

# **Summary**

## **Dropped Call Analysis**



AT&T Mobility  
5201 Congress Avenue  
Boca Raton, FL 33487

RE: Documentation in support of need for new AT&T site at or near the location of the proposed tower at 1010 Kennedy Dr. in Key West, FL.

### Summary

AT&T has an existing and ongoing need for a new facility in the eastern half of the city of Key West to improve coverage and service experience for our customers in the vicinity. The proposed tower at 1010 Kennedy Dr. is in the correct location to meet AT&T's needs in the area. The proposed tower at 125' is lower than AT&T's optimum height of 145', but will meet AT&T's needs in the immediate area. Because the site is lower than optimum, there is a possibility that AT&T will require additional sites to properly serve our customers in the eastern half of the city. Lowering the proposed height any further will greatly reduce the probability of coverage towards the edges of the cell site coverage area and increase the chance that AT&T will require multiple additional sites.

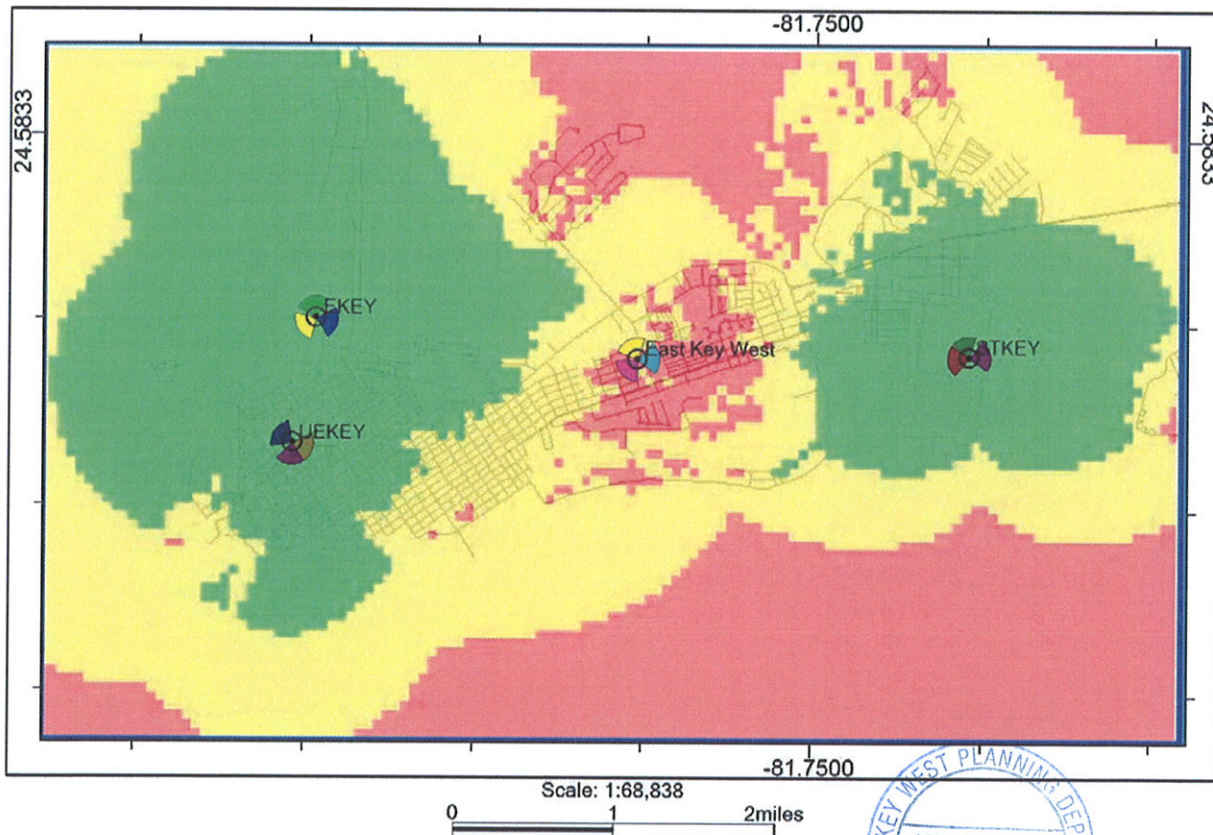
Below are two maps showing AT&T's current coverage on the island and a simulation of the coverage provided by the proposed tower.

### Existing coverage:

Green = good outdoor and indoor service

Yellow = useable outdoor, marginal indoor service

Red = marginal outdoor, poor to no indoor service

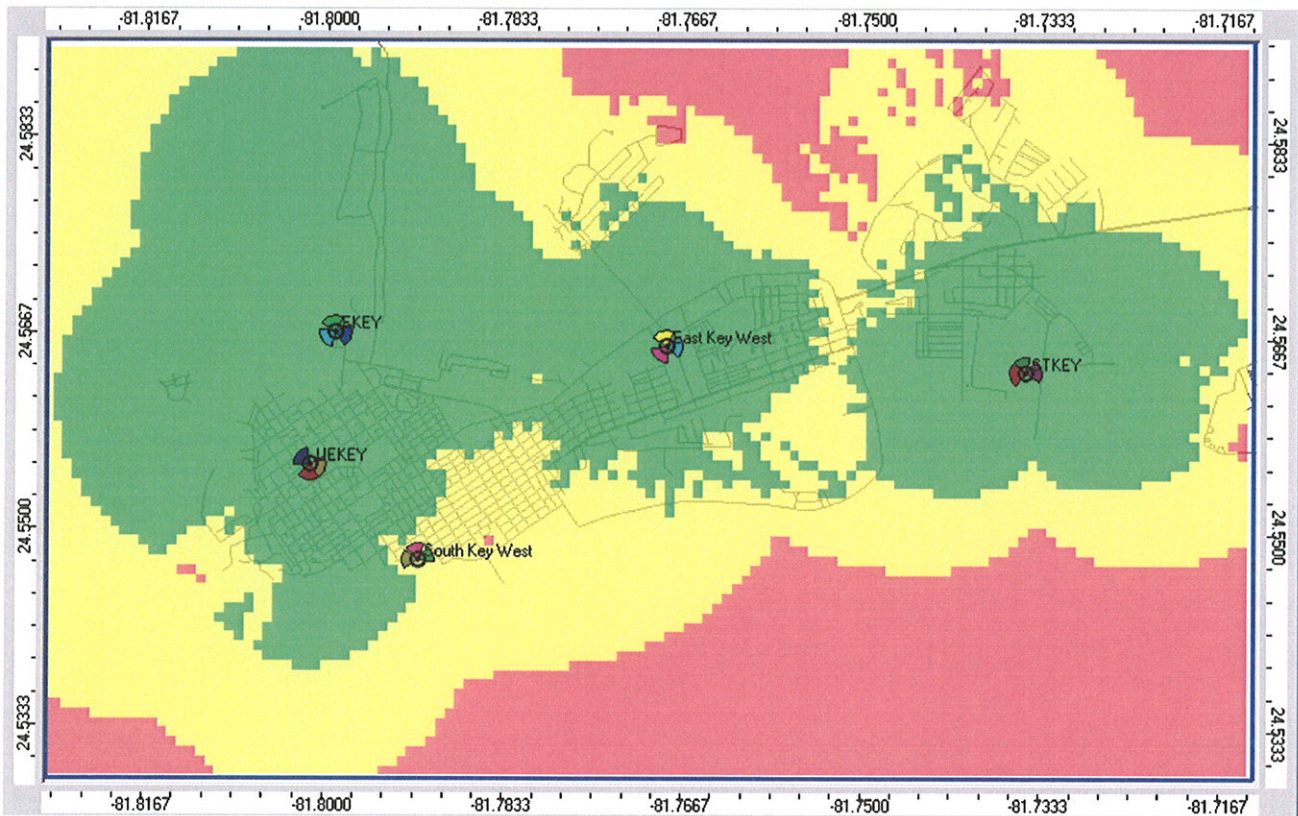




AT&T Mobility  
5201 Congress Avenue  
Boca Raton, FL 33487

**Coverage with proposed site:**

Green = good outdoor and indoor service  
Yellow = useable outdoor, marginal indoor service  
Red = marginal outdoor, poor to no indoor service



Sincerely,

Maiko Llanes, PE  
RF Design Engineer  
AT&T Mobility





AT&T Mobility  
5201 Congress Avenue  
Boca Raton, FL 33487

RE: Dropped call analysis in support of need for new AT&T site at or near the location of the proposed tower at 1010 Kennedy Dr. in Key West, FL.

Summary:

An analysis of dropped calls on the AT&T network was performed to provide additional justification of the need for a new wireless facility in the vicinity of the proposed tower at 1010 Kennedy Dr. In order to perform this study, the eastern (Beta) sector of AT&T's facility on the Coast Guard Base and the Western (Gamma) sector on AT&T's facility at the Stock Island power plant were selected, as these two sectors currently attempt to serve more than 95% of the area in question. Using these two sectors, switch data reports were run to determine the number of dropped calls per month using an average of the last four months of data. The dropped numbers were grouped by band and technology as shown below:

Sector/ Technology	Avg # dropped calls/ Month
Coast Guard Beta GSM	1910
Coast Guard Beta UMTS	5200
Stock Island Gamma GSM	1040
Stock Island Gamma UMTS	2800

The total number of dropped calls/ month on average is 10950. Because of the location of the proposed tower near the center of the weakest coverage area and the high usage density in the immediate vicinity, it is predicted that at least 75% of the dropped calls on these two sectors occur within the coverage area of the proposed site. Even using an extremely conservative figure of 50%, more than 5000 dropped calls a month have the potential to be remedied by the introduction of a new facility in the vicinity of the proposed tower.

Sincerely,

Maiko Llanes, PE  
RF Design Engineer  
AT&T Mobility

