exhibit A shows that two of the four crossings currently meet one of the nine criteria  
19 in the FHWA Handbook for consideration of grade separation. Both the Cortaro Farms Road  
20 crossing and the Ina Road crossing meet the crossing exposure criterion, with crossing exposures of  
21 1.2 million and 1.7 million, respectively. As depicted on Exhibit A, projected data indicate that all  
22 four crossings may meet three of the nine criteria by the year 2030, the criterion for average annual  
23 gross tonnage of 300 million or more,<sup>5</sup> the crossing exposure criterion, and the vehicular delay  
24 criterion.

25  
26  
27 <sup>4</sup> Staff used the revised 2<sup>nd</sup> edition, August 2007.

28 <sup>5</sup> This projection for the year 2030 is based on the current annual gross tonnage in excess of 217 million with volume of 46 freight trains per day and projected volume of 84 freight trains per day by 2016, with the trains also expected to be longer (8,000 feet long instead of the current length of 6,000 feet).

1           52.     Staff testified that the criteria in the FHWA Handbook are only a screening tool and  
2 guideline and not necessarily determinative of whether a grade separation is necessary, so meeting  
3 one or more of the criteria does not automatically mean that grade separation is required. (Tr. at 53-  
4 54.) In this case, based on the results of Staff's findings and analysis of the four crossings based on  
5 the nine criteria, Staff does not recommend grade separation at any of the four crossings at issue and  
6 testified that the crossings, with the proposed improvements, will be safe without grade separation at  
7 this time. (Tr. at 56.)

8           53.     The Railroad's expert witness, Dean Carlson,<sup>6</sup> agrees with Staff's analysis and  
9 determination that there is currently no need for grade separation at any of the four crossings and that  
10 the work that the Railroad proposes will be adequate to provide increased safety at those crossings.  
11 (Tr. at 9, 12.)

12           54.     Staff testified that it has learned from both the Town and the Pima Association of  
13 Governments ("PAG") that a grade separation project is currently in the planning for the Tangerine  
14 Road crossing, to be located approximately 0.10 mile west of the existing Tangerine Road at-grade  
15 crossing. According to Staff, construction of the proposed project is planned to commence in 2010,  
16 with the estimated \$70 million cost to be contributed to by the developer Westcor, ADOT, and the  
17 regional transit authority. (Tr. at 57.)

18           55.     Staff testified that it has learned from PAG that plans also exist for a future grade  
19 separation at the Ina Road crossing. According to Staff, plans exist to begin construction of the  
20 proposed project sometime between 2010 and 2013, with the estimated \$50 million cost to be  
21 contributed to by ADOT and the regional transit authority. (*Id.*)

22           56.     Staff testified that it recommends the Application's proposed upgrades to the  
23 Tangerine Road and Ina Road at-grade crossings despite the existence of future plans for grade  
24 separations at the two crossings, due to uncertainty in funding and in commencement and completion  
25 dates. (Tr. at 57-58.)

26  
27 \_\_\_\_\_  
28 <sup>6</sup> Mr. Carlson retired from the FHWA, after 37 years of service, as its Executive Director. (Tr. at 7.) During his tenure  
at the FHWA, Mr. Carlson also served as the Director of Engineering and the Director of the Office of Highway Safety.  
(*Id.*) Mr. Carlson also served as the Secretary of Transportation for the State of Kansas for eight years. (*Id.*)

1           57.     Staff also analyzed whether any of the four crossings in the Application should be  
2 eliminated. Staff stated in the Staff Report that the areas surrounding these four crossings are highly  
3 developed with commercial and industrial businesses and that Staff believes closing any of the four  
4 crossings would have a negative effect on many of the local businesses. Staff therefore does not  
5 recommend closure of any of the four crossings at this time.

6 **Staff's Recommendations**

7           58.     Staff recommends that the Application be approved. Based on its review of all  
8 applicable data, Staff believes that the proposed crossing upgrades are reasonable and in the public  
9 interest.

10          59.     Staff's recommendations are reasonable and appropriate and should be followed.

11 **CONCLUSIONS OF LAW**

12          1.     The Commission has jurisdiction over the Railroad and over the subject matter of the  
13 Application pursuant to Article XV of the Arizona Constitution and A.R.S. §§ 40-336, 40-337, and  
14 40-337.01.

15          2.     Notice of the Application was provided in accordance with the law.

16          3.     Alteration of the crossings as proposed in the Application is necessary for the public's  
17 convenience and safety.

18          4.     Pursuant to A.R.S. §§ 40-336 and 40-337, the Application should be approved as  
19 recommended by Staff.

20          5.     After alteration of the crossings, the Railroad should maintain the crossings in  
21 accordance with A.A.C. R14-5-104.

22 **ORDER**

23           IT IS THEREFORE ORDERED that the Union Pacific Railroad Company's Application is  
24 hereby approved.

25           IT IS FURTHER ORDERED that the Union Pacific Railroad Company shall notify the  
26 Commission, in writing, within ten days of both the commencement and the completion of the  
27 crossing alterations, pursuant to A.A.C. R14-5-104.

28           IT IS FURTHER ORDERED that the Union Pacific Railroad Company shall maintain the

1 crossings at Cochie Canyon Road, Tangerine Road, Cortaro Farms Road, and Ina Road, in the Town of  
2 Marana, Pima County, Arizona in compliance with A.A.C. R14-5-104.

3 IT IS FURTHER ORDERED that the Union Pacific Railroad Company shall file, every five  
4 years from the effective date of this Decision, with the Commission's Docket Control, as a  
5 compliance item in this docket, an update on the average daily traffic count at each of the four  
6 crossings described in the Application. The updated average daily traffic count shall be obtained  
7 from the road authority or a contractor hired by the Railroad.

8 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

9 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.  
10  
11

12 CHAIRMAN \_\_\_\_\_ COMMISSIONER \_\_\_\_\_

13  
14 COMMISSIONER \_\_\_\_\_ COMMISSIONER \_\_\_\_\_ COMMISSIONER \_\_\_\_\_

15  
16 IN WITNESS WHEREOF, I, MICHAEL P. KEARNS, Interim  
17 Executive Director of the Arizona Corporation Commission,  
18 have hereunto set my hand and caused the official seal of the  
19 Commission to be affixed at the Capitol, in the City of Phoenix,  
20 this \_\_\_\_ day of \_\_\_\_\_, 2009.

21 \_\_\_\_\_  
22 MICHAEL P. KEARNS  
23 INTERIM EXECUTIVE DIRECTOR

24 DISSENT \_\_\_\_\_

25 DISSENT \_\_\_\_\_  
26  
27  
28

1 SERVICE LIST FOR: UNION PACIFIC RAILROAD COMPANY

2 DOCKET NO.: RR-03639A-08-0037

3 Aziz Aman, Manager of Special Projects  
4 UNION PACIFIC RAILROAD COMPANY  
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18 Bruce Vana, P.E., Engineer-Manager  
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20 ARIZONA DEPARTMENT OF TRANSPORTATION  
21 205 South 17<sup>th</sup> Avenue, M/D 618E  
22 Phoenix, AZ 85007

23 Brian Lehman, Chief  
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25 ARIZONA CORPORATION COMMISSION  
26 1200 West Washington Road  
27 Phoenix, AZ 85007

28 Janice Alward, Chief Counsel  
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## EXHIBIT A

		Cochie Canyon	Tangerine	Cortaro Farms	Ina
The highway is a part of the designated Interstate Highway System	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030	No	No	No	No
The highway is otherwise designed to have full controlled access	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030	No	No	No	No
The posted highway speed equals or exceeds 70 mph	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030	No	No	No	No
AADT exceeds 100,000 in urban areas or 50,000 in rural areas	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030	No	No	No	No
Maximum authorized train speed exceeds 110 mph	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030	No	No	No	No
An average of 150 or more trains per day or 300 million gross tons/year	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030 <sup>1</sup>	Yes	Yes	Yes	Yes
Crossing exposure (trains/day x AADT) exceeds 1M in urban or 250k in rural; or passenger train crossing exposure exceeds 800k in urban or 200k in rural	Crossing Currently meets the criteria <sup>2</sup>	No	No	Yes	Yes
	Crossing meets the criteria by 2030 <sup>3</sup>	Yes	Yes	Yes	Yes
Expected accident frequency for active devices with gates, as calculated by the US DOT Accident Prediction Formula including five-year accident history, exceeds 0.5	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030	Unknown	Unknown	Unknown	Unknown
Vehicle delay exceeds 40 vehicle hours per day	Crossing Currently meets the criteria	No	No	No	No
	Crossing meets the criteria by 2030 <sup>4</sup>	Yes	Yes	Yes	Yes

N/A = Information was not available.

This table utilizes the most recent projected ADT data as follows: Cochie Canyon - 29,200 vpd (2030), Tangerine - 37,800 vpd (2030), Cortaro Farms - 36,900 vpd (2030), Ina - 44,400 vpd (2030).

<sup>1</sup>The Railroad is projected to exceed 300 million gross tons as of 2016. This projection is based on the fact that the Railroad is currently exceeding 217 million gross tons with 46 trains per day and is projected to run twice the number of trains (at lengths of up to 8,000 feet instead of the current length of 6,000 feet) by 2016.

<sup>2</sup>The current crossing exposure for Cortaro Farms - 1.2 million and for Ina is 1.7 million.

<sup>3</sup>The projected crossing exposures utilizing the most recent projected vpd data are as follows: Cochie Canyon - 2.5 million, Tangerine - 3.2 million, Cortaro Farms - 3.1 million and Ina - 3.7 million.